

OPD Home

Town of East Hampton LWRP

The Town of East Hampton Local Waterfront Revitalization Program (LWRP) is a locally prepared comprehensive land and water use plan for the Town's natural, public, and developed waterfront resources along the Gardiner Bay/Block Island Sound and Atlantic Ocean shorelines and waterfronts.

The Town of East Hampton LWRP refines and supplements the State's Coastal Management Program and provides a comprehensive framework within which critical waterfront issues can be addressed, and planned waterfront improvement projects can be pursued and implemented. The approval history of the East Hampton LWRP was published in a final public notice.

The highlighted text is a download link for the full **Town of East Hampton LWRP** document.

The links below provide easy access to each part of the Town of East Hampton LWRP, as approved in 2007:

Guide to Using the LWRP



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The Town of East Hampton is addressing priority coastal resource issues identified in its LWRP through preparation of a comprehensive watershed management plan for Lake Montauk and enhancement of hard clam and American oyster populations in Three Mile, Napeague, and Accabonac harbors.

TOWN OF EAST HAMPTON LOCAL WATERFRONT REVITALIZATION PROGRAM

Adopted

Town of East Hampton Town Board, December 3, 1999

Approved

NYS Secretary of State, Lorraine A. Cortez-Vazquez, December 20, 2007

Concurred

US Office of Ocean and Coastal Resources Management, August 26, 2008



TOWN OF EAST HAMPTON

159 Pantigo Road East Hampton, New York 11937

CATHERINE H. LESTER SUPERVISOR

December 3, 1999

Tel: (516) 324-4140 Fax: (516) 324-2789

Honorable Alexander F. Treadwell Secretary of State New York State Department of State 41 State Street Albany, New York 12231-0001 BEPARTMENT OF STATE GOASTAL PROGRAMS DEC 1 4 1999 RECEIVED

Dear Secretary Treadwell:

The East Hampton Town Board formally adopted the Town of East Hampton Local Waterfront Revitalization Program (LWRP) on December 3, 1999. These actions were taken after having completed all environmental review procedures in accordance with the State Environmental Quality Review Act and having addressed review comments received pursuant to Article 42 of the NYS Executive Law. Attached is a copy of the resolution passed by the East Hampton Town Board in adopting the LWRP. In addition, a copy of the final LWRP document that was adopted has been enclosed.

As the Supervisor for the Town of East Hampton and on behalf of the entire Town, I respectfully request your consideration and approval of the Town of East Hampton Local Waterfront Revitalization Program pursuant to Article 42 of the NYS Executive Law.

Sincerely,

atheeine H. Loter

Catherine H. Lester Supervisor

5 27

Enclosure as noted

CHL/bc

Resolution # **/2 69** December 3, 1999

The following resolution was offered by Supervisor Lester, seconded by

vouncilman P. Hammerle , and adopted:

[Town of East Hampton Local Waterfront Revitalization Program And Submission of the Local Waterfront Revitalization Program to the Secretary of State for Approval]

WHEREAS, the Town of East Hampton initiated preparation of a Local Waterfront Revitalization Program in cooperation with the New York State Department of State, pursuant to Article 42 of the Executive Law; and

WHEREAS, a Draft Local Waterfront Revitalization Program (DLWRP) were prepared under the guidance of the Town's Local Waterfront Revitalization Advisory Committee; and

WHEREAS, a Full Environmental Assessment Form was prepared and considered for the DLWRP in accordance with the requirements of Part 617 of the implementing regulations for Article 8 of the Environmental Conservation Law; and

WHEREAS, a Negative Declaration was subsequently issued by the Town Board as Lead Agency in accordance with the requirements of Part 617 of the implementing regulations for Article 8 of the Environmental Conservation Law; and

WHEREAS, the Supervisor of the Town of East Hampton submitted the DLWRP to the New York State Secretary of State for review, pursuant to Article 42 of the NYS Executive Law, as amended on March 11, 1999; and

WHEREAS, the Secretary of State completed the review of the DLWRP, pursuant to Article 42 of the NYS Executive Law and the DLWRP was circulated by the Department of State to appropriate local, county, state, and federal agencies in accordance with Article 42 of the NYS Executive Law; and

WHEREAS, all meetings of the Town's Local Waterfront Revitalization Program Advisory Committee were open to the public, and a public hearing was advertised and held by the Town Board on April 15, 1999 to receive and consider comments on the DLWRP; and

WHEREAS, modifications were made to the Draft Local Waterfront Revitalization Program in response to comments received; now therefore, be it

RESOLVED, by the Town Board of the Town of East Hampton that the Town of East Hampton Local Waterfront Revitalization Program is hereby approved and adopted; and, be it further Resolution # 1269 December 3, 1999

RESOLVED, that the Town Board of the Town of East Hampton hereby directs the Supervisor of the Town to formally transmit the adopted LWRP to Alexander F. Treadwell, New York State Secretary of State for approval pursuant to Article 42 of the NYS Executive Law -- the Waterfront Revitalization of Coastal Areas and Inland Waterways Act.

-2-



Fred Overton Telephone: (631) 324-4142

September 21, 2007

Adopted [Unanimous]

Rec'd Coastal Resources

SEP 2 4 2007

Imfluid-ful-ful-ful-ful-ful-ful-Mr. Steve Ridler NYS Department of State Division of Coastal Resources 41 State Street Albany, NY 12231

Dear Mr. Steve Ridler:

Please be advised that the Town Board, at a meeting held on September 20, 2007 7:00 PM, considered the following legislative document(s):

Resolution RES-2007-1357

Resolution Authorizing Submission of The Town of East Hampton Local Waterfront Revitalization Program to the New York State Secretary of State for Approval

CC: Marguerite Wolffsohn, Planning Director William Sharp. Esq., Principal Attorney Dennis Mildner, Division of Coastal Resources

Sincerely Yours,

Fred Overton Town Clerk



RESOLUTION 2007-1357

ADOPTED

Item # 4 DOC ID: 4630 A

Resolution Authorizing Submission of The Town of East Hampton Local Waterfront Revitalization Program to the New York State Secretary of State for Approval

WHEREAS, the Town of East Hampton initiated preparation of a Local Waterfront Revitalization Program in cooperation with the New York State Department of State, pursuant to Article 42 of the NYS Executive Law; and

WHEREAS, a Draft Local Waterfront Revitalization Program (DLWRP) was prepared under the guidance of the Town's Local Waterfront Revitalization Program Advisory Committee; and

WHEREAS, a Full Environmental Assessment Form was prepared and considered for the DLWRP in accordance with the requirements of Part 617 of the implementing regulations for Article 8 of the Environmental Conservation Law; and

WHEREAS, a Negative Declaration was subsequently issued by the Town Board as Lead Agency, in accordance with the requirements of Part 617 of the implementing regulations for Article 8 of the Environmental Conservation Law; and

WHEREAS, the Supervisor of the Town of East Hampton submitted the DLWRP to the New York State Secretary of State for review, pursuant to Article 42 of the NYS Executive Law; and

WHEREAS, the NYS Secretary of State completed the review of the DLWRP, pursuant to Article 42 of the NYS Executive Law and the DLWRP was circulated by the Department of State to appropriate local, county, State, and federal agencies in accordance with Article 42 of the NYS Executive Law; and

WHEREAS, all meetings of the Town's Local Waterfront Revitalization Program Advisory Committee were open to the public, and a public hearing was advertised and held by the Town Board on April 15, 1999 to receive and consider comments on the DLWRP; and

WHEREAS, modifications were made to the Draft Local Waterfront Revitalization Program in response to all comments received; and

WHEREAS, at the request of the NYS Department of State, the Town of East Hampton has evaluated legislation, planning decisions, and physical changes that have occurred since the East Hampton Town Board unanimously approved and adopted the Town's LWRP document in December, 1999 in an effort to determine whether modifications to the program were necessary prior to approval of the program by the NYS Secretary of State. There has been little change since 1999 in the conditions identified in the LWRP, and

East Hampton Town Board - Letter

there has been no significant impact on the policies or application of the LWRP since that time; the conditions, issues and opportunities identified in the 1999 draft LWRP remain relevant and appropriate today. Legislative initiatives and projects over the period have been consistent with and have furthered the policies and objectives of the LWRP. Minor changes that have been made to the document since 1999, have been specifically identified in a new Introduction to the Local Waterfront Revitalization Program document and further detailed in a summary entitled "Changes to be made to December 1999 East Hampton LWRP" attached hereto;

NOW, THEREFORE, BE IT RESOLVED, by the Town Board of the Town of East Hampton that the Town of East Hampton Local Waterfront Revitalization Program is hereby ready to be submitted to the NYS Secretary of State for approval under the provisions of Article 42 of the NYS Executive Law;

AND, BE IT FURTHER RESOLVED, that the Town Board of the Town of East Hampton hereby directs the Supervisor of the Town to formally transmit the East Hampton Local Waterfront Revitalization Program to the New York State Secretary of State for approval pursuant to Article 42 of the NYS Executive Law.

RESULT:	ADOPTED [UNANIMOUS]
MOVER:	William McGintee, Supervisor
SECONDER:	Pete Hammerle, Councilman
AYES:	Foster, Hammerle, Mansir, Loewen, McGintee



STATE OF NEW YORK DEPARTMENT OF STATE **41 STATE STREET** ALBANY, NY 12231-0001

ELIOT SPITZER GOVERNOR

LORRAINE A. CORTÉS-VÁZQUEZ SECRETARY OF STATE

December 20, 2007

Honorable William McGintee Supervisor Town of East Hampton 159 Pantigo Road East Hampton NY, 11937

Dear Supervisor McGintee:

I am pleased to inform you that the Town of East Hampton Local Waterfront Revitalization Program (LWRP) has been approved, pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. Everyone who participated in the preparation of this program is to be commended for developing a comprehensive management program that promotes the balanced preservation, enhancement, and utilization of the Town's valuable waterfront resources.

State agencies will be notified that your LWRP has been approved and will be advised their activities must be undertaken in a manner consistent, to the maximum extent practicable, with the program.

I look forward to working with you as you endeavor to revitalize and protect your waterfront. If you have any questions, please contact Jeffrey Beach in our Division of Coastal Resources at 518-473-2472.

Sincerely,

orraine A. Cortés-Vázquez

LACV:JB\gn



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL OCEAN SERVICE OFFICE OF OCEAN AND COASTAL RESOURCE MANAGEMENT Silver Spring, Maryland 20910

Rec'd Coastal Resources

AUG 2 6 2008

AUG 2 9 2008

Mr. George R. Stafford Director, Division of Coastal Resources New York State Department of State Division of Coastal Resources 99 Washington Avenue – Suite 1010 Albany, New York 12231-0001

Dear Mr. Stafford

Thank you for the New York Division of Coastal Resources' June 23, 2008 request that the Town of East Hampton Local Waterfront Revitalization Program (LWRP) be incorporated into the New York Coastal Management Program (CMP). You requested that the Town of East Hampton LWRP policies described below be incorporated as routine program changes (RPCs), pursuant to Coastal Zone Management Act (CZMA) regulations at 15 C.F.R. part 923, subpart H, and Office of Ocean and Coastal Resource Management (OCRM) Program Change Guidance (July 1996). OCRM received the request on June 27, 2008, and OCRM's decision deadline was extended until August 29, 2008.

Based on our review of your submission, we concur, with the qualifications described below, that the incorporation of the Town of East Hampton LWRP is an RPC and we approve the incorporation of the LWRP policies and policy standards as enforceable policies of the New York CMP. Federal Consistency will apply to the approved policies only after you publish notice of this approval pursuant to 15 C.F.R. § 923.84(b)(4). Please include in the public notice the list of enforceable policies provided in this letter, and please send a copy of the notice to OCRM.

CHANGES APPROVED

See enclosed list of the changes incorporated into the New York CMP.

QUALIFICATIONS

As noted in the LWRP document and the state's Approval and Findings document, the following New York State Coastal Policies are not applicable to the Town of East Hampton: 3, 24, 26 and 40.

For Policy 38A, only the eight guidelines identified in the LWRP are applicable. Neither the state nor the town intends to incorporate the goals and objectives of the Water Resources Management Report (TOEH 1987) as enforceable policies of the LWRP.



The following policies include language that seeks to regulate federal agencies, or instructs them to take specific actions: policies 10 (p. IV-20 and 22), 18 (p. VI-1), 9A (p. VII-81), 21A (p. VII-83), and 22A (p. VII-84). This language is not enforceable under state law and thus could not be approved as an enforceable policy. A state policy that purports to regulate or otherwise establish standards for federal agencies or federal lands or waters would not meet the CZMA's definition of "enforceable policy," which requires that state polices be legally binding under state law. *See* 16 U.S.C. § 1453(6a). The state has agreed to remove the federal agency references from these policies when the final LWRP document is published.

PUBLIC AND FEDERAL AGENCY COMMENTS

OCRM received no comments on this RPC submission.

Thank you for your cooperation in this review. Please contact Carleigh Trappe at (301) 713-3155, extension 165, if you have any questions.

John King, Chief

Coastal Programs Division

Enclosure: Policies Approved and Incorporated into the New York CMP

INTRODUCTION TO 2007 FINAL LWRP

The inventory and analysis section of this Local Waterfront Revitalization Program (LWRP) catalogs existing conditions in 1999 and highlights the relevant issues and opportunities that existed within the Town's coastal boundary at that time. The Town of East Hampton has evaluated legislation, planning decisions, and physical changes that have occurred since the East Hampton Town Board unanimously approved the Town's LWRP document in December 1999 in an effort to determine whether modifications to the program were necessary prior to approval of the program by the Department of State. There has been little change since 1999 in the conditions identified in the LWRP, and there has been no significant impact on the policies or application of the LWRP since that time; the conditions, issues and opportunities identified in the 1999 draft LWRP remain relevant and appropriate today. Legislative initiatives and projects over the period have been consistent with and have furthered the policies and objectives of the LWRP.

The Town's primary planning initiative undertaken between 1999 and 2007 was an update of the Town Comprehensive Plan, completed in May, 2005. That plan incorporated the LWRP as its coastal management component, and the LWRP policies and objectives were summarized in Appendix C (Coastal Management Component). The LWRP is likewise consistent with the vision and goals of the comprehensive plan.

Together with adopting an updated comprehensive plan, the Town Board adopted a revised zoning map to help implement the plan. Prior to adoption, the revised comprehensive plan and zoning map, along with a Generic Environmental Impact Statement, were routed for review and comment to numerous local, county, state, and federal agencies. Substantive responses to comments received were prepared by the Town and included in the Final Generic Environmental Impact Statement.

A comparison between both the zoning maps and text within the LWRP and the revised zoning map revealed no changes for most of the 12 reaches or geographic regions in which East Hampton was divided in the LWRP for descriptive purposes. Within the remaining regions and reaches, changes to the zoning map corresponded to the data, policies, and programs already set forth in the LWRP. For example, some of the land zoned for low density residential within environmentally-sensitive areas was rezoned to a lower density residential classification in order to better protect the identified features.

The need to protect features with recognized and documented importance was called for in the LWRP and served as the basis for creating and applying the new zoning classification to specific areas. Aside from the rezoning of some sensitive residential lands for less intense use, the only major difference between the LWRP and the revised zoning corresponds to preserved lands. Preserved land, protected for the most part between preparation of the LWRP and 2005, was rezoned to Parks and Conservation.

In 2005, the Town adopted a Local Waterfront Revitalization Consistency Review Law. The law assures that applications submitted to Town departments for actions within the coastal area, or direct actions within the coastal area undertaken by any Town agency or department, are reviewed for consistency with the policies established in the LWRP. In 2007, the Town adopted Coastal Erosion Overlay District legislation to regulate projects designed to control or prevent flooding and erosion of the coastline and adjacent upland areas, implementing the coastal erosion recommendations of the LWRP.

Open space preservation, critical to achieving the LWRP goals of improving water quality and preserving habitat and agricultural lands, has continued since 1999 with a number of significant coastal parcels preserved, including Shadmoor and the Amsterdam Beach parcel. Between 2000 and 2004, more than 1,983 acres of open space has been acquired at a cost of nearly \$160,000,000. These open space acquisitions represent the major change between existing land use in 2005 and the existing and future land use maps in the LWRP. The acquisitions are consistent with the Open Space Plan as amended and updated by the Community Preservation Plan, included as Project # 1, Open Space Acquisition, and as Appendices A and B in the LWRP.

Comparing conditions along the shoreline as described in the LWRP to current conditions shows few manmade changes. The Montauk Shores Condominium Mobile Home Park responded to some of the flooding and erosion problems described in the LWRP Reach 8 Inventory and Analysis with construction of a shore hardening structure without having first obtained all the necessary state and local permits. A review of the local permits issued indicated that, other than rebuilding a handful of existing structures within the harbors, the only new coastal structures that had been approved or constructed within the coastal area since the LWRP was approved by the Town Board was a court-mandated revetment on a residential lot and a culvert to improve water quality in Accabonac Harbor.

Natural conditions along the shoreline have progressed as described and predicted in the LWRP, with few areas of accelerated erosion. The fronting beach and dune system in the Ditch Plains area, described within Reach 9 as an area of concern, has received repeated deposits of beach nourishment in recent years. Similarly, the Soundview Drive Area within Reach 6 continues to be one of the most vulnerable storm-induced erosion areas within the Town. The LWRP recommends the preparation of a hurricane damage mitigation plan and a hazard mitigation plan to address these concerns, and adoption of the LWRP increases the likelihood of the Town successfully securing funds to undertake these studies.

In 2004, the Town implemented a program that offers financial incentives to homeowners to remove or close underground fuel oil tanks. The Town Board also enacted legislation limiting clearing on residential lots Town wide.

All of these actions demonstrate that the East Hampton Town government continues to further the objectives established in the 1999 LWRP and that the preceding

summary of differences between the 1999 draft and current conditions supports the fact that the LWRP document does not require significant modification prior to approval by the NYS Secretary of State. The conditions, issues, and opportunities identified in the 1999 draft LWRP remain relevant and appropriate today.

ACKNOWLEDGEMENTS

From the outset this Local Waterfront Revitalization Program (LWRP) has been a collaborative effort. Several levels of government and a great number of individuals have made significant contributions to its development and labored intensively toward its completion.

The East Hampton LWRP could not have proceeded without the unwavering logistical and financial assistance of the New York State, Department of State through two administrations, first of Gail Schaeffer, and second of Alexander Treadwell, as Secretaries of State. The NYS DOS Division of Coastal Resources, under the leadership of George Stafford and Charles McCaffrey, provided consistent support and invaluable advice to the local program. Their representatives to East Hampton, Peter Walsh, John Bartow, and Steve Ridler through the long stretch, threaded bureaucratic mazes, helped to craft accurate language, and provided guidance at every turn. Fred Anders, NYS DOS Coastal Hazards Specialist, was a constant collaborator on coastal processes and erosion, and Tom Hart's expertise was key to producing the GIS maps. Bill Sharp, NYS DOS attorney and former local resident, supplied expert legal counsel.

Steve Ridler, NYS DOS Coastal Planner extraordinaire, focused patiently on everything from policy issues to punctuation, and helped to edit, format and structure the LWRP document throughout the process of completing the program. He provided great assistance in preparing the Town's application for *No-Discharge Zones* for the NYS DEC and US EPA. Though they may remain invisible in the document, the patience, intelligence and committment of the NYS DOS staff vastly enhanced the Town's coastal planning effort.

On a local level, Town determination to produce a quality plan emanated from Cathy Lester, former baywoman and Town Trustee, who shepherded it for the Town Board, first as a Councilwoman and later as Town Supervisor. Her support, dedication and attention to detail have been unparalleled. Planning Director Lisa Liquori supervised preparation of the LWRP, guiding it through ten years of constant labor in the midst of her day-to-day planning responsibilities. Natural Resources Director Larry Penny was a close collaborator, contributing invaluable advice and scientific information, and his own time as well as that of his department staff to help produce the document. Barnaby Friedman taught himself the MapInfo software and was able to produce the LWRP maps. NRD intern Jennifer Darling carried out a summer-long boater and marina survey, much of it on her own time.

From the Planning Department staff, Judy Cooper, Kim Shaw, Joanne Pawhul, Crista Carmody, Brian Frank and Deputy Director Marguerite Wolfson all contributed to the LWRP. Judy Cooper, especially, produced the initial draft of the **Water Resources** component before departing for the greener pastures of Vermont. The clerical staff, including Kate McNally, Jacqui Wilkins and Jodi Walker, toiled through endless drafts and versions of the report, resurrecting files from old computer

systems. Jodi Walker, in particular, wrestled with the many tables in WordPerfect until they looked perfect. The extra efforts of the Planning Department support staff are immensely appreciated.

A citizen's Waterfront Advisory Committee (WAC), commissioned by the Town Board in 1989, oversaw preparation of the LWRP draft. It would be difficult to calculate the time and effort expended by this dedicated group, who attended more than 60 night meetings, reviewed thousands of pages, and provided insights only those intimately familiar with the local waters, habitats and marine industry could furnish. Through it all, the members of the WAC displayed amazing endurance, patience and civility. Many other local residents also shared an affectionate knowledge of their coast at public meetings and in correspondence and conversation. At completion of the draft, the WAC members included Jim Ash, Lester Black, Billy Grimm, Brad Loewen, and Dick Mendelman.

Russell Stein, attorney and past chairman of the WAC, helped to get the program started in 1989. Jim Mangano also participated for a time. One member, Captain Warren Hader, charter fisherman par excellence, and member of the International Convention for Conservation of Atlantic Tuna (ICCAT) died during the period. Warren's hands-on familiarity with the local waterfront and fisheries of all kinds was leavened with salty humor. The early years of the LWRP also benefitted from the marine lore and ancestral knowledge of Tom Lester, bayman of the finest kind. Their joy of being on the water and their intimate wisdom of the coast inspired us all.

Assistant Clerk Jim McCaffrey represented the Town Trustees at WAC meetings, preceded by Tom Knobel. Trustee Gordon Vorpahl dedicated himself to helping the Town's *No-Discharge Zone* become a reality, before his untimely death in June, 1998. Lisa Stewart was also an active Trustee liaison.

Rick Whalen, Assistant Town Attorney of many talents, put his expertise in planning and zoning to work producing essential local laws that implement LWRP policies, in a *Harbor Protection Overlay District*, new ferry legislation, a revised Flood Hazard Overlay District, local adoption of the State Coastal Erosion Hazard Act and a local Erosion Protection Law, among others.

As the various sections of the LWRP were drafted, many individuals contributed their expertise. Dewitt Davies, of the Suffolk County Planning Department, contributed land use mapping from the Peconic Estuary Program to **Development Policies #1-6**. Ron Green, Manager of Information Systems for Suffolk County, was also of great assistance in supplying GIS maps. **Significant Habitats Policy #7** benefitted from information from The Nature Conservancy, both from the local South Fork/Shelter Island Chapter and their state Heritage Program, as well as from review by NYS DOS habitat specialists Greg Capobianco and Nancy Niedowski, who oversaw preparation of updated habitat narratives.

Fred Anders brought his expertise and constant temperate advice to bear on **Flooding & Erosion Policies #11-17**, to its great improvement. Coastal geologists Steve Leatherman, Jay Tanski and Rhodes Fairbridge helped to fathom the complexities of coastal processes. Retired science teacher Tony Minardi shared ten years of beach monitoring in East Hampton Village. Joe Burgess acted as faithful recorder of wave and beach phenomena at Ditch Plains in Montauk.

Thanks to Colonel Fleming of the Air National Guard in Westhampton, Captains Kevin Fennell and Mike Noyes, and Flight Sergeant Mike Kurtz, who gave us a helicopter tour of the coastline in 1994. Kevin McDonald, Vice President of the Group for the South Fork, helped to get the aerial inventory and a shoreline monitoring pilot project off the ground, and a community grant from the Nathan Cummings Foundation helped to fund them. NRD staff Barnaby Friedman, Pat Janums, and intern Betsy Jacobs on the beach and at the computer spent hours compiling beach profiles, under surveyor Bill Walsh's tutelage.

Too many local citizens to name contributed their time and local knowledge to the preparation of the original **Public Access** report. The majority of their recommendations and observations were invaluable and are incorporated into the text. Information and technical support from several public agencies was also an aid, most notably from representatives of the State and County Parks in the Town. The extensive database created for the **Public Access and Recreation** section was designed by consultant Pat Janums, using Paradox 4.0 DOS software. Pat did an outstanding job preparing a planning tool with application beyond this report. She persisted through many revisions and fine tuning adjustments. Crista Carmody and Brian Frank, Planners, helped refine the database design, then laboriously scrutinized and categorized each site using maps, aerial photos, telephone consultations with local "experts", and site inspections in the field. Hours of data entry work followed their deliberations, which were further checked and analyzed by Planning Director Lisa Liquori, and reviewed in detail by the Waterfront Advisory Committee.

For her tireless effort in preserving the integrity of East Hampton's heritage of abundant waters and wild places, the **Water Resources** section is dedicated to Debra Brodie Foster for her fifteen years of service on the East Hampton Town Planning Board. Numerous other individuals deserve thanks for their assistance in preparing this section, including Emerson Hasbrouck and Chris Smith of Cornell Cooperative Extension for shellfish analysis, Senior Harbormaster Bill Taylor for his practical experience, Judith Hope for her ideas and support, Larry Penny, Natural Resources Director and two former members of the Natural Resources Department, Cathy Bailey for her computer skills and coliform bacteria analysis, and Jennifer Darling for her dedication and many volunteer hours to complete the marina and boater survey. Lisa Tettlebach of NYS DEC Shellfisheries Section in Setauket has been a continuing source of data on water quality and a helping hand on shellfish closures.

As editor, and Chairman of the WAC, I congratulate all those who have worked to make the Town's LWRP a working, living document, especially those members of the public who have taken the time to contribute their thoughts, and the local press who have translated it for the community. We have all labored to take it beyond a written plan on a shelf. Though it will not tame the sea, the LWRP may help us live in better harmony with it.

Rameshwar Das December, 1999

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ACRONYMS

ACOE	U.S. Army Corps of Engineers
ATV	All-terrain vehicle
BMP	Best Management Practices
BOD	Biological Oxygen Demand
CAF	Coastal Assessment Form, used in Consistency Review process
CBRA	Coastal Barrier Resources Act, designates CBRA zones where Federal funds may not be used to encourage development
ССМР	Comprehensive Conservation and Management Plan, being devised for Peconic Estuary Program (PEP)
СЕНА	New York State Coastal Erosion Hazards Act, codified in Coastal Erosion Mnanagement Regulations, as amended March, 1988
EAF	Environmental Assessment Form, used in SEQRA process
EPF	New York State Environmental Protection Fund
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map, denotes flood zones for the National Flood Insurance Program
GIS	Geographic Information System, computerized mapping system and associated databases
HDMP	Hurricane Damage Mitigation Plan
HPOD	Harbor Protection Overlay District
ICCAT	International Convention for Conservation of Atlantic Tuna
IPM	Integrated Pest Management
ISTEA	Federal Inter-modal Surface Transportation Efficiency Act

LCB	Leaching catchment basins, used for drainage retention
LILCO	Long Island Lighting Company
LIPA	Long Island Power Authority, took over LILCO in 1998
LIRPB	Long Island Regional Planning Board, coordinates planning studies for Nassau and Suffolk Counties
LIRR	Long Island Railroad, operated by Metropolitan Transit Authority (MTA)
LWRP	Local Waterfront Revitalization Program, this document
MHW	Mean High Water
MSD	Marine Sanitation Device, marine toilet or head
MSL	Mean Sea Level
MSRC	Marine Science Research Center, coastal research institution at the State University of New York, Stony Brook, includes a Sea Grant extension office
NDZ	No-Discharge Zone
NFIP	National Flood Insurance Program, Federal flood insurance program administered by the locally implemented by the Flood Hazard Overlay District
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmosperic Administration, administers Federal Coastal Zone Management program
NRD	
	Natural Resources Department, Town of East Hampton
NRSP	Natural Resources Department, Town of East Hampton Town Natural Resources Special Permit
NRSP NSSP	
	Town Natural Resources Special Permit National Shellfish Sanitation Program, water quality standards for shellfish

NYS DOS	New York State Department of State, Division of Coastal Resources and Waterfront Revitalization, responsible for State coastal program
NYS OPRHP	New York State Office of Parks, Recreation and Historic Preservation
NYS DOT	New York State Department of Transportation
NYS DEC	New York State Department of Environmental Conservation
OCS	Outer continental shelf
OMWM	Open Marsh Water Management
ORV	Off-road vehicle, usually 4-wheel drive
PDR	Purchase of development rights, technique for farmland preservation
PEP	Peconic Estuary Program
PLT	Peconic Land Trust
SASS	Scenic Areas of Statewide Significance, regionally significant scenic resources
SCDHS	Suffolk County Department of Health Services
SCFWH	Locally or State designated Significant Coastal Fish and Wildlife Habitat
SCPD	Suffolk County Planning Department
SCTM#	Suffolk County Tax Map number, parcel reference used to locate property
SEMO	State Emergency Management Office of New York
SEQRA	State Environmental Quality Review Act, gives requirements and timetable for environmental review by municipal and state agencies
SLOSH	Sea Lake and Overland Surge from Hurricanes, computer model for hurricane flooding
SPDES	State Pollution Discharge Elimination System, permits issued by NYS DEC for point discharges from wastewater or other waste treatment systems
SWMP	Town Solid Waste Management Plan

TNC	The Nature Conservancy
ТОЕН	Town of East Hampton
US EPA	U.S. Environmental Protection Agency
USDA	U.S. Department of Agriculture, Natural Resources Section
USFWS	U.S. Fish and Wildlife Service
WAC	Town Waterfront Advisory Committee, oversight committee for preparation of LWRP

INTRODUCTION AND GUIDE

EXECUTIVE SUMMARY

The Town of East Hampton Local Waterfront Revitalization Program (LWRP) is the Town's coastal management blueprint. As a comprehensive examination of the Town's coastal resources and management practices, it aspires to coordinate local and state policies for a multitude of commercial and recreational uses of the coast. It puts forward the Town's coastal policies and commits it to managing and conserving coastal resources into the twenty-first century and for generations to come.

The LWRP process has provided a forum for a host of local coastal issues, many of them complex and requiring long term solutions. The summary of **Key Local Issues** accompanying the **Introduction** highlights the scope of concerns that were examined. Throughout its development the LWRP has involved balancing community interests and state program requirements. Structured on the 44 statewide coastal policies, the LWRP has been adapted to reflect local needs. In its programmatic mode the LWRP serves as the guide for consistency review, a process for state and federal agencies to review actions affecting the Town's coast based on the LWRP policies, and a means to require adherence to Town guidelines.

East Hampton's LWRP document was written by the Town Planning Department with advice and oversight by a Town Waterfront Advisory Committee. The Committee, made up of citizen representatives of the marina industry, commercial fishing, and environmental interests, was regularly augmented by Town Board members, representatives of the Town Trustees, the Town Harbormaster, and the Town Planning and Natural Resource Directors. The NYS Department of State Division of Coastal Resources provided extensive technical guidance and support throughout the process. The Waterfront Advisory Committee devotedly reviewed each policy issue and inventory detail in countless hours of night meetings over nine years. Issues were further resolved at numerous public meetings, and received a thorough airing in the local press. A final review was conducted by the full Town Board.

As a planning tool the LWRP is intended as a living document, an evolving strategy rather than a static regimen. As knowledge increases, as needs manifest over time, the LWRP can and should be amended and reviewed. A compendium of **Projects** included in Section XIV are designed to enhance understanding of coastal processes, take further planning steps, and implement policy recommendations. The **Projects** section provides an extensive shopping list of management initiatives that will serve the Town's coast in years to come. Integrating these efforts within the LWRP is also expected to help leverage Town funding with grants from other levels of government.

Completing the LWRP has been a long and arduous process that will benefit the Town's coast with tangible improvements, better management and enhanced resource protection. The **Introduction** and **Guide to Using the LWRP** that follow provide an overview of the document and assist in navigating its structure and in locating information and recommendations. They are intended as an aid to the general public, agencies and the private sector in reviewing the LWRP planning process.

INTRODUCTION

A. WHAT IS THE LOCAL WATERFRONT REVITALIZATION PROGRAM?

1. Local setting

A hundred miles from New York City, East Hampton is the easternmost town on Long Island, a well known summer resort surrounded by water. Coexisting with trendy seasonal activity is a sturdy local community founded 350 years ago as a colonial settlement. The early economy had its roots in agriculture on the fertile outwash plain and fishing and shellfishing from the abundant coastal waters.

Today's coastal issues remain inherent in East Hampton's values and lifestyles and vital to its physical and economic well being. Everything is intertwined with the sea and the shore. If beaches, water quality or scenic values deteriorate, the attraction of the area as a summer haven will diminish. To preserve coastal resources and to maintain future quality of life it is vital that Town officials and citizens be able to make informed decisions based on good information. Fortunately, East Hampton Town has a long record of sound planning and environmental protection on which to build its coastal management policies. In recent years the Town has often taken a lead in innovative land use techniques and preservation of open space.

Although the resources of the coast must have seemed pristine and limitless to the early settlers, the pressures of modern development and population increase have caused significant impacts and have begun to degrade the environment. Even so, it is still realistic to believe that use of the water and adjacent land can be managed to preserve a healthy coastal environment. However, if decisions are not made to reverse current trends many coastal resources may be lost, changed or damaged beyond repair within a generation. This is a pivotal time for the Town to enact a Local Waterfront Revitalization Program (LWRP). (See Regional Setting Map v-1)

2. Program scope

An LWRP is a detailed, realistic effort to protect and promote waterfront resources. The LWRP process derives from the Federal Coastal Zone Management Act (CZMA) of 1972, renewed in 1996. CZMA authorizes the Commerce Department's National Oceanic and Atmospheric Administration (NOAA) to develop coastal management programs in conjunction with the nation's coastal states. In New York coastal management is administered by the New York State, Department of State, Division of Coastal Resources (NYS DOS), which provides policy standards, support services and funding for the development of LWRPs. If a locality does not choose to develop a LWRP, NYS DOS retains responsibility for integrating and reviewing local coastal matters as they apply to the state and federal programs. However, the LWRP is critical for the expression of community based policies and concerns.

The LWRP is structured as a voluntary grass roots effort that brings together local and state government, citizens, business and environmental interests to assess local conditions and build a

consensus on the desired future for the community's coast. Unlike localities addressing an underutilized or deteriorated waterfront, the Town of East Hampton's LWRP is primarily a coastal resource management plan. It addresses a wide spectrum of coastal issues including waterfront development, natural habitats, public access, recreational resources, water quality, flooding and erosion, commercial fishing, and historic and visual resources.

Developing a community consensus on coastal issues, with a clear and decisive action plan, flexible enough to adapt to future alterations in the coastline, the LWRP lays the groundwork and provides a context for improved coastal management. The LWRP is intended to be a living body of knowledge about the Town's coast that will evolve as information and management expertise develop over time. When approved and implemented, the LWRP will not only sustain existing Town land use practices, but form a policy and information base for managing the Town's coast for decades to come. The **Policies**, and the **Projects** in Section XIV are the bridge to that future.

3. Consistency review

The premise of the LWRP is that local policy should have a strong voice in coastal management, especially as affects actions by other levels of government. This is accomplished through a consistency review process, whereby proposed actions originating from or coming before a state or federal agency are reviewed for consistency with LWRP policies or standards. Local actions are reviewed by designated units of local government. In brief, while the LWRP adapts state policies to meet local policy needs, the consistency review process results in state agencies complying with, and enforcing local standards. The local policies are also advanced through positive projects and activities, assisted by state grants for planning and implementation, and other efforts to promote local coastal management.

After the LWRP is approved by the Secretary of State, the NYS DOS is responsible for ensuring that state and federal agencies actions are compatible with the Town's LWRP. The consistency review process is the critical link between local, state and federal actions and provides the mechanism for inclusion of the Town's policies in all levels of coastal management within an orderly and timely procedure.

There are significant advantages in having an approved LWRP where the Town's policies take precedence, both to make state and federal actions more responsive to local conditions and to prevent actions or policies that are inconsistent with local needs. Once the LWRP is completed and approved the Town has in place the local controls and the legal ability to ensure that federal and state actions proposed for the coastal zone will occur in the fashion prescribed in the LWRP. This consistency provision is a strong tool that assures that federal, state and local governments work in unison, and not at cross purposes, to build a healthier waterfront environment and a stronger local economy.

4. Preparation of the LWRP document

In the process of preparing the LWRP, Town and NYS DOS personnel developed a working partnership, with technical expertise, practical experience and funding assistance from the State complementing dedicated staff and volunteer efforts from the Town's side. Preparation of the LWRP document was concentrated in the Town Planning Department, headed by Planning Director Lisa Liquori, with assistance from other departments, especially the Natural Resources Department and its Director, Larry Penny. In contrast to other communities, East Hampton Town chose to produce its LWRP document internally rather than hire consultants from outside the town.

A Town Waterfront Advisory Committee of citizens appointed by the Town Board included Jim Ash, Lester Black, Rameshwar Das, Bill Grimm, Brad Loewen, and Dick Mendelman, who reviewed and revised drafts of the various LWRP sections in detail. Town Supervisor Cathy Lester, Town Trustee James McCaffrey, and Senior Harbormaster Bill Taylor were also active contributors who added substantively to the committee's advisory role in developing the LWRP.

From comment at public meetings, interviews and correspondence from individuals, citizens have extended the breadth and depth of knowledge embodied in the report with considerable local expertise about coastal matters. Public awareness of coastal issues and the content of the LWRP has also been expanded by extensive reporting in the local press. Town planners have also made an effort to reach out to knowledgeable people in the community when collecting information. A second phase of local review consisted of input from the Town Board, and further public comment at Town Board meetings or hearings. Changes resulting from these proceedings have been incorporated into the LWRP document.

Each topic section of the LWRP consists of an **Inventory and Analysis** of resources accompanied by management recommendations, and a **Policy** segment. The New York State outline of 44 policies to be addressed by each LWRP was consolidated into topic sections of policy groups (listed below) for working efficiency. **Inventory and Analysis** sections were compiled with planning department resources such as maps, aerial photographs, and the Town's comprehensive plan, accompanied by field investigations and consultations with knowledgeable groups and individuals.

Policies, based on the state framework, were drafted to reflect existing conditions and with the aim of sustaining quality of life, natural resources, economic health, and traditional ways of life such as fishing. While the **Policies** are summarized below, the detailed information in the **Inventory and Analysis** sections and the accompanying **Policy** explanations in each topic section are integral to an understanding of the Town's rationale.

5. Agency approval

An important ingredient in the LWRP approval process is the opportunity it affords other agencies of government to provide feedback and comment on the Town's policies. In the approval process, this takes the form of a comment period during which state and federal agencies review the draft

LWRP document and note any apparent inconsistencies with existing laws or regulations, which NYS DOS and the Town of East Hampton then work to resolve within the final LWRP.

6. LWRP implementation

The path leading from an LWRP issue to a government response and implementation of a solution may at times be lengthy. Within the LWRP process, issues were discussed in the **Inventory and Analysis**, then addressed in resulting recommendations, which were formalized as standards or statements in the relevant **Policy** sections of the LWRP document. The bridge from policy to practice is effected by existing local, state or federal law, or in some cases the Town has passed new enabling local legislation, for instance, the *Harbor Protection Overlay District (HPOD)*. A catalog of local laws that implement the LWRP policies appears in **Section XV** of the LWRP document, with summaries of each.

In addition, coastal management consists of positive actions not involving legal or regulatory procedures. These activities are addressed through changes in present Town programs or through future undertakings of the LWRP included in the **Proposed Projects** in **Section XIV**. The **Projects** section encompasses a spectrum of coastal initiatives from virtually every policy group, from *Open Space Acquisition* to *No-Discharge Zones*, from *Public Access Improvements* to *Wetlands Restoration*.

Research on local coastal processes and their underlying science also continues to better inform regulatory decisions and policy making. Ongoing studies and research needs are also described in the **Projects**. If, as expected, global warming and future sea level rise accelerate, this knowledge base will be important in managing flooding and erosion, maintaining habitat, and planning future development. Shoreline monitoring, water quality studies and habitat studies are among the efforts which will provide a baseline of information for future coastal management.

The success of the LWRP depends not only on Town initiatives, but on developing public support, an attitude of respect and responsibility for coastal resources, and an understanding of the fragility of wetland habitat and the natural wisdom of the beaches' dynamic equilibrium. Several public education **Projects** are targeted at user groups such as waterfront homeowners and boaters, while other efforts will be directed throughout the community. The true test of the LWRP will be whether a community consensus develops to support it over time.

7. Broader planning context

While the LWRP is an integral program, it is one of a number of planning initiatives that have taken place or are in process on local, regional, state and federal levels. On the local level the LWRP builds on the Town's Comprehensive Plan (last updated in 1996), and other Town plans formulated to address specific issues, such as the Town Open Space Plan, Town Transportation Study, Town Emergency Response Plan for hurricanes, and studies of environmental resources such as beach monitoring for erosion, water quality testing, and habitat management initiatives.

Regional efforts include planning work by Suffolk County and the Long Island Regional Planning Board, which conducts studies such as the 1984 *South Shore Hurricane Hazard Mitigation Plan*, and groundwater and recreational resource studies. The County government also has traditionally performed most dredging operations on the East End, although these endeavors have been curtailed in recent years by budget constraints. Another regional planning effort, the Peconic Estuary Program (PEP), is a multi-tiered federal/state/county/local effort that is part of the National Estuary Program sponsored by the Environmental Protection Agency (US EPA). The goal of the five-year PEP program is to produce a Comprehensive Conservation and Management Plan (CCMP) to improve water quality and conserve natural resources for the entire Peconic Bay system, which includes the Town's northern shores.

State planning includes the State Coastal Program, as well as support for local coastal management such as the LWRP. Through its Division of Coastal Resources, the New York Department of State also conducts research and helps to formulate policy on coastal issues, for instance by coordinating a state Coastal Erosion Task Force (NYS DOS, 1994), maintaining the list of Significant Coastal Fish and Wildlife Habitats (SCFWH), etc. NYS DOS funds coastal management planning and projects with annual grants from the state Environmental Protection Fund and through funds from the federal coastal program. Also at the state level, NYS DEC administers the Coastal Erosion Hazard Act, Tidal Wetlands Act and other permits and environmental regulations, makes grants for improvement of environmental quality, and regulates fisheries in state waters.

Federal planning activities include erosion related studies such as a South Shore Reformulation Study presently underway by the U.S. Army Corps of Engineers (ACOE), dredging and maintenance of federal channels and inlets by ACOE, emergency planning by the Federal Emergency Management Agency (FEMA), designations of barrier beaches under the Coastal Barrier Resources Act, the National Flood Insurance Program, and various management programs of the US Fish and Wildlife Service, the US EPA National Estuary Program, and, of course, programs administered by NOAA under the Coastal Zone Management Act, the progenitor of this LWRP.

Combined, the many levels of government activities form a mosaic of planning expertise, with interlocking legal and permitting constraints designed to protect coastal resources, public interests and private property. The many governmental layers may at times appear a regulatory maze, but as with most planning and environmental matters, the core issues are the same, their resolution dependent on interpersonal and intergovernmental communications. As the saying goes, it's all done with people.

8. East Hampton Town Trustees

The Town Trustees are integral to the unique history of the Township. Settled in 1649, the Town of East Hampton was self-governed until the British conquest of the colony of New York in 1664. In order to protect their colony, the early inhabitants were constrained to purchase the Nicolls Patent from the Duke of York (later King James the Second). That Patent ratified, confirmed and granted

to the Patentees, for and on behalf of themselves and the inhabitants of the town, all that tract of land from Southampton Township eastward to the "utmost extent of the island", bounded on the north by the bay and on the south by the sea or main ocean. Included within the Patent were all havens, harbors, creeks, marshes, waters, lakes, rivers, fishing, hunting, and all other profits, commodities, emoluments and hereditaments.

In 1685, James the Second ascended the throne of England and sought "to overturn the institutions he had conceded" (Town Records, Vol. II, pg 4). He succeeded in forcing the inhabitants to purchase a new Patent at the then substantial cost of 200 pounds. Dated December 9, 1686, that Patent, known as the Dongan Patent, created the Trustees of the Freeholders and Commonalty of the Town of East Hampton. The Town Trustees of today are the direct successors of the twelve original Trustees named in the Dongan Patent.

The Dongan Patent (referring to the Nicolls Patent) described the geographical limits and bounds of the grant as follows: "...beginning from the East limits of the bounds of Southampton, as they are now laid out and staked according to agreement and consent; so to stretch East to a certain Pond, which lies within the old bounds of the lands belonging to the Montauk Indians, commonly called Fort Pond; furthermore, to go on still East to the utmost extent of the Island; on the north they are bounded by the Bay and on the South they are bounded by the Sea or main Ocean".

Within those geographic bounds, the Patent granted title to certain lands to the Town Trustees. On behalf of his Majesty, King James the Second, Governor Dongan "granted, ratified, released and confirmed" unto the Town Trustees "all the aforesaid tracts and necks of land within the limits and bounds aforesaid, together with all and singular the ... Marshes, Swamps, Plains, Rivers, Rivulets, Waters, Lakes, Ponds, Brooks, Streams, Beaches, Quarries, Mines, Minerals, Creeks, Harbors, Highways and Easements, Fishing, Hawking, Hunting and Fowling, Silver and Gold Mines Excepted...". After declaring the Town Trustees the power "to make such acts and orders in writing, for the more orderly doing of the premises of the said trustees...and their successors, from time to time shall or may think convenient."

The validity of the Dongan Patent and similar Patents in other Long Island townships has been repeatedly upheld throughout the history of the State. See, Heller v. Trustees of the Town of East Hampton; Trustees of the Freeholders and Commonalty of the Town of East Hampton v. Bienstock, et al.; State of New York v. Trustees of the Freeholders and Commonalty of the Town of Southampton; Knapp v. Fasbender; Howell v. Jessup; and the cases cited in each of the above. (Copies of those cases are available at the Trustee office.) In the case of Howell v. Jessup (1899), the New York State Court of Appeals examined Southampton Town's Dongan Patent (virtually identical with East Hampton's Patent) and found that "It is not a deed conveying private property, to be interpreted by the rules applicable to cases of that description. It was an instrument upon which was to be founded the institutions of a great political community, and in that light it should be regarded and construed." The Court found that the Patent was "broad enough in terms to grant to the

trustees of the freeholders and commonalty of the town of Southampton, not only the lands under the waters, but the sovereignty over the waters for the benefit of the freeholders and inhabitants of the town...".

After the Dongan Patent was received, the Town Trustees went about dividing the lands they had been granted among those inhabitants entitled to same. These divisions were known as allotments. While the exact phraseology of each allotment varied, the Town Trustees have always been protective of the public's right of access to, and use of, their waters, underwater lands and beaches. They retained title to the beaches adjacent to the allotted lands as a convenient means of travel and as a valuable source of fish, shellfish, seaweed and other sea products. The Town Trustees never allotted any of their waters or underwater lands and have retained title to same throughout their history.

The Town Trustees manage and regulate their waters, lands, underwater lands and beaches as "common lands", with rights or interests therein held by them for the benefit of the inhabitants of the Town. Both the Town Trustees' authority over, and their proprietary rights in, such common lands have been specifically recognized and confirmed by legislation of the State of New York on at least three occasions. By Chapter 1001 of the Laws of 1966, Chapter 233 of the Laws of 1972 and Chapter 378 of the Laws of 1975, the authority of the Town Trustees to manage their common lands was confirmed. Each empowers the Town Trustees to "execute all such conveyances, leases, permits, agreements or other writings, necessary or proper in carrying into effect the provisions of this act".

Throughout their history, the Town Trustees have jealously protected their right to legislate and control their waters, lands, underwater lands and beaches. At times, they have been in conflict with other Town entities over the appropriate course of action to be taken. In the majority of cases, the Town Trustees and other Town entities have been able to arrive at acceptable compromise solutions. In those cases where compromise cannot be achieved, the Trustees believe that the Nicolls and Dongan Patents, subsequent legislation and numerous judicial decisions grant to the Town Trustees the final say in all matters relating to their holdings.

It is not the intent of this LWRP to alter in any way the unique and ancient patents, or the rights and privileges enjoyed thereunder. Therefore, nothing in this LWRP should be construed to abrogate, dilute, limit or abridge any rights the Town Trustees may possess, either now or in the future, to regulate and manage properties within their control.

GUIDE TO USING THE LWRP

This user guide includes an **Overview** of the organization of the LWRP, a **Topic Index**, a summary of **Key Local Issues**, and a **Policy Guide** with the basic policy text and a synopsis to assist in locating information and with the consistency review process.

A. OVERVIEW

1. Organization of the LWRP

The New York State Coastal Management Program is comprised of 44 statewide coastal policies. These have been adapted to address local conditions and planning needs. In the Town of East Hampton LWRP, the 44 statewide policies were organized into policy groups, originally with a separate report for each group. The **Inventory and Analysis** and **Policy** component for each group were completed as a unit so that, for instance, the **Inventory and Analysis** which is the basis for **Flooding and Erosion Policies #11-17** accompanies these policies as a unified report. While the LWRP as a whole was being completed, a number of these reports were incorporated into the Town's Comprehensive Plan, with accompanying public hearings, and a number of recommendations were implemented, for instance, a *Harbor Protection Overlay District*. The East Hampton LWRP is organized into 19 sections (see **Table of Contents**):

Section I	Coastal Area Boundary
Section II	Development Policies #1-6
Section III	Significant Habitats Policies #7-8
Section IV	Commercial Fishing Policy #10/10A
Section V	Flooding & Erosion Policies #11-17
Section VI	General Policy #18
Section VII	Public Access/Recreation Policies #9,19-22
Section VIII	Historic Resources Policy #23
Section IX	Scenic Resources Policies #24-25
Section X	Agriculture Policy #26
Section XI	Miscellaneous Policies #27-29
Section XII	Water Resources Policies #30-40,44
Section XIII	Air Quality Policies #41-43
Section XIV	Proposed Projects
Section XV	Local Implementation of the LWRP
Section XVI	State and Federal Actions and Programs Likely to Affect Implementation
Section XVII	Consultation with Other Affected Federal, State, Regional and Local
	Agencies
Section XVIII	Local Commitment

Section XVIII Local Commitment

2. Coastal Area boundary

Section I of the LWRP defines the boundary of the **Coastal Area** which was studied in the LWRP and to which the 44 policies apply. For LWRP purposes the Town's coast was divided into twelve geographic reaches. Reach 1, Northwest, begins at the Town's north shore boundary with the Village of Sag Harbor and Southampton and Shelter Island Towns. Seven more reaches extend along the Town's Peconic Estuary shore to Montauk Point, and three reaches cover the Atlantic Ocean shore to the west boundary with Southampton Town at Wainscott. East Hampton Village, a separate municipality, is not included, nor is the Village of Sag Harbor, which has an approved LWRP of its own. A twelfth reach is set aside for Gardiner's Island, the most significant detached part of the Town's coast. Neighboring municipalities are either preparing, or should be encouraged to prepare their own LWRP's in coordination with East Hampton's policies.

The inland boundary of the **Coastal Area** extends approximately 1500' from the shore, although this dimension varies to include significant features or to conform to natural demarcations such as roadways, etc. In addition, several expansions to the **Coastal Area** have been proposed in order to include important features. It is important to be aware of the reach locations in order to reference information in the LWRP. Map I-2 depicts the Reach and **Coastal Area** boundaries.

3. State and Local Coastal Policies

The sequence of the original 44 State policies, listed in the following table, has been somewhat rearranged in the policy groups of the East Hampton LWRP. A number of the statewide policies do not apply or apply only minimally to the Town of East Hampton, such as those for **Major Ports** (#3), **Statewide Scenic Resources** (#24), and **Energy and Ice Management** (#27-29).

Some policies were also emphasized or consolidated in the process of developing the LWRP. For example, **Policy #10, Commercial Fishing**, is separated out in the East Hampton LWRP because of its importance to the local economy. **Policy #9, Recreational Fish and Wildlife Resources**, and **Public Access Policies #19-20**, are included with **Recreational Resources Policies #21-22** in the **Public Access and Recreational Resources** report. This was done because the Inventory for the **Recreational Resources** report, an extensive computerized database completed in 1996, was used to update the inventory for the **Public Access** report, which had originally been undertaken in 1991.

Several local sub-policies were added to the document to address specific local concerns. These are generally noted as **Policy #X-A** following the relevant State policy. For instance, **Policy #10A**, **Aquaculture/Mariculture** follows **Policy #10**, **Commercial Fishing**. A synopsis of the local policies is found in the **Policy Guide**.

POLICY NUMBER	CATEGORY	SUBJECT AREA
1 2 3 4 5 6	Development Policies	Waterfront Revitalization Water-dependent Uses Major Ports Small Harbors Public Services Permit Procedures
7 8 9 10	Fish & Wildlife Policies	Significant Habitats Pollutants Recreational Resources Commercial Fisheries
11 12 13 14 15 16 17	Flooding & Erosion Policies	Siting of Structures Natural Protective Features 30-year Erosion Control Structures No Flooding or Erosion Increases Mining, Excavation and Dredging Use of Public Funds Non-structural Control Measures
18	General Policy	Economic/Social/Environmental Interests
19 20	Public Access Policies	Access to Water-related Recreation Resources Access to the Public Foreshore
21 22	Recreation Policies	Water-dependent/Water-enhanced Recreation Uses Multiple-use Development
23 24 25	Historic Resource and Visual Quality Policies	Historic Preservation Scenic Resources of Statewide Significance Local Scenic Resources
26	Agricultural Lands Policy	Agricultural Lands Preservation
27 28 29	Energy & Ice Management Policies	Energy Facilities Siting and Construction Ice Management Practices Energy Resources Development

NEW YORK STATEWIDE COASTAL POLICIES

POLICY NUMBER	CATEGORY	SUBJECT AREA
30	Water & Air Resources	Discharge of Pollutants into Coastal Waters
31	Policies	Water Quality Classifications
32		Innovative Sanitary Waste Systems
33		Storm-water Run-off
34		Vessel Discharges
35		Dredging and Disposal
36		Hazardous Materials Spills
37		Non-point Discharges
38		Surface & Groundwater Supplies
39		Solid Waste Management
40		Industrial Discharges
41		State & National Air Quality Standards
42		Clean Air Act - Reclassifications
43		Acid Rain
44		Tidal & Freshwater Wetlands

B. HOW TO FIND INFORMATION IN THE LWRP

To locate information in the LWRP, find the appropriate policy group and locate the report in the **Table of Contents**. Within the various policy reports, information in the **Inventory and Analysis** section is organized with general information on a townwide basis and detailed information by reach.

As an example, to find information about erosion protection on Gerard Drive in Reach 3, one could refer to **Section V, Flooding and Erosion Policies #11-17**, to the general discussion about erosion problems and solutions in the townwide introduction, and to specific information about erosion problems and structures along Gerard Drive in the section for Reach 3, Accabonac, in the Inventory, and further discussion in the accompanying **Analysis. References** and **Appendices** are found at the end of the LWRP. Alternatively, use the **Subject Index** below for reference to the appropriate report or policy. The **Policy Guide** following this section can also be scanned for a synopsis of the policies.

Recommendations are generally found in the **Analysis** section of each report, on both a townwide basis and for each reach. Recommendations are further incorporated into the relevant accompanying **Policy** section, or for those involving concrete action plans or research, crafted into **Proposed Projects** in **Section XIV** of the LWRP. **Projects** are loosely associated by policy group. However, there are many overlaps; for instance, a drainage project may serve policy goals of reducing flooding as well as improving water quality or habitat.

A brief explanation of laws implementing the policies is found in **Section XV.A, Local Laws**, along with a summary table. For full text of a particular section of the law, see the **Appendices**, where applicable, or a current edition of the Town Code.

The information and policy material in the LWRP is synergistic. Policy areas often overlap. Information relevant to habitats may also raise a concern for use of recreation resources, flooding

and erosion and visual quality issues may be relevant for development, waterfront development to commercial fishing, etc., etc. Though not exhaustive, the **Inventory and Analysis** and **Policies** frequently contain cross-references to other sections. The overlap of policies results in a certain amount of duplication and repetition, but the reader should keep in mind that the LWRP is a tapestry of interwoven issues and information that has evolved over time. Because of the nature of coastal issues, it will necessarily be an evolving document as information and policies continue to adapt to the changing conditions of the coast.

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D. KEY LOCAL ISSUES

1. Introduction

The process of formulating East Hampton's LWRP produced an extended discussion on waterfront issues between planners, citizens, special interest groups, the Town Board and its subsidiary Planning and Zoning Boards, the Town Trustees, the Waterfront Advisory Committee, and NYS DOS. Concerns emerged relative to the Town's long term coastal management, but many issues also grew from day to day planning and zoning needs and land use controversies. Some issues necessarily require resolution through the political process. In East Hampton political issues are linked closely to land use, and nearly all land use is related to the coast, directly affecting the quality of life. Some key issues that emerged in the LWRP process are noted in the following pages, grouped loosely by LWRP policy affiliation:

2. Development Issues (Policies #1-6)

Revitalizing deteriorated waterfront areas is an important policy thrust of the state coastal program. Although there are few areas in East Hampton's coastal zone that would be characterized as deteriorated, seven sites in need of revitalization, reclamation or reuse were identified. At several sites fragile coastal and marine environments require great sensitivity to avoid impacts on the natural surroundings. At others, such as Montauk Harbor and the Montauk business district, cooperative planning with local business owners will be an essential ingredient of success.

Preserving important water-dependent uses such as commercial fishing docks, fish-packing operations and other shoreside infrastructure is a primary policy objective, especially in harbor areas where high value non-water-dependent uses such as restaurants or retail stores are competing for scarce waterfront real estate. For instance, in planning the revitalization of Montauk Harbor it will be important to preserve fishing uses while at the same time improving water access for tourists and pedestrians. Whether Permitted and Special-permit uses in the Waterfront (WF) Zone adequately protect water-dependent uses is an open question. It may be desirable to further prioritize Permitted

WF uses, particularly where mixed uses come into play, such as commercial fishing and retail or restaurant operations.

Maintaining open space for recreational purposes, habitat, public access and natural buffers is an important policy consideration for the coastal area. Where contiguous open space parcels are preserved or are in the process of being established, for example in Northwest (Barcelona Neck-Grace Estate-Cedar Point), Accabonac Harbor, Napeague State Park-Hither Hills-Hither Woods, Montauk Point (State Park-County Park-Sanctuary-Shadmoor), and Amagansett Double Dunes, it is important to complete remaining acquisitions and to constrain development on surrounding parcels to maintain habitats. Other areas remain in need of preservation or management. For instance, a permanent plan should be worked out for preservation of the Benson Reservation along Old Montauk Highway.

Limiting development in ecologically sensitive and flood prone areas such as the bay mouth spits of Sammy's Beach and Gerard Drive is critical to retaining their natural protective features, to avoid overstressing groundwater resources, and to prevent pollution of surrounding surface waters. Future development or redevelopment in these and other sensitive areas such as the Double Dunes of Amagansett will be further examined in the proposed *Hurricane Damage Mitigation Plan* (see **Projects**).

3. Fish & Wildlife Habitat Issues (Policies #7-8)

Increasing development and intensifying commercial and recreational uses pose significant problems for State and locally designated Significant Coastal Fish and Wildlife Habitats (SCFWH), including loss, fragmentation, and degradation of habitat areas. Some aspects of protecting habitats from development include minimizing stormwater runoff, avoiding activities that degrade water quality or reduce biological productivity in harbors and bays, and taking measures to maintain and preserve migration streams and coastal ponds for anadromous fish, e.g. alewives. The Town must also do whatever it can to conserve habitat and species diversity on Gardiner's Island, one of the great natural treasures of the east coast.

For multi-jurisdictional areas such as Hither Hills/Hither Woods, relevant agencies of State, County or Town government need to develop cooperative habitat management plans, including fire management. For significant habitats on private property the Town should work out cooperative preservation strategies with landowners and private environmental groups such as The Nature Conservancy and Peconic Land Trust.

The Town should work to maintain traditional fish and wildlife harvests, hunting and shellfishing at sustainable levels within the constraints of habitat protection and compatible with increasing development, year-round population, and other recreational uses.

The ecological communities of the Town's beaches are particularly vulnerable. Some believe there is a need to reduce or eliminate ORV traffic, human and pet disturbances around seasonal nesting sites for colonial shorebirds, especially least terns and piping plovers. While the Trustees have developed and supported programs for the protection of shorebirds, they do not perceive a need to

reduce or eliminate ORV traffic. The Trustees believe that increased and consistent enforcement of existing town code provisions will afford the increased protection necessary to support those endangered species. Bluff and beach communities of shoreline vegetation that support rare and endangered plant species also need increased protection from traffic, and shoreline hardening structures should be prohibited in these areas to avoid impacts on fronting beaches. A contingency plan should be developed for a sustained breach of Oyster Pond to protect the endangered plant community on its shores from changes in salinity. Given the fragility of the beach environment, the Town should encourage the U.S. Department of Transportation to establish a Tanker-Free Zone (see **Projects**) between Montauk Point and Block Island to prevent catastrophic spills.

Surface water quality is critical to a healthy marine habitat. Any activity that degrades water quality or reduces biological productivity must be restricted to maintain healthy marine nurseries in the harbors, creeks and inshore waters of the town. Habitat protection, shellfish seeding programs, and elevating water quality to a top priority in the planning process will help to maintain sustainable levels of fish and shellfish stocks. Scheduling of dredging projects should be on a case by case basis and site specific to minimize impacts on habitats. Through water quality monitoring and improvement in non-point pollution abatement the Town can work to minimize shellfish closure areas in harbors at risk for closures due to high coliform bacteria counts. Measures to reduce runoff, leaching of septic wastes, and other sources will be encouraged, as through the *Harbor Protection Overlay District*. As another example, a **Project** is planned to improve water quality in Fresh Pond in Amagansett by shortening or removing the jetty and opening the gut to increase flushing, with a view to recertifying it for shellfishing.

4. Commercial Fishing Issues (Policy #10/10A)

Ways that the Town can support the commercial fishing industry include maintaining adequate shoreside support facilities, including Town commercial docks, and reexamining the WF zone to make sure it provides adequate protection for fish processing and other fishery support uses. If regional initiatives to restore fisheries' historic levels of productivity are successful, it is important to have adequate infrastructure and capacity for expansion if needed. To remain competitive with other states, New York should rebate the fuel tax for commercial draggers at the dock. Commercial activity at onshore fishing facilities should be protected with a "Right to Fish" law.

While fishery conservation is important, it is also important to keep traditional fishing techniques from being regulated out of existence. Town advocacy with state and federal regulatory agencies can help, e.g. to permit fish traps in waters adjacent to state parklands. The Town should retain a fish & wildlife expert in the Town Natural Resources Department to assist with fisheries issues and monitoring, and act as liaison with other agencies. The regulatory process should be reformed to include more input from fishermen. Needlessly restrictive interpretations of the National Shellfish Sanitation Program should be changed to reflect actual boating use and coliform statistics.

Public access is critical for commercial fishermen to get to the shore. In Montauk the Town should resolve conflicts between shellfish harvesters and property owners of privately owned bottomlands in Lake Montauk. In the future no agency should grant private leases of public bottomlands unless they benefit public stocks. The Town opposes large-scale private aqua-/mariculture that does not

benefit the public resource or monopolizes productive public bottomland. Present techniques of finfish aquaculture are also opposed because of the potential for pollution, disease, genetic mutation and impacts on traditional fisheries.

5. Flooding & Erosion Issues (Policies #11-17)

Flooding and erosion problems provoke policy dilemmas, of balancing protection of private property with preservation of public resources such as beaches, bluffs, dunes and wetlands. The present condition of the Town's shore reflects decisions of the past. The question for some areas is how to treat previously armored shorelines, as opposed to predominantly natural shores, and what mitigating measures can be taken to offset damage from hard structures. At Montauk Harbor, the beach erosion downdrift of the Federal jetties might be aided by sand bypassing to the affected area. The Town should also promote efforts to eliminate the scouring effect of the state and federal groins on the Wainscott beach. In the inner harbors hard structures are of low utility in the low energy tidal environment and should be phased out.

It is important to identify areas of critical erosion and flooding potential so increased measures can be taken to protect resources and property. Some municipal infrastructure and evacuation facilities are within hazard zones on Army Corps SLOSH maps, and should be considered for relocation. In embayments such as Northwest Creek and Accabonac Harbor relocation of existing artificial channels or restoration of historic channels should be considered as a way to ameliorate flooding and water quality problems. In hazard areas the Town should prepare for, and look at ways to minimize and mitigate storm damage, as well as set up a framework for rapid post-storm damage assessment and response.

Appropriate responses may include increased setbacks or limiting expansion of existing residences in hazard areas. Hard erosion control structures should not be permitted on south ocean shores, nor should structures be permitted to interfere with the natural shoreline characteristics of Gardiner's Island. The Town should also examine whether pre-existing structures should be rebuilt in high hazard areas following a catastrophic storm. Where erosion control measures are appropriate, structural vs. non-structural erosion control measures must be evaluated; also perpendicular (groins, jetties) vs. shore-parallel structures; and environmentally sound techniques must be identified that can be used for soft structures or other erosion protection as alternatives to hard structures. Use of Erosion Control Districts should be explored to renourish eroded beaches.

In areas already damaged by erosion, as at Ditch Plains in Montauk, it will be necessary to study causes and design a remediation strategy for erosion of the protective dune. Similarly, the Town should rebuild the ocean dune at Kirk Park in the Montauk business area to prevent blowout or breach, and develop contingency procedures for closing breaches of coastal ponds, low-lying areas of Napeague, reopening harbors closed by storms, etc. Other remedial or preventive actions include realigning setbacks along Old Montauk Highway with the bluff setbacks for the rest of Town, redesigning and revegetating road-ends to reduce flooding and erosion, and prohibiting beach vehicles within 50 feet of the beachgrass line, with additional post-storm restrictions on vehicles when the beach is narrowed. Where excessive beach vehicle (ORV) use is damaging beaches and vegetation, additional restrictions should be imposed.

Restoration of natural saltmarsh flood absorption patterns through Open Marsh Water Management (OMWM) will help to reduce storm flooding. Redirecting drainage from NY 114 and from East Hampton Village that now flows into Georgica Pond, and a cooperative stormwater abatement effort with Southampton Town for Wainscott Pond will also help alleviate flooding.

Future planning efforts should examine the likely effects of global warming, including increasing sea-level rise and storm and hurricane activity on the Town's coastline. Beginning to plan for these effects, assessing potential damage to public resources and infrastructure, and evaluating methods of protection and associated costs, are vital for future coastal management.

Other initiatives for the Town include adoption of a local law to implement the NYS Coastal Erosion Hazard Act (CEHA), including protection for secondary dunes, and adapting the Town Code to changes in the National Flood Insurance Program (NFIP).

6. Public Access and Recreation Issues (Policies #9 and 19-22)

The central focus of the public access policies is to increase public access to public beaches and water bodies where it has been diminished, lost to private development, or is otherwise inadequate, and to reopen public access points closed by unauthorized private activities. Where access to the water is insufficient at sites listed in the report, the Town may acquire additional public access points. Increased access must be appropriate to the particular site. For instance, trails and other low-impact accesses are appropriate for sensitive natural areas, just as a continuous waterfront walkway would be for Coonsfoot Cove in Montauk Harbor. Wherever possible, public access and/or recreation should be incorporated in new development, and should not be excluded solely because of safety or liability considerations.

Ideas for additional public access and waterfront recreation include: establishing a townwide marine park network for primitive canoe/kayak camping; developing a new bathing beach at the Town's [Assembly of God] property in Napeague; revitalizing the former fishing station in Three Mile Harbor for passive recreation, environmental education and Town Hatchery use; restoring the Marina Lane dredge spoil site in Three Mile Harbor for a park and native plant nursery; restoring wetlands and eliminating phragmites to preserve visual access and scenic views; revitalizing the old fish factory at Promised Land for limited recreational use as a fishing pier [and possible canoe/kayak campsite]; reclaiming the former Montauk landfill as a park; improving access to Camp Hero for low-intensity uses such as hiking and surfcasting; and acquiring the Shadmoor parcel for additional habitat and low-intensity recreation.

Conflicts between uses need to be resolved, particularly off-road vehicle (ORV) use at sites where they damage beach resources or disturb nesting shorebirds. The Town and Town Trustees should expand education and enforcement of ORV regulations, make regulations uniform, and close beaches with nesting shorebirds, in accordance with a comprehensive protection plan approved by the Town Trustees for Town Trustee beaches, as has been done in the past. Other conflicts arise over safety issues with jetskis in proximity to swimmers and other boaters, or active recreational uses such as hunting conflicting with passive uses, e.g. hiking, photography. Some conflicts can be resolved relatively easily, for example, maintaining scenic and conservation easements to insulate homeowners from hikers, and vice versa. Conflicts of uses with resources may require enhanced enforcement of existing regulations, for instance, preventing unauthorized ORV/ATV access to trails in Hither Woods. Others conflicts indicate a need for a shift in management or policy, e.g. to reduce the great numbers of campers on beaches in the County and State Parks at Montauk Point, or to maintain the contiguous habitat of Hither Hills-Hither Woods.

Many improvements can be made in recreational resources and access to them, for instance, improving facilities at access points to include bike racks, benches, additional parking, restored launch ramps, etc., and establishing upland beach parking with a shuttle bus service to beaches. These improvements can be accomplished through a program of annual capital improvements to beach access and other facilities.

Other management initiatives include restoring and revegetating public access points and road-ends damaged by ORV's or erosion without otherwise eliminating public access; posting educational signs to reduce impacts and use conflicts; addressing overuse at the Lazy Point Road windsurfing access to Napeague Harbor; reducing speed limits (now 25 mph, and 45 mph for ski boats) and establishing no-wake zones in south Lake Montauk to address safety and ecological concerns; providing standards for development that incorporate coastal recreation and resource protection; and ensuring future recreational shellfish harvests by seeding of local waters with stock from the Town Shellfish Hatchery, and maintaining water quality through non-point pollution controls. The Town also believes that public bay bottomlands should be kept for the public and that no new leases of productive County or State bottomlands should be granted to private entities.

7. Historic Resources Issues (Policy #23)

A salient issue related to historic resources is how to protect sites listed or eligible for listing on the State and National Registers of Historic Places. To do this the Town should update its earlier survey of historic structures and sites, and expand it to include sites of cultural and economic or military significance, including from the World War II era, and devise an historic district and building preservation local law [as an LWRP project] to better protect historic structures and sites.

The Town should also develop a cultural resources sensitivity model and standards to identify and protect archaeological, historical and cultural resources, and incorporate National Register criteria in the planning and zoning process. In addition to historic districts, local legislation is also needed to better protect areas of known historic and prehistoric significance. The law would require that phased archaeological research be carried out in accordance with state and federal standards in areas identified by the sensitivity model as potentially significant, and provide options for preservation.

To record local lore the Town should also set up a project to collect oral history related to the coast from older residents, especially baymen and fishermen (see **Projects**).

8. Scenic Resources and Visual Quality Issues (Policies #24-25)

Although current planning and zoning law provides some protections, the Town needs a comprehensive inventory and analysis of its scenic resources and a local law to better protect scenic

resources and enhance visual quality. The Town should likewise encourage New York State to conduct or fund a survey for Scenic Areas of Statewide Significance. See **Projects**.

Views of or from scenic and historic structures should be preserved and new development should be visually integrated into the landscape so as not to interfere with views. Original landforms, historic landscapes, farms, gardens and specimen trees should be maintained or restored wherever possible. Unattractive elements should be kept out of scenic areas and landscapes, or minimized or screened, and removed when they deteriorate. Vegetated areas should be maintained with native species; road shoulders should be planted or allowed to grow in with native species, especially wildflowers.

The pleasures of stargazing and views over moonlit waters are deteriorating from manmade lighting. Light pollution should be avoided through regulations designed to contain light onsite, and to encourage use of least-polluting light sources and proper shielding. The Town should follow these guidelines at all of its municipal installations, ballfields, docks, parking lots, etc.

9. Agricultural Lands, Energy and Ice Management Issues (Policies #26-29)

Remaining farmland is scarce in the coastal area and the Town should utilize all available techniques for preservation of prime farmland including mandatory clustering, purchase of development rights (PDR), right-to-farm legislation, agricultural value assessment, and private conservation. The Town should encourage a change in Federal tax code provisions on valuation of farmland for estates taxes to help keep farm families on the land. All levels of government should avoid public actions that would lead to further farmland development. Groundwater contamination from agricultural practices can be reduced by reducing reliance on monocrops like potatoes, diversifying to low maintenance crops, using organic farming and integrated pest management (IPM) techniques.

Siting of any future energy facilities may conflict with flood hazards, habitat, scenic, recreational and biological values of the coastal area, and other LWRP policies. The LILCO substation and emergency generating facility on Fort Pond should be relocated out of the NFIP flood hazard zone.

Town policy is to encourage conservation of non-renewable energy resources, and to seek to expand the role of renewable energy resources such as solar and wind power, especially wind on the Montauk peninsula. The Town is generally opposed to development of offshore energy resources on the outer continental shelf (OCS), which could threaten local coastal habitat and beaches with degradation from oil spills. No sites in East Hampton presently meet criteria for OCS onshore support facilities. The Town should petition the federal government for a *Tanker-Free Zone* between Montauk Point and Block Island to prevent catastrophic navigation accidents and resulting oil spills (see **Water Resources Policy #34**).

10. Water and Air Resources Issues (Policies #30-44)

Water quality concerns stimulated the broadest array of LWRP issues of any policy group. The Brown Tide, an algal bloom, has since 1985 eradicated the valuable bay scallop crop and decimated eelgrass beds, the primary scallop habitat. Its causes are still undetermined, and it may return at any

time. A number of research and management initiatives are focused on the Brown Tide from various levels of government, most notably through the PEP.

Permits issued by the NYS DEC are at times incompatible with its own water quality classifications, e.g. intensive resort development is permitted next to waters with SA classification, the highest habitat and recreational purity. Such practices have led to degradation of water quality, which has in turn led to increasing closures for shellfishing and some recreational purposes. A consistent water quality monitoring program is essential to prevent additional shellfish closures and should include overall water quality indicators other than coliform, e.g. nitrates, heavy metals, suspended sediment, hydrocarbons, viruses and phosphates. The Town intends to conduct additional monitoring as an LWRP **Project**.

Closures due to coliform bacteria contamination or National Shellfish Sanitation Program (NSSP) marina regulations have eliminated 29% of Town waters from shellfishing harvest. NSSP closures around marinas are based on an occupancy formula more intensive than is shown to be the case by Town's Marina and Boater Survey. The Town should lobby to reduce present closures to reflect realistic use, and pursue improvements in water quality to forestall further closures.

As there are no significant municipal sewage treatment facilities (point sources) in the Town contributing to pollution of surface waters, surface water pollutants derive from non-point sources, including leaking fuel storage tanks, waste leachates, pesticides, fertilizers, stormwater runoff, animal wastes, leachate from treated wood structures, siltation, faulty septic systems, boat wastes including human wastes from marine sanitation devices (MSD's), and marine cleaners, paints, bilge wastes, and fuel and petroleum derivatives. Non-point sources are difficult to control, and while the interactions and effects of nutrients from these non-point sources are poorly understood, nutrient loading of nitrogen in particular should be reduced.

The Town has implemented or is considering several measures to reduce non-point pollution. A *Harbor Protection Overlay District (HPOD)* has been established to educate property owners and reduce pollutants draining into surface waters. Provisions of the HPOD require turf and clearing restrictions; encourage agricultural best management practices in the coastal area to reduce discharges; include best management land use practices including setbacks to insure protection of freshwater and tidal wetlands; encourage use of non-chlorine swimming pool systems, require adequate dry-wells for swimming pool discharge, and discourage use of acid cleaners in proximity to coastal waters; and encourage upgrading and use of alternative septic systems to reduce leaching from faulty septic systems.

The HPOD strengthens drinking water protection standards in low-lying coastal areas by increasing distance to groundwater for septic systems to 4', relocating faulty systems where possible and minimizing new development in sensitive areas. Suffolk County Health Department standards for new septic systems for single family residences should be revised to permit alternative septic waste disposal systems, and the Town should utilize alternative systems for public facilities in sensitive areas where public access to the waterfront is provided. This policy on alternative septic systems should not be construed to support additional development in sensitive areas. To encourage

improvements to existing systems the Town should investigate an incentive-based approach and a revolving loan fund for septic system upgrades.

To further address non-point pollution the Town will prioritize and mitigate stormwater runoff with a number of measures including drainage improvements, onsite containment of runoff, buffers of native vegetation, erosion protection methods during construction, catchments, road repair and maintenance, reduced use of vector control ditches, and reduced use of pesticides, herbicides, fertilizers and road salt. It will also seek to reduce spills of hazardous materials through education, monitoring and enforcement.

To coordinate land and water based initiatives the Town may in the future develop *Harbor Management Plans* for each harbor. Many harbor management objectives are being addressed by the LWRP, including educating the boating public on ways to reduce pollution; encouraging use of shoreside sanitary and washing facilities by marina patrons; marina operators voluntarily designating their marina as a No-Discharge Marina within the Empire State Marine Trades Association program; instituting fuel spill prevention measures for boaters, marinas and fuel storage or dispensing facilities (including trucks filling from docks); a prohibition against floating homes in Town waters; prohibiting transient overnight anchoring in Northwest Creek, Accabonac Harbor, and Napeague Harbor except in emergency. In addition, the Town, with help from the local marine industry and state agencies has applied for *No-Discharge Zone* designation for its inner harbors to reduce cumulative impacts of pollution.

Dredging issues also enter into harbor management and water quality. The Town will work to provide more consistent maintenance dredging for the navigable channels of Northwest Creek, Three Mile Harbor, Accabonac Harbor, and Montauk Harbor to improve navigational safety and to increase circulation and flushing. Both public and private dredging projects should synchronize dredging time windows to minimize impacts on marine life. However, this window should be determined on a case by case basis. To compensate for damage to public shellfish resources from private maintenance dredging when the localized impact cannot be adequately mitigated, the Town should establish an impact fee system. Clean dredge spoil should be used for public beach nourishment (see also dredging under **Flooding/Erosion Policy #15**). South of Star Island in Lake Montauk dredging to allow deeper draft boats should be discouraged because of the locally poor circulation and flushing, and existing water quality problems.

The Town will make needed capital improvements to maintain or improve surface water quality, including stormwater abatement, pumpouts for boat waste and improvements to scavenger waste treatment plants to allow boat waste processing. In addition a number of projects will be undertaken to address water quality issues, including OMWM techniques to reduce coliform and other bacterial levels in enclosed harbors, demonstrated by pilot projects in Northwest Creek and Accabonac Harbor; encouraging an upgrade of the Sag Harbor Sewage Treatment Plant to reduce effluent and nutrient loading in Northwest Harbor; improving flushing in Fresh Pond, Amagansett, to reduce coliform counts; and construction of the Oceanside-Ditch Plains Drainage System to reduce infiltration of pollutants into southern Lake Montauk.

Air pollution in the Town comes primarily from automobile emissions, which are controlled by state and federal regulations; the Town should request monitoring by NYS DOT to assess and locate problem areas. The Town can work to reduce automobile pollutants by reducing traffic congestion, to be examined in Town Transportation Study, forthcoming in 1997. The Town is downwind of nuclear reactors at Waterford, CT (Millstone) and Brookhaven National Lab, and should be included in their emergency plans and immediately advised of any airborne releases of radioactive material. The Town should set up its own radiological monitoring station to monitor these emissions.

11. Harbor Management Plan

In preparing the LWRP, the Town of East Hampton identified numerous harbor management issues and recognizes the need to manage the nearshore areas through harbor management planning. A harbor management plan addresses conflict, congestion and competition for space in the use of a community's surface waters and underwater land. It provides guidance and regulation for management of boat traffic and general harbor use; optimum locations and numbers of boating support structures such as docks, piers, moorings, pumpout facilities, and transient anchorage areas; and identifies local and federal navigation channels and maintenance needs. It also provides the opportunity to identify various alternatives for optimum use of the waterfront and adjacent water surface, while at the same time analyzing the probable environmental effects of these alternatives.

As harbor management programs are now a required element for the approval of a LWRP, the Town of East Hampton has chosen to integrate the *Town of East Hampton Harbor Management Plan* within the LWRP, which considers many uses of East Hampton's water area. The key harbor management issues have been addressed within the LWRP Inventory and Analysis and **Policies**. In order to address specific water use issues the Town will prepare separate harbor management plans for its principal harbors as an LWRP **Project**. The boundary for harbor management along the northern bay coast is the Town's municipal water boundary; along the south facing Atlantic Ocean shore it extends 1500' offshore, as authorized in **19 NYCRR Part 603.2**. The Town Trustees have historically regulated the uses of and in their harbors. Any future Harbor Management Plan directly affecting Trustee lands will be subject to approval by the Trustees.

The Town's principle harbor management concerns and the policies in which they are addressed include: Water-Dependent Uses, especially ferries, **Development Policies #1-6**; shoreside infrastructure for commercial fisheries, **Commercial Fishing Policy #10**; and public access and recreational uses, **Public Access and Recreation Resources Policies #9 & 19-22**. Issues specific to maintaining surface water quality have been included in the **Policies** and **Projects** of **Water Resources Policies #30-40 & 44**, particularly in the Local Law for a *Harbor Protection Overlay District (HPOD)* and Town applications for *No-Discharge Zones*. Dredging related issues are included in **Flooding and Erosion Policy #15**, **Mining, Excavation and Dredging**, and **Water Resources Policies #24-25**, and will be further developed in the *Scenic and Visual Resources Survey and Protection* **Project**.

The open waters of the Town are used primarily for boating and fishing, whereas the enclosed harbors are generally mixed use areas inviting a variety of recreational pursuits and some commercial

enterprises, including tourism and commercial fishing and shellfishing. Issues related to water uses, for instance, ownership and leasing of underwater lands and aquaculture or mariculture, are discussed within **Commercial Fishing Policy #10**, **Significant Habitats Policy #7**, and **Development Policies #1-6**. Opportunities to provide additional public access, improved facilities or to secure open space in the coastal area are detailed in **Development Policies #1-6** and **Public Access and Recreation Policies #9 & 19-22**, with future implementation in various **Projects** for restoration or revitalization of disused sites, and several public access **Projects**, especially *Public Access and Recreation Improvements*.

Implementation and enforcement of harbor management policies is provided for in applicable sections of the Town Code, and by virtue of ownership of significant coastal resources by the Town Trustees, who issue permits and make regulations for moorings, docks and other structures on their lands.

E. POLICY GUIDE

This section provides the basic text of the 44 statewide LWRP policies along with a synopsis of the Town's approach to them. The guidelines, standards and supporting local laws included within each policy or policy group are noted for reference and purposes of regulatory review. However, the reviewer should refer to individual policy sections for substantive policy explanations and actual language of guidelines. Local laws are discussed and summarized in greater detail in **Section XV**, **Implementation**. Other LWRP policies which apply are cross-referenced, as are initiatives in **Section XIV**, **Projects**, which implement the policies.

The links between policies are found primarily in the main body of the policy reports. Information from the Inventory and Analysis sections is interwoven with policy statements, and complemented by the **Local Laws** and **Projects**, each contributing to the fabric of the LWRP as a whole.

DEVELOPMENT POLICIES

- POLICY#1 (REVITALIZATION OF DETERIORATED WATERFRONT AREAS) RESTORE, REVITALIZE AND REDEVELOP DETERIORATED AND UNDERUTILIZED WATERFRONT AREAS FOR COMMERCIAL AND INDUSTRIAL, CULTURAL, RECREATIONAL AND OTHER COMPATIBLE USES.
- **POLICY #1A**(UNDERUTILIZED WATERFRONT SITES)
RESTORE, REVITALIZE, AND REDEVELOP THE FOLLOWING
UNDERUTILIZED SITES FOR CULTURAL, RECREATIONAL, AND
OTHER COMPATIBLE USES:
 - (1) MARINA LANE DREDGE SPOIL SITE, THREE MILE HARBOR
 - (2) OLD FISH FACTORY SITE, NAPEAGUE
 - (3) FORMER MONTAUK LANDFILL SITE

(4) MONTAUK HARBOR AREA (LINKED WALKWAY)(5) FORMER CAMP HERO, MONTAUK(6) MONTAUK BUSINESS AREA

This policy identifies and provides capsule plans for improvements at seven sites in the Town's coastal area. Refer to **Public Access and Recreation Resources Policies #9 & 19-22** for discussion of potential recreation uses, and to **Significant Habitats Policy #7** for a discussion of potential habitat constraints on reuse of the sites. Sites and proposed plans are also noted in **Section XIV**, **Projects**.

- POLICY #2(WATER-DEPENDENT USES)
FACILITATE THE SITING OF WATER-DEPENDENT USES AND
FACILITIES ON OR ADJACENT TO COASTAL WATERS.POLICY #2ATHE SITING OF WATER-DEPENDENT USES AND FACILITIES ON OR
- POLICY #2ATHE SITING OF WATER-DEPENDENT USES AND FACILITIES ON OR
ADJACENT TO COASTAL WATERS SHALL BE ACCOMPLISHED
PROVIDED THE PROPOSED USE IS CONSISTENT WITH THE
PRESERVATION AND ENHANCEMENT OF OTHER COASTAL
RESOURCES, INCLUDING CULTURAL AND NATURAL RESOURCES.

These policies detail existing Waterfront (WF) and Resort (RS) zones and land uses by reach and tax parcel. Standards for water-dependent and water-enhanced uses in these zones from **§153-11-10** of the Town Code are listed for Permitted and Special Permit uses, as are standards for development and special standards for recreational marinas. Standards for development also include those for the Harbor Protection Overlay District, **§153-3-70** through **-75**.

The thrust of **Policy #2A** is to emphasize protection of resources and especially surface waters. For further information refer to **Significant Habitats Policy #7**, **Commercial Fishing Policy #10/10A**, **Historic and Visual Resources Policies #23-25**, and **Water Resources Policies #30-40 & 44**.

Initiatives in the **Projects** section which implement this policy include *Fisheries Shoreside Support* Infrastructure, Visual Inventory of Existing Waterfront, Historic Building and District Update, Cultural Resources Inventory and Identification Matrix, Scenic and Visual Resources Survey and Protection Program, and Harbor Management Plans.

POLICY #3(MAJOR PORTS)
FURTHER DEVELOP THE STATE'S MAJOR PORTS OF ALBANY,
BUFFALO, NEW YORK, OGDENSBURG AND OSWEGO AS CENTERS
OF COMMERCE AND INDUSTRY, AND ENCOURAGE THE SITING,
IN THESE PORT AREAS, INCLUDING THOSE UNDER THE
JURISDICTION OF STATE PUBLIC AUTHORITIES, OF LAND USE
AND DEVELOPMENT WHICH IS ESSENTIAL TO OR IN SUPPORT OF
THE WATERBORNE TRANSPORTATION OF CARGO AND PEOPLE.

This policy does not apply; East Hampton has no major port.

POLICY #4 (SMALL HARBORS) STRENGTHEN THE ECONOMIC BASE OF SMALL HARBOR AREAS BY ENCOURAGING THE DEVELOPMENT AND ENHANCEMENT OF THOSE TRADITIONAL USES AND ACTIVITIES WHICH HAVE PROVIDED SUCH AREAS WITH THEIR UNIQUE MARITIME IDENTITY.

Applied to Three Mile and Montauk Harbors, this policy provides guidelines to maintain maritime traditions and preserve the resources of these harbors. Actions should also be consistent with Significant Habitats Policy #7, Commercial Fishing Policy #10/10A, Flooding and Erosion Policies #11-17, Public Access and Recreational Resources Policies #9, & 19-22, Historic and Visual Resources Policies #23-25, and Water Resources Policies #30-40 & 44.

Projects which implement this [and other harbor-related] policies include Visual Inventory of Existing Waterfront, Harbor Management Plans, No-Discharge Zones, Fisheries Shoreside Support Facilities, Montauk Harbor Revitalization, Water Quality Monitoring, Historic Building and District Update, Cultural Resources Inventory and Identification Matrix, and the Scenic and Visual Resources Survey and Protection Program.

POLICY #5(PUBLIC SERVICES)
ENCOURAGE THE LOCATION OF DEVELOPMENT IN AREAS
WHERE PUBLIC SERVICES AND FACILITIES ESSENTIAL TO SUCH
DEVELOPMENT ARE ADEQUATE, EXCEPT WHEN SUCH
DEVELOPMENT HAS SPECIAL FUNCTIONAL REQUIREMENTS OR
OTHER CHARACTERISTICS WHICH NECESSITATES ITS LOCATION
IN OTHER COASTAL AREAS.

This policy is intended to further the rural pattern of the Town which concentrates development in village and hamlet centers, thereby minimizing infrastructure costs and serving the greatest number of people. The principal infrastructure constraint on coastal development is public water, and some related issues are discussed in this policy. See also **Water Resources Policies #30-40 & 44**.

POLICY #6(PERMIT PROCEDURES)
EXPEDITE PERMIT PROCEDURES IN ORDER TO FACILITATE THE
SITING OF DEVELOPMENT ACTIVITIES AT SUITABLE LOCATIONS.

This policy describes Town efforts to coordinate and synchronize permitting for development which furthers LWRP policy goals such as public access, desirable water-dependent uses, etc. The Town issues expedited emergency permits and expresses willingness to work on a streamlined or consolidated permitting procedure, provided objectives of regulations are not jeopardized.

Local Laws, summarized in Section XV.A, which implement the LWRP Development Policies include: §153, Zoning, particularly §153-3-70, Harbor Protection Overlay District; §153-4, Protection of Natural Features; §153-3-40, Flood Hazard Overlay District; §153-5, Special Permit Uses; §153-6, Site Plan Review; §153-12, Use District (Zoning) Maps; §153-11-10, Use Tables.

SIGNIFICANT HABITATS

POLICY #7 (SIGNIFICANT FISH AND WILDLIFE HABITATS) SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS, AS IDENTIFIED ON THE COASTAL AREA MAP, SHALL BE PROTECTED, PRESERVED, AND, WHERE PRACTICABLE, RESTORED SO AS TO MAINTAIN THEIR VIABILITY AS HABITATS.

POLICY #7A(LOCALLY SIGNIFICANT FISH AND WILDLIFE HABITATS)
LOCALLY SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS,
AS IDENTIFIED ON THE COASTAL AREA MAP SHALL BE
PROTECTED, PRESERVED, AND WHERE PRACTICABLE RESTORED
SO AS TO MAINTAIN THEIR VIABILITY AS HABITATS.

These policies identify state and locally designated Significant Coastal Fish and Wildlife Habitats (SCFWH) in the Town, and provide standards for their protection. Potential impacts are evaluated through a habitat impairment test, with examples of activities which may cause impairment. Detailed analysis of the individual SCFWH's, threatened and endangered species, and potential impacts is found in the accompanying Inventory and Analysis.

POLICY #7B(PROTECTION OF DIVERSITY)
PROTECT TO THE MAXIMUM EXTENT PRACTICABLE THE
VULNERABLE PLANT AND ANIMAL SPECIES AND NATURAL
COMMUNITIES THAT HAVE BEEN IDENTIFIED ON THE STATE AND
FEDERAL LEVELS BY THE NEW YORK HERITAGE PROGRAM, THE
NYS DEC PROTECTED NATIVE PLANT LIST (NYCRR 193.3), THE
NYS DEC LIST OF ENDANGERED, THREATENED AND SPECIAL
CONCERN SPECIES AND THE FEDERAL LIST OF ENDANGERED
AND THREATENED WILDLIFE AND PLANTS (50 CFR 17).

This policy requires site inspections and additional protection of the most vulnerable species or biological communities, as identified by state and federal programs. Policy guidelines are intended to maximize protection of listed species.

POLICY #8(POLLUTANTS)
PROTECT FISH AND WILDLIFE RESOURCES IN THE COASTAL
AREA FROM THE INTRODUCTION OF HAZARDOUS WASTES AND
OTHER POLLUTANTS WHICH BIO-ACCUMULATE IN THE FOOD

CHAIN OR WHICH CAUSE SIGNIFICANT SUBLETHAL OR LETHAL EFFECT ON THOSE RESOURCES.

The storage, transport, treatment and disposal of hazardous materials is strictly regulated in New York State to prevent their entry or introduction into the environment. Other pollutants are conventional wastes generated from point and non-point sources and addressed in other sections of the LWRP, primarily in **Water Resources Policies #30-40 & 44**.

RECREATIONAL FISH AND WILDLIFE RESOURCES

POLICY #9(RECREATIONAL USE OF FISH AND WILDLIFE)
EXPAND RECREATIONAL USE OF FISH AND WILDLIFE
RESOURCES IN COASTAL AREAS BY INCREASING ACCESS TO
EXISTING RESOURCES, SUPPLEMENTING EXISTING STOCKS, AND
DEVELOPING NEW RESOURCES.

POLICY #9A (EXPANDING ACCESS TO FISH AND WILDLIFE) RECREATIONAL USE OF FISH AND WILDLIFE RESOURCES WILL BE EXPANDED BY INCREASING PUBLIC ACCESS AND OTHER MEASURES AT SITES RECOMMENDED UNDER "OPPORTUNITIES FOR IMPROVEMENT" AND "RECREATIONAL USES COMPATIBLE WITH NEW DEVELOPMENT" IN THE ANALYSIS NARRATIVE OF THIS REPORT AND IN "PUBLIC ACCESS AND RECREATION IMPROVEMENTS" IN PROJECTS, SECTION XIV.

(NOTE: POLICIES #9/9A HAVE BEEN INCLUDED IN SECTION VII WITH PUBLIC ACCESS AND RECREATIONAL RESOURCES POLICIES #19-22)

These policies provide guidelines for expanding traditional hunting and fishing activities, with recommendations for improvements at specific access points throughout the Town. The guidelines also emphasize resource conservation and habitat preservation.

Other aspects of habitat protection are included within **Development Policies #1-6, Flooding and Erosion Policies #11-17**, **Public Access and Recreation Resources Policies #9 & 19-22**, and **Water Resources Policies #30-40 & 44**.

Projects which will help foster habitat protection include *Open Space Acquisition, Gardiner's Island Preservation, Camp Hero Revitalization and Redevelopment, Town Natural Heritage Inventory and Management, Interpretive Signs, Wetland Restoration, Eelgrass Restoration, Natural Beach Habitat and Coastal Processes Control Area, Roadside Wildflower Habitat, Scenic Byways, Road-end and Beach Access Modifications, Stormwater Abatement, Open Marsh Water Management (OMWM), Septic Waste Remediation, Harbor Management Plans, No-Discharge Zones, and Harbor Protection Overlay District Homeowner Education.* Local Laws, summarized in Section XV.A, governing aspects of habitat management and protection include: §153, Zoning, particularly §153-4, Protection of Natural Features; §43, Beaches and Parks; §125, Shellfish; §131, Subdivision of Land; §110, Open Space Preservation; §103, Nature Preserve; §22, Conservation Easements; §153-4-4.95(A).

COMMERCIAL FISHING

POLICY #10 (COMMERCIAL FISHING)

FURTHER DEVELOP COMMERCIAL FINFISH, SHELLFISH AND CRUSTACEAN RESOURCES IN THE COASTAL AREA BY: (i) ENCOURAGING THE CONSTRUCTION OF NEW, OR IMPROVEMENT OF EXISTING ON-SHORE COMMERCIAL FISHING FACILITIES; (ii) INCREASING MARKETING OF THE STATE'S SEAFOOD PRODUCTS; AND (iii) MAINTAINING ADEQUATE STOCKS AND EXPANDING AQUACULTURE FACILITIES. SUCH EFFORTS SHALL BE IN A MANNER WHICH ENSURES THE PROTECTION OF SUCH RENEWABLE FISH RESOURCES AND CONSIDERS OTHER ACTIVITIES DEPENDENT ON THEM.

POLICY #10A(AQUACULTURE/MARICULTURE)
ENCOURAGE AQUACULTURE AND MARICULTURE WHICH
BENEFITS OVERALL PUBLIC STOCKS OF LIVING MARINE
RESOURCES, BUT DISCOURAGE AQUACULTURE OR
MARICULTURE INCONSISTENT WITH MAINTAINING HEALTHY
STOCKS AND HABITATS.

These policies detail the importance of commercial fishing to both the Town's economic and cultural life. Locations which supply shoreside support for the fishing industry are noted. Guidelines for decision making related to fisheries indicate the Town's commitment to support for its fishing industry, including traditional methods used by baymen and haulseiners.

Guidelines in the Aquaculture/Mariculture policy reflect Town concerns about the use of public waters and bottomlands for private benefit, and a cautionary approach to environmental problems arising from aquaculture in other regions. The Town's policy encourages public aquaculture that enhances stocks and discourages large scale private aquaculture/mariculture, particularly finfish aquaculture.

Local Laws affecting commercial fishing center on permitted uses in the Town's Waterfront (WF) zone, as delineated in § 153-4-39B, § 153-3-45D and § 153-5-50 [Fish Processing accessory use] of the Town Code. Projects which will support commercial fishing include Wetland Restoration, Eelgrass Restoration, Fisheries Shoreside Support Infrastructure, Local Fishery Assistance, Open Marsh Water Management, Water Quality Monitoring Project, Harbor Management Plans, No-Discharge Zones, and Dredging Projects.

FLOODING AND EROSION POLICIES

POLICY #11(SITING OF STRUCTURES)
BUILDINGS AND OTHER STRUCTURES WILL BE SITED IN THE
COASTAL AREA SO AS TO MINIMIZE DAMAGE TO PROPERTY AND
THE ENDANGERING OF HUMAN LIVES CAUSED BY FLOODING
AND EROSION.

Where an erosion hazard has been identified, this policy directs that buildings and similar structures be set back from the shoreline a distance sufficient to minimize damage from erosion, as set forth in § 153-4-30 through -39 of the Town Code. Siting of buildings and other structures in designated flood and erosion hazard areas are also subject to provisions of the National Flood Insurance Program (NFIP), implemented locally as a Flood Hazard Overlay District, § 153-3-40 to -45 of Town Code; and to provisions of the NYS Coastal Erosion Hazards Act, as implemented by NYS DEC.

Both laws are excerpted in the policy.

POLICY #12 (NATURAL EROSION PROTECTION FEATURES) ACTIVITIES OR DEVELOPMENT IN THE COASTAL AREA WILL BE UNDERTAKEN SO AS TO MINIMIZE DAMAGE TO NATURAL RESOURCES AND PROPERTY FROM FLOODING AND EROSION BY PROTECTING NATURAL PROTECTIVE FEATURES INCLUDING BEACHES, DUNES, BARRIER ISLANDS AND BLUFFS. PRIMARY DUNES WILL BE PROTECTED FROM ALL ENCROACHMENTS THAT COULD IMPAIR THEIR NATURAL PROTECTIVE CAPACITY.

Natural protective features help safeguard coastal lands and property from damage and reduce danger to human life from flooding and erosion. Activities or development in, or in proximity to, natural protective features must ensure that all adverse effects are minimized. The policy cites Town Code provisions protecting these features.

POLICY #13 (30-YEAR EROSION CONTROL STRUCTURES)

THE CONSTRUCTION OR RECONSTRUCTION OF EROSION PROTECTION STRUCTURES SHALL BE UNDERTAKEN ONLY IF THEY HAVE A REASONABLE PROBABILITY OF CONTROLLING EROSION FOR AT LEAST THIRTY YEARS AS DEMONSTRATED IN DESIGN AND CONSTRUCTION STANDARDS AND/OR ASSURED MAINTENANCE OR REPLACEMENT PROGRAMS.

POLICY #13A(MAINTENANCE/MITIGATIONFOREROSION CONTROLSTRUCTURES)EROSION PROTECTION STRUCTURES MUST BE MAINTAINEDBOTH WITH REGARD TO THE STRUCTURE AND TO ADJOINING
NATURAL PROTECTIVE FEATURES.REQUIRED MAINTENANCE

MAY INCLUDE BEACH NOURISHMENT AND MITIGATION OF EROSION TO NEARBY PROPERTY AND RESOURCES CAUSED BY CONSTRUCTION OR RECONSTRUCTION OF EROSION PROTECTION STRUCTURES.

Because of improper design and/or poor construction and maintenance standards many erosion protection structures fail to provide adequate protection over time. As a result, development is sited in areas where it becomes subject to erosion damage. The purposed of this policy is to ensure that when erosion protection structures are used, they function as intended. **Policy #13A** has been added by the Town to ensure that when coastal erosion protection structures are used they do not damage coastal resources or neighboring property.

POLICY #14(NO FLOODING OR EROSION INCREASES)
ACTIVITIES AND DEVELOPMENT INCLUDING THE
CONSTRUCTION OR RECONSTRUCTION OF EROSION PROTECTION
STRUCTURES, SHALL BE UNDERTAKEN SO THAT THERE WILL BE
NO MEASURABLE INCREASE IN EROSION OR FLOODING AT THE
SITE OF SUCH ACTIVITIES OR DEVELOPMENT, OR AT OTHER
LOCATIONS.

POLICY #14A(MINIMIZE EROSION PROTECTION STRUCTURES IN CERTAIN
REACHES)
MINIMIZE THE CONSTRUCTION OF EROSION PROTECTION
STRUCTURES AND NEW DEVELOPMENT IN HAZARDOUS AREAS
IN REACHES 1, 4, 5, 7, 8, 9, 10, 11, 12, PARTS OF REACHES 2, 3 AND
6.

Through poor construction practices, improper siting, or poor planning and design, human activities and development in the coastal area can increase the severity of erosion and flooding on site or at adjacent locations. The intent of this policy is to ensure that this will not occur.

Certain areas of the Town's shoreline are inappropriate for installation of erosion protection structures because of potential damage to natural protective features and disruption of coastal processes with consequent downdrift impacts. **Policy #14A** has been inserted by the Town in order to identify these areas.

POLICY #15 (MINING, EXCAVATION, AND DREDGING) MINING, EXCAVATION OR DREDGING IN COASTAL WATERS SHALL NOT SIGNIFICANTLY INTERFERE WITH THE NATURAL COASTAL PROCESSES WHICH SUPPLY BEACH MATERIALS TO LAND ADJACENT TO SUCH WATERS AND SHALL BE UNDERTAKEN IN A MANNER WHICH WILL NOT CAUSE AN INCREASE IN EROSION OF SUCH LAND.

Mining, excavation, and dredging can reduce sediment supply for beaches and adversely affect coastal processes in nearshore waters thus changing natural sediment transport. The purpose of this policy is to confirm that these activities will be accomplished in a manner which does not cause a reduction of sediment supply, and thus increase erosion along the shoreline.

POLICY #16(USE OF PUBLIC FUNDS)
PUBLIC FUNDS SHALL ONLY BE USED FOR EROSION PROTECTIVE
STRUCTURES WHERE NECESSARY TO PROTECT HUMAN LIFE,
AND NEW DEVELOPMENT WHICH REQUIRES A LOCATION
WITHIN OR ADJACENT TO AN EROSION HAZARD AREA TO BE
ABLE TO FUNCTION, OR EXISTING DEVELOPMENT; AND ONLY
WHERE THE PUBLIC BENEFITS OUTWEIGH THE LONG TERM
MONETARY AND OTHER COSTS INCLUDING THE POTENTIAL FOR
INCREASING EROSION AND ADVERSE EFFECTS ON NATURAL
PROTECTIVE FEATURES.

This policy recognizes the public need for protection of human life and existing investment in development or infrastructure which requires proximity to coastal erosion hazards to be able to function. It also recognizes the potential adverse impacts of human activities and development on natural resources, and requires that a cost/benefit analysis be completed prior to expending public funds which includes impacts to natural features.

POLICY #17(NON-STRUCTURAL CONTROL MEASURES)
WHENEVER POSSIBLE, USE NON-STRUCTURAL MEASURES TO
MINIMIZE DAMAGE TO NATURAL RESOURCES AND PROPERTY
FROM FLOODING AND EROSION. SUCH MEASURES SHALL
INCLUDE: (I) THE SETBACK OF BUILDINGS AND STRUCTURES; (II)
THE PLANTING OF VEGETATION AND THE INSTALLATION OF
SAND FENCING AND DRAINING; (III) THE RESHAPING OF BLUFFS;
AND (IV) THE FLOOD-PROOFING OF BUILDINGS OF THEIR
ELEVATION ABOVE THE BASE FLOOD LEVEL.

POLICY #17A(ONLY NON-STRUCTURAL MEASURES PERMITTED IN
CERTAIN REACHES)ALONG THE SOUTH SHORE OCEAN FACING REACHES OF THE
TOWN, ONLY NON-STRUCTURAL MEASURES TO MINIMIZE
FLOODING AND EROSION ARE PERMITTED.

This policy addresses the potential adverse impacts which can be caused by structural shoreline protection methods. It states a preference for use of non-structural methods for protection of property and natural resources.

POLICY #17A recognizes the highly dynamic and mobile character of the ocean beach and dune system, and was inserted by the Town to reflect its concern that structural solutions in this high-

energy environment are likely to disrupt coastal processes and cause adverse impacts downdrift or to neighboring property.

Aspects of flooding and erosion control or related policy also pertain to **Development Policies #1-6**, **Significant Habitat Policy #7**, **Public Access and Recreation Policies #9 & 19-22**, **Storm-water Run-off Policy #33**, and **Dredging and Disposal Policy #35**.

Local Laws implementing Flooding and Erosion Policies #11-17 include: §43, Beaches and Parks, with specific protections for beaches, dunes and vegetation in §43-4 Prohibited Conduct, §43-5 Vehicles on the beach, §43-12 Temporary Closure; §131, Subdivision Law, particularly §131-1.04 (also §153-1-20 of Zoning), definitions for Lot Area, and §131-1.05, Subdivision Law General Policies; §153, Zoning, especially §153-4, Protection of Natural Resources, §153-4-15, §153-4-20, Natural Resource Special Permit, §153-4-20 (E), §153-4-25, Emergency and minor maintenance exceptions, §153-4-30 through 39, Setbacks, §153-4-39, Exceptions, §153-3-40 to 45, Flood Hazard Overlay District, §153-5-50, standards for coastal structures, §153-4-85, reference to Town Trustee prerogatives. The Town Trustees also have regulations and issue permits for structures on beaches and bottomlands in their ownership.

Projects which will implement the **Flooding and Erosion Policies** include: *Hurricane Damage Mitigation Plan, Visual Inventory of Existing Waterfront, Coastal Erosion Monitoring, Storminess History and Statistical Model, Sea Level Rise Model, Erosion Control Districts, Fresh Pond Channel Erosion Stabilization and Widening, Montauk Harbor Channel Sand Bypass System, Ditch Plains Erosion and Remediation Study, Drainage Mitigation, Georgica Cove, East Hampton/Southampton Cooperative Run-off Mitigation for Wainscott Pond, Reduce Impacts of Federal Groins on Wainscott Beach, Natural Beach Habitat and Coastal Processes Control Area, Road-end and Beach Access Modifications, Management Plan for Lazy Point Road-end, Stormwater Abatement, Storm and Flood Monitoring Cooperative with National Weather Service, Public Education Project, and Geographic Information System for Coastal Zone Management.*

GENERAL POLICY

POLICY #18 (STATE VITAL INTERESTS) TO SAFEGUARD THE VITAL ECONOMIC, SOCIAL AND ENVIRONMENTAL INTERESTS OF THE STATE AND OF ITS CITIZENS, PROPOSED MAJOR ACTIONS IN THE COASTAL AREA MUST GIVE FULL CONSIDERATION TO THOSE INTERESTS, AND TO THE SAFEGUARDS WHICH THE STATE HAS ESTABLISHED TO PROTECT VALUABLE COASTAL RESOURCE AREAS.

This policy requires that no major action be undertaken that would have a significant impact on coastal resources unless appropriate and accepted mitigative measures are implemented. It provides a general standard which serves as a framework for all other LWRP policies, and is implemented through Local Laws including §43 Beaches and Parks, §75 SEQR, §153-4 Protection of Natural

Features, and §153-4-20 Natural Resource Special Permit. No specific Projects implement this policy.

PUBLIC ACCESS AND RECREATION RESOURCES POLICIES

POLICY #19 (ACCESS TO **PUBLIC WATER-RELATED RECREATION RESOURCES**) PROTECT, MAINTAIN AND INCREASE THE LEVEL AND TYPES OF ACCESS TO PUBLIC WATER-RELATED RECREATION RESOURCES AND FACILITIES SO THAT THESE RESOURCES AND FACILITIES MAY BE FULLY UTILIZED IN ACCORDANCE WITH REASONABLY ANTICIPATED PUBLIC RECREATION NEEDS AND THE PROTECTION OF HISTORIC AND NATURAL RESOURCES. IN PROVIDING SUCH ACCESS, PRIORITY SHALL BE GIVEN TO PUBLIC BEACHES, BOATING FACILITIES, FISHING AREAS AND WATERFRONT PARKS.

POLICY #20(ACCESS TO PUBLICLY-OWNED LANDS ADJACENT TO THE
WATER'S EDGE)
ACCESS TO THE PUBLICLY-OWNED FORESHORE AND TO LANDS
IMMEDIATELY ADJACENT TO THE FORESHORE OR THE WATER'S
EDGE THAT ARE PUBLICLY-OWNED SHALL BE PROVIDED, AND
IT SHOULD BE PROVIDED IN A MANNER COMPATIBLE WITH
ADJOINING USES. SUCH LANDS SHALL BE RETAINED IN PUBLIC
OWNERSHIP.

The objective of the **Public Access** policies is to maintain or improve public access to public water-related recreational facilities and public shores using a balance among the level of access to a site, its capacity, and the protection of natural resources. The policies recommend a variety of improvements for public access, including for habitat protection, education and signage, enforcement of existing regulations, land acquisition and further studies. Guidelines are provided for maintaining public access to the water in accord with the policies. **POLICY #20** also deals with the question of access to underwater lands and provides guidelines for maintaining access to public lands.

Several other LWRP policy groups deal with aspects of public access, including **Development Policies #1-6, Flooding and Erosion Policies #11-17, Historic Resource and Visual Quality Policies #23-25**, and **Water Resources Policies #30-40 & 44**. The following sections of the Town Code implement the **Public Access Policies: §43, Beaches and Parks**, especially **§43-5, Vehicles on the beach; §110, Open Space Preservation; §131, Subdivision Law; §146-4, Parking Permit; and §153, Zoning,** especially **§153-4 Protection of Natural Features**.

Project initiatives which will enhance public access include: *Improve Public Access to Ocean Beaches, Road-end and Beach Access Modifications, Camp Hero Revitalization and Redevelopment, Interpretive Signs, Public Access and Recreation Improvements, Management Plan for Lazy Point* Road-end, Visual Inventory of Existing Waterfront, Scenic and Visual Resources and Protection Program, and Geographic Information System.

- POLICY #21(WATER-RELATED RECREATION)
WATER-DEPENDENT AND WATER ENHANCED RECREATION WILL
BE ENCOURAGED AND FACILITATED, AND WILL BE GIVEN
PRIORITY OVER NON-WATER RELATED USES ALONG THE COAST,
PROVIDED IT IS CONSISTENT WITH THE PRESERVATION AND
ENHANCEMENT OF OTHER COASTAL RESOURCES AND, TAKES
INTO ACCOUNT DEMAND FOR SUCH FACILITIES. IN
FACILITATING SUCH ACTIVITIES, PRIORITY SHALL BE GIVEN TO
AREAS WHERE ACCESS TO THE RECREATION OPPORTUNITIES OF
THE COAST CAN BE PROVIDED BY NEW OR EXISTING PUBLIC
TRANSPORTATION SERVICES AND TO THOSE AREAS WHERE THE
USE OF THE SHORE IS SEVERELY RESTRICTED BY EXISTING
DEVELOPMENT.
- POLICY #21A (WATER-RELATED RECREATION IMPROVEMENT SITES) WATER-DEPENDENT AND WATER-ENHANCED RECREATION WILL BE ENCOURAGED AND FACILITATED AT SITES RECOMMENDED UNDER "OPPORTUNITIES FOR IMPROVEMENT" AND "RECREATIONAL USES COMPATIBLE WITH NEW DEVELOPMENT" IN THE ANALYSIS NARRATIVE OF THIS REPORT AND IN "PUBLIC ACCESS AND RECREATION IMPROVEMENTS" IN PROJECTS, SECTION XIV.

These policies provide consistency guidelines for water-related recreation designed to preserve and maintain coastal resources and avoid user conflicts.

- POLICY #22 (PROVISION OF WATER-RELATED RECREATION WITHIN DEVELOPMENT ADJACENT TO THE SHORE) DEVELOPMENT, WHEN LOCATED ADJACENT TO THE SHORE, WILL PROVIDE FOR WATER-RELATED RECREATION, AS A MULTIPLE USE, WHENEVER SUCH RECREATIONAL USE IS APPROPRIATE IN LIGHT OF REASONABLY ANTICIPATED DEMAND FOR SUCH ACTIVITIES AND THE PRIMARY PURPOSE OF THE DEVELOPMENT.
- POLICY #22A(SITES WHERE WATER-RELATED RECREATION MAY BE
INCORPORATED INTO DEVELOPMENT AS A MULTIPLE USE)
FOR SPECIFIC LOCATIONS WHICH MAY APPROPRIATELY
PROVIDE WATER-RELATED RECREATION AS A MULTIPLE USE
WITH DEVELOPMENT SEE RECOMMENDATIONS UNDER
"OPPORTUNITIES FOR IMPROVEMENT" AND "RECREATIONAL"

USES COMPATIBLE WITH NEW DEVELOPMENT" IN THE ANALYSIS NARRATIVE OF THIS REPORT AND IN "PUBLIC ACCESS AND RECREATION IMPROVEMENTS" IN PROJECTS, SECTION XIV. SEE ALSO PUBLIC ACCESS POLICIES #19-20.

Provision for public access and water-related recreation in conjunction with public or private development is encouraged in this policy to the full extent permitted by law. Water-related recreation activities cross over with many other policy recommendations and initiatives. Other LWRP policies with application include: **Development #1-6**, **Significant Habitats #7**, **Flooding and Erosion #11-17**, **Historic Resources and Visual Quality #23-25**, and **Water Resources #30-40 & #44**.

Local Laws implementing the Recreation Resources Policies include §43, Beaches and Parks, especially §43-5, Vehicles on the beach; §103, Nature Preserves; §146-6, Parking Permit; §149, Waterways and Boats; §125, Shellfish; and §153-4, Protection of Natural Features.

Projects designed to further aspects of the **Recreation Resources Policies** include *Public Access* and Recreation Improvements Lions Field/Montauk Point State Boulevard Recreation Complex, Management Plan for Lazy Point Road-end, Improved Public Access to Ocean Beaches, Open Space Acquisition, Reclamation and Park Design for Former Montauk Landfill, Revitalization of Montauk Harbor, Camp Hero Revitalization and Redevelopment, and Scenic and Visual Resources Survey and Protection Program.

HISTORIC RESOURCES POLICY

POLICY #23(HISTORIC RESOURCES)
PROTECT, ENHANCE AND RESTORE STRUCTURES, DISTRICTS,
AREAS OR SITES THAT ARE OF SIGNIFICANCE IN THE HISTORY,
ARCHITECTURE, ARCHEOLOGY OR CULTURE OF THE STATE, ITS
COMMUNITIES, OR THE NATION.

This policy is concerned with protection of historic resources including standing and subsurface historical remains, prehistoric localities and/or sites, and geographical areas of cultural, historical, economic and environmental significance. Its mandate includes appropriate efforts to identify, protect, restore, or revitalize historic and/or prehistoric resources, either through preservation in place or through adaptive reuse. Policy guidelines define types of resources to be included under local and New York State or Federal National Register criteria, and means for protecting resources in accord with state and federal standards.

Several **Project** initiatives are adjuncts to this policy and will further its mandate: *Town Historic Building and District Update*, development and implementation of an *Historic District and Building Preservation Local Law*, development of a *Cultural Resources Inventory and Identification Matrix*, and a *Coastal Oral History Project*. Other **Projects** that would impinge less directly on the policy but would involve historic resources include *Gardiner's Island Preservation, Revitalization of*

Former Fish Factory Site in Napeague State Park, and Camp Hero Revitalization and Redevelopment.

Local laws which presently act to further this policy include **§131 Subdivision; §153 Zoning; §75** SEQR; §153-6 Site Plan Review, and §153-7 Architectural and Design Review.

Other LWRP policies which relate to the **Historic Resources Policy** include **Development Policies** #1-6, General Policy #18, Public Access & Recreation Policies #9 and 19-22, Visual Quality Policies #24-25, and Agricultural Lands Policy #26.

VISUAL QUALITY POLICIES

POLICY #24 (SCENIC RESOURCES OF STATE SIGNIFICANCE) PREVENT IMPAIRMENT OF SCENIC RESOURCES OF STATEWIDE SIGNIFICANCE, AS IDENTIFIED ON THE COASTAL AREA MAP. IMPAIRMENT SHALL INCLUDE: (i) THE IRREVERSIBLE MODIFICATION OF GEOLOGICAL FORMS, THE DESTRUCTION OR REMOVAL OF VEGETATION OR STRUCTURES ARE SIGNIFICANT TO THE SCENIC QUALITY OF AN IDENTIFIED RESOURCE; (ii) THE ADDITION OF STRUCTURES WHICH BECAUSE OF SITING OR SCALE WILL REDUCE IDENTIFIED VIEWS OR WHICH BECAUSE OF SCALE, FORM, OR MATERIALS WILL DIMINISH THE SCENIC QUALITY OF AN IDENTIFIED RESOURCE.

This policy cannot be applied to East Hampton, as Scenic Areas of Statewide Significance (SASS) must be designated by New York State. Although many of the town's scenic resources might qualify, the designation process has not been undertaken either by the State or Town.

POLICY #25(OVERALL VISUAL QUALITY)
PROTECT, RESTORE OR ENHANCE NATURAL AND MAN-MADE
RESOURCES WHICH ARE NOT IDENTIFIED AS BEING OF
STATEWIDE SIGNIFICANCE BUT WHICH CONTRIBUTE TO THE
OVERALL SCENIC QUALITY OF THE COASTAL AREA.

East Hampton's world-class coastal scenery provides enjoyment to residents and visitors alike, and is critical to the health of the Town's resort economy. Guidelines stated in this policy are designed to protect, restore or enhance the Town's scenic resources under existing laws. A list of examples of scenic resources accompanies the Inventory and Analysis for this policy report. A Scenic and Visual Resources Survey and Protection Program as proposed in Projects is currently underway as a means of cataloging and developing protections for visual resources with public input, as well as pursuing designation under the State program. Existing local law protects scenic and visual quality primarily through the provisions of **§131**, **Subdivision of Land**; **§153**, **Zoning**; **§153-6**, **Site Plan Review**; and **§75**, **SEQR**.

AGRICULTURAL LANDS POLICY

POLICY #26 (IMPORTANT AGRICULTURAL LANDS) TO CONSERVE AND PROTECT AGRICULTURAL LANDS IN THE STATE'S COASTAL AREA, AN ACTION SHALL NOT RESULT IN A LOSS, NOR IMPAIR THE PRODUCTIVITY, OF IMPORTANT AGRICULTURAL LANDS IF THAT LOSS OR IMPAIRMENT WOULD ADVERSELY AFFECT THE VIABILITY OF AGRICULTURE IN AN AGRICULTURAL DISTRICT OR IF THERE IS NO AGRICULTURAL DISTRICT, IN THE AREA SURROUNDING SUCH LANDS.

This policy cannot be applied to East Hampton, as New York State has not identified any important agricultural lands within the Town. Although many of the town's agricultural lands might qualify, the designation process has not been undertaken either by the State or Town.

POLICY #26A(LOCALLY IMPORTANT AGRICULTURAL LANDS)TO CONSERVE AND PROTECT AGRICULTURAL LANDS IN EASTHAMPTON'S COASTAL AREA, AN ACTION SHALL NOT RESULT IN

HAMPTON'S COASTAL AREA, AN ACTION SHALL NOT RESULT IN A LOSS, NOR IMPAIR THE PRODUCTIVITY, OF LOCALLY IMPORTANT AGRICULTURAL LANDS IF THAT LOSS OR IMPAIRMENT WOULD ADVERSELY AFFECT THE VIABILITY OF AGRICULTURE IN AN AGRICULTURAL DISTRICT OR IF THERE IS NO AGRICULTURAL DISTRICT, IN THE AREA SURROUNDING SUCH LANDS.

This policy's objective is to minimize the loss of farmland, which is important not only for its direct contribution to the economy but for its aesthetic and social benefits as well. Agricultural land contributes to the rural and visually appealing nature of the Town and attracts artists, tourists and second homeowners to the area. This policy provides standards for review of actions that would either be consistent or inconsistent with town policy for conservation of farmland.

East Hampton Town has instituted a number of complementary programs to protect existing farm acreage including expenditure of large amounts of money to purchase farmland or farm development rights, mandatory clustering, architectural review, right to farm legislation and soil conservation. The Town's Open Space Plan, completed in September 1995, includes techniques and priorities for farmland preservation.

Present local laws governing farmland derive primarily from §79, Farmland Preservation; §118, Right to Farm; §131, Subdivision; and §153, Zoning. §153-6-60 requires protection of public views and contiguous prime soil farmlands; §153-6-30 A.(6) requires site plan review for single family residences on parcels over 10 acres within Agricultural Districts. Other LWRP policies relevant to conservation and protection of agricultural lands include Development #1-6, Historic Resource and Visual Quality Policies #23-25, and Water Resources Policies #30-40 & 44. Projects promoting farmland conservation and protection include *Open Space Acquisition*, Gardiner's Island Preservation, and the Scenic and Visual Resources Survey and Protection Program.

ENERGY AND ICE MANAGEMENT POLICIES

POLICY #27 (SITING OF MAJOR ENERGY FACILITIES) DECISIONS ON THE SITING AND CONSTRUCTION OF MAJOR ENERGY FACILITIES IN THE COASTAL AREA WILL BE BASED ON PUBLIC ENERGY NEEDS, COMPATIBILITY OF SUCH FACILITIES WITH THE ENVIRONMENT, AND THE FACILITY'S NEED FOR A SHOREFRONT LOCATION.

This policy discusses state and local priorities for present and future energy facilities in the coastal area. The Town advocates relocation of the LILCO [LIPA] Montauk emergency substation presently sited in a flood hazard zone on Fort Pond and promotes development of renewable energy resources. See also **Development Policies #1-6, Flooding and Erosion Policies #11-17**, and **Water and Air Resources Policies #30-44**. Local Laws affecting energy facilities include primarily **\$153 Zoning**, especially provisions in **\$153-6**, **Site Plan Review** including **Definition of utility**, **\$153-12 Uses and Dimensions; \$153-11-72 Height; and \$151, Wind Energy Conversion Systems**.

POLICY #28(ICE MANAGEMENT PRACTICES)
ICE MANAGEMENT PRACTICES SHALL NOT DAMAGE
SIGNIFICANT FISH AND WILDLIFE AND THEIR HABITATS,
INCREASE SHORELINE EROSION OR FLOODING, OR INTERFERE
WITH THE PRODUCTION OF HYDROELECTRIC POWER.

Area winters generally do not cause extensive ice floes, and waterfront infrastructure requiring ice management is minimal.

POLICY #29(DEVELOPMENT OF OFF-SHORE ENERGY RESOURCES)
ENCOURAGE THE DEVELOPMENT OF ENERGY RESOURCES ON
THE OUTER CONTINENTAL SHELF, IN LAKE ERIE AND IN OTHER
WATER BODIES, AND ENSURE THE ENVIRONMENTAL SAFETY OF
SUCH ACTIVITIES.

The Town recognizes the need for new energy sources. However, development of the outer continental shelf (OCS) could result in oil spills which would devastate the Town's shoreline and surface waters, its fishing and resort economy. Development of OCS oil and gas resources would be in conflict with other policies of the East Hampton LWRP, especially **Significant Habitats Policy #7 and Commercial Fishing 10**, and should therefore only occur as a last resort, if needed to maintain national security. Furthermore, there are no sites currently within the Town of East Hampton which meet the criteria for OCS support sites.

WATER AND AIR RESOURCES POLICIES

POLICY #30 (DISCHARGE OF POLLUTANTS INTO COASTAL WATERS) MUNICIPAL, INDUSTRIAL, AND COMMERCIAL DISCHARGE OF POLLUTANTS INCLUDING BUT NOT LIMITED TO, TOXIC AND HAZARDOUS SUBSTANCES, INTO COASTAL WATERS WILL CONFORM TO STATE AND NATIONAL WATER QUALITY STANDARDS.

The policy of the Town of East Hampton is to maintain water resources as near to their natural condition of purity as possible to safeguard public health and the local economy. To that end, all necessary steps shall be taken to prevent water pollution and improve water quality which has degraded. Both point and non-point sources of pollutants are identified in this policy. See also **Policy #8, Pollutants**.

POLICY #31(WATER QUALITY CLASSIFICATIONS)
STATE COASTAL AREA POLICIES AND THE PURPOSES OF
APPROVED LOCAL WATERFRONT REVITALIZATION PROGRAMS
WILL BE CONSIDERED WHILE MODIFYING WATER QUALITY
STANDARDS; HOWEVER, THOSE WATERS ALREADY
OVERBURDENED WITH CONTAMINANTS WILL BE RECOGNIZED
AS BEING A DEVELOPMENT CONSTRAINT.

This policy notes classifications of the Town's waters under the Clean Water Act, and describes the Town's principal initiatives for improvement of surface waters, including *No-Discharge Zones*, *Harbor Protection Overlay District, and the Water Quality Monitoring* program. The initiatives are further described in the Inventory and Analysis accompanying the policies, and in **Section XIV**, **Projects**.

POLICY #32(USE OF ALTERNATIVE SANITARY WASTE SYSTEMS)
ENCOURAGE THE USE OF ALTERNATIVE OR INNOVATIVE
SANITARY WASTE SYSTEMS IN SMALL COMMUNITIES WHERE
THE COSTS OF CONVENTIONAL FACILITIES ARE UNREASONABLY
HIGH, GIVEN THE SIZE OF THE EXISTING TAX BASE OF THESE
COMMUNITIES.

This policy expresses the Town's concerns about the adequacy of conventional septic tank/leaching pool systems under some conditions in the coastal area, and provides guidelines for introducing alternative systems and techniques for single family use.

POLICY #33(STORM WATER RUNOFF)
BEST MANAGEMENT PRACTICES WILL BE USED TO ENSURE THE
CONTROL OF STORMWATER RUNOFF AND COMBINED SEWER
OVERFLOWS DRAINING INTO COASTAL WATERS.

While there is no municipal sewer system, thus no combined sewer overflow, direct runoff into surface waters remains a problem the Town is committed to reducing to the maximum extent practicable. The policy provides standards for management of stormwater and other runoff sources and to decrease pollutants reaching surface waters through recharge, filtration and other measures. Best management practices to control stormwater runoff are outlined in **Policy 37/37A**.

POLICY #34(DISCHARGE OF VESSEL WASTES)
DISCHARGE OF WASTE MATERIALS INTO COASTAL WATERS
FROM VESSELS WILL BE LIMITED SO AS TO PROTECT
SIGNIFICANT FISH AND WILDLIFE HABITATS, RECREATION
AREAS AND WATER SUPPLY AREAS.

POLICY #34A(NO-DISCHARGE ZONES)
THE FOLLOWING HARBORS AND CREEKS OF THE TOWN SHALL
BE DESIGNATED AS STATE AND FEDERAL EPA NO-DISCHARGE
ZONES PER THE TOWN'S APPLICATION OF JULY, 1997:

REACH 1	NORTHWEST CREEK
REACH 2	THREE MILE HARBOR, HOG CREEK
REACH 3	ACCABONAC HARBOR
REACH 4	NAPEAGUE HARBOR
REACH 6	LAKE MONTAUK

These policies reflect the Town's commitment to reduce all sources of pollutants affecting surface waters. They contain guidelines for both management and education efforts to reduce all boating related pollutants, and enumerate efforts by the Town to install pumpout facilities, increase Harbormaster personnel, process boat waste, and develop *Harbor Management Plans*. Designation of Town waters as *No-Discharge Zones* will enhance education and enforcement efforts to limit discharge of vessel wastes, and help to prevent further closures of Town waters to shellfishing.

POLICY #35 (DREDGING AND DREDGE SPOIL DISPOSAL) DREDGING AND DREDGE SPOIL DISPOSAL IN COASTAL WATERS WILL BE UNDERTAKEN IN A MANNER THAT MEETS EXISTING STATE DREDGING PERMIT REQUIREMENTS, AND PROTECTS SIGNIFICANT FISH AND WILDLIFE HABITATS, SCENIC RESOURCES, NATURAL PROTECTIVE FEATURES, IMPORTANT AGRICULTURAL LANDS, AND WETLANDS.

Periodic dredging is needed to maintain navigation channels and improve circulation and flushing in enclosed harbors. Dredging can also have an adverse affect on water quality, fish and wildlife habitat, wetlands and other important coastal resources. The policy provides guidelines to determine need for dredging and to minimize adverse impacts. Priorities are given for use of clean dredge spoil for beach nourishment and/or habitat enhancement.

POLICY #36(SHIPMENT AND STORAGE OF PETROLEUM AND OTHER
HAZARDOUS WASTES)
ACTIVITIES RELATED TO SHIPMENT AND STORAGE OF
PETROLEUM AND OTHER HAZARDOUS MATERIALS WILL BE
CONDUCTED IN A MANNER THAT WILL PREVENT OR AT LEAST
MINIMIZE SPILLS INTO COASTAL WATERS; ALL PRACTICAL
EFFORTS WILL BE UNDERTAKEN TO EXPEDITE THE CLEANUP OF
SUCH DISCHARGES; AND RESTITUTION FOR DAMAGES WILL BE
REQUIRED WHEN THESE SPILLS OCCUR.

Hazardous materials storage, shipment and spills are discussed in the accompanying Inventory and Analysis. Minor fuel spills are a problem in the Town's harbors, and standards are enumerated for dockside fueling procedures to prevent spills. The Town also has a NYS DEC approved Oil Spill Contingency Plan. Finally, given known navigational hazards and the potentially catastrophic consequences of a large scale oil spill on marine habitat and recreational resources, the Town proposes that US DOT institute a *Tanker-Free Zone* in the waters of Block Island Sound between Block Island and Montauk.

POLICY #37(NON-POINT DISCHARGE OF WATER POLLUTANTS)
BEST MANAGEMENT PRACTICES WILL BE UTILIZED TO MINIMIZE
THE NON-POINT DISCHARGE OF EXCESS NUTRIENTS, ORGANICS
AND ERODED SOILS INTO COASTAL WATERS.

This policy complements several other Water Resources policies with guidelines to minimize impacts of non-point sources of pollution, which include nearly all land-based pollution sources in the coastal area. Management practices and guidelines in the policy are organized under three categories: a *Harbor Protection Overlay District (HPOD)*, Agricultural Cultivation Practices, and Development Controls. Each of these provides a list of actions to reduce pollutants from municipal, residential, commercial, and agricultural sources.

POLICY #38(SURFACE AND GROUND WATER PROTECTION)
THE QUALITY AND QUANTITY OF SURFACE WATER AND
GROUNDWATER SUPPLIES, WILL BE CONSERVED AND
PROTECTED, PARTICULARLY WHERE SUCH WATERS
CONSTITUTE THE PRIMARY OR SOLE SOURCE OF WATER
SUPPLY.

POLICY 38AMAINTAIN WATER RESOURCES AS NEAR TO THEIR NATURAL
CONDITION OF PURITY AS REASONABLY POSSIBLE TO
SAFEGUARD PUBLIC HEALTH.

Given the vulnerability of the Town's groundwater and its dependence on a sole source aquifer, all practical methods of preventing and controlling water pollution must be utilized. This policy adds

to earlier Water Resources policies with specific guidelines for groundwater protection, including water conservation and measures to prevent septic infiltration.

POLICY #39 (SOLID WASTE TRANSPORT, TREATMENT, AND DISPOSAL) THE TRANSPORT, STORAGE, TREATMENT AND DISPOSAL OF SOLID WASTES, PARTICULARLY HAZARDOUS WASTES, WITHIN COASTAL AREAS WILL BE CONDUCTED IN SUCH A MANNER SO AS TO PROTECT GROUNDWATER AND SURFACE WATER SUPPLIES, SIGNIFICANT FISH AND WILDLIFE HABITATS, RECREATION AREAS, IMPORTANT AGRICULTURAL LANDS AND SCENIC RESOURCES.

Although solid waste handling, particularly hazardous waste, is licensed and regulated by NYS DEC, Town practices designed to protect the environment from solid wastes are also enumerated in this policy. Town policy of hazardous materials disposal under the NYS Stop Throwing Out Pollutants (STOP) program is also described.

POLICY #40 (EFFLUENT DISCHARGE BY MAJOR ENERGY AND INDUSTRIAL FACILITIES) EFFLUENT DISCHARGED FROM MAJOR STEAM ELECTRIC GENERATING AND INDUSTRIAL FACILITIES INTO COASTAL WATERS WILL NOT BE UNDULY INJURIOUS TO FISH AND WILDLIFE AND SHALL CONFORM TO STATE WATER QUALITY STANDARDS.

This policy does not apply. East Hampton has no major generating or industrial facilities.

- POLICY #41(COMPLIANCE WITH AIR QUALITY STANDARDS)
LAND USE OR DEVELOPMENT IN THE COASTAL AREA WILL NOT
CAUSE NATIONAL OR STATE AIR QUALITY STANDARDS TO BE
VIOLATED.
- POLICY #41A (INCLUSION IN RADIOLOGICAL EMERGENCY RESPONSE PLANS) THE TOWN SHALL BE INCLUDED IN RADIOLOGICAL EMERGENCY RESPONSE PLANNING AND NOTIFICATION FOR THE MILLSTONE NUCLEAR ENERGY PLANTS OPERATED BY NORTHEAST UTILITIES IN WATERFORD, CT AND THE NUCLEAR REACTORS OPERATED BY THE U.S. DEPARTMENT OF ENERGY AT BROOKHAVEN NATIONAL LABORATORY.

Land use and development in the coastal zone of East Hampton do not violate federal or state air quality policies and programs. The principal air pollution source within the Town is automobile traffic, particularly the significant congestion that occurs on summer weekends on Montauk

Highway, the Town's principal artery. Potential solutions are analyzed in a Town Transportation Study completed in 1997.

The Town's northerly coast lies within a 20-mile radius of the three units of the Millstone Nuclear Power Plant operated by Northeast Utilities across Long Island Sound, and in the prevailing downwind shadow of the nuclear reactors operated by the U.S. Department of Energy at Brookhaven National Laboratory approximately 30 miles to the west. As ionizing radiation from byproducts of nuclear fission poses a significant health hazard, the Town should be advised immediately of any abnormal release of fission byproducts, and should be included in federally mandated emergency response plans for notification, monitoring, containment, or evacuation from affected areas. The Town also proposes to undertake independent radiological monitoring (see *Air Quality Monitoring Station* in **Projects**).

POLICY #42(RECLASSIFICATION OF AREAS PURSUANT TO CLEAN AIR
ACT)
COASTAL MANAGEMENT POLICIES WILL BE CONSIDERED IF THE
STATE RECLASSIFIES LAND AREAS PURSUANT TO THE
PREVENTION OF SIGNIFICANT DETERIORATION REGULATIONS
OF THE FEDERAL CLEAN AIR ACT.

LWRP policies will be taken into account prior to any action to change Prevention of Significant Deterioration land classifications under Federal Clean Air Act regulations within the Town's coastal zone or adjacent areas.

POLICY #43(ACID RAIN PRECURSORS)
LAND USE OR DEVELOPMENT IN THE COASTAL AREA MUST NOT
CAUSE THE GENERATION OF SIGNIFICANT AMOUNTS OF THE
ACID RAIN PRECURSORS: NITRATES AND SULFATES.

There are no significant generators of acid rain precursors in the Town. The only significant generation of air pollutants within the Town occurs from automobile traffic.

POLICY #44(TIDAL AND FRESHWATER WETLANDS)PRESERVE AND PROTECT TIDAL AND FRESHWATER WETLANDSAND PRESERVE THE BENEFITS DERIVED FROM THESE AREAS.

Wetlands benefit habitat, control flooding and break down or filter pollutants. This policy characterizes the Town's wetlands, and provides standards for development in adjacent upland, including provisions for alternative locations, setbacks, siting of septic systems, etc.

The Water and Air Resources Policies as a group amplify and interact with many other LWRP policies including Development #1-6, Significant Habitats #7, Commercial Fishing #10, Flooding and Erosion #11-17, Recreation Policies #9 and 21-22, Visual Quality #24-25, Agricultural Lands #26, and Energy and Ice Management #27-29.

Provisions of the Town Code which implement the Water and Air Resources Policies include §75, SEQR; §77-8, Dredging; §123, Scavenger Waste; §131, Subdivision Review; §149 Waterways and Boats, particularly §149-2, Prohibited discharges and §149-34, Prohibition of floating homes; §153, Zoning, particularly §153-3-70, Harbor Protection Overlay District, §153-4-20, Natural Resource Special Permits, §153-4-20 (A), Wetland setbacks, §153-3-40 Flood Hazard Overlay District, §153-6, Site Plan Review, and §153-3-65, Water Recharge Overlay District. Mooring, anchorage and dock permits and regulations are also issued by the Town Trustees for harbors, beaches and bottomlands under their jurisdiction. In addition, the Town's Building Code requires water conserving appliances; the Town's state approved Solid Waste Management Plan governs disposal of solid waste; and local implementation of the NYS Stop Throwing Out Pollutants (STOP) program helps to remove toxic or hazardous materials from the environment.

Projects to achieve the objectives of these policies include: *Open Space Acquisition, Reclamation* and Park Design for Former Montauk Landfill, Revitalization of Montauk Harbor, Wetland Restoration, Eelgrass Restoration, Sea Level Rise Model, Fresh Pond Channel Erosion Stabilization and Widening, Drainage Mitigation for Georgica Cove, East Hampton/Southampton Cooperative Run-off Mitigation for Wainscott Pond, Road-end and Beach Access Modifications, Management Plan for Lazy Point Road-end, Stormwater Abatement, Open Marsh Water Management (OMWM), Water Quality Monitoring Project, Septic Waste Remediation, Harbor Management Plans, No-Discharge Zones, Boater Education Project, Harbor Protection Overlay District Homeowner Education, Dredging Projects to Improve Water Quality, Air Quality Monitoring Station, Storm and Flood Monitoring Cooperative with National Weather Service, and Geographic Information System for Coastal Zone Management.

SECTION I

COASTAL AREA BOUNDARY

I. COASTAL AREA BOUNDARY

The New York State, Department of State established the boundary of the State's coastal area in 1981, as part of the Federal approval of the State Program. This boundary set the inland limit of the coastal area within all coastal municipalities. The coastal area land boundary in the Town of East Hampton is illustrated on Map I-1 and extends as follows:

The State boundary starts at the intersection of the Southampton-East Hampton Town Line with the Sag Harbor Village Line on Town Road. The boundary follows the Village line east to its intersection with the East Hampton - Sag Harbor Turnpike, NY Route 114. The Town of East Hampton coastal boundary continues along the Sag Harbor Village Line until it intersects with the shoreline of Sag Harbor Bay. The Village of Sag Harbor is not included within the Town of East Hampton LWRP. The boundary follows the East Hampton - Sag Harbor Turnpike in a southeasterly direction to its intersection with Swamp Road. It follows Swamp Road in a northeasterly direction to its intersection with Northwest Landing Road and Phoebe Scoys Road. The boundary then runs northeast along Phoebe Scoys Road to its intersection with Mile Hill Road. It then runs south along Mile Hill Road to Northwest Landing Road, which it follows to the intersection of Old Northwest and Northwest Roads. The boundary then follows Old Northwest Road (Road to Powder HIll) to the northeast to its intersection with Alewive Brook Road, which it follows in a southeasterly direction to the intersection of Old House Landing and Ely Brook Roads. The boundary continues in a southeasterly direction on Alewive Brook Road (also known as Ely Brook to Hands Creek Road in this section) to its junction with Hands Creek Road. The boundary then follows Hands Creek Road in a southeasterly direction to Springy Banks Road and along Springy Banks Road to its junction with Soak Hides Road, which it follows in an easterly direction to its intersection with Three Mile Harbor Road.

The boundary crosses Three Mile Harbor Road and runs in an easterly direction along Abrahams Path for a distance of 500 feet from Three Mile Harbor Road. The boundary then runs northeast along an imaginary line parallel to Three Mile Harbor Road at a distance of 500 feet to its intersection with Gardiners Avenue, which it follows to its intersection with Three Mile Harbor Road. It then follows Three Mile Harbor Road in a northeasterly direction to its intersection with Kings Point, which it follows to its intersection with Tyrone Road. The boundary follows Tyrone Road in a northerly direction to its intersection with Bull Pasture, which it follows to its intersection with Hog Creek Lane. Following Hog Creek Lane southeasterly to the intersection with Argyle Lane, the boundary runs southerly along Argyle Lane to its intersection with Norfolk Drive. It follows Norfolk Drive to the intersection with Underwood Drive, then runs northeasterly along Underwood Drive to the junction with Springs-Fireplace Road.

The boundary then runs southwesterly and turns southeasterly along Springs-Fireplace Road to its intersection with Old Stone Highway. It follows Old Stone Highway in an easterly

direction and then south along the Old Stone Highway to its intersection with Winding Way and then east along Winding Way to its intersection with Northway. The boundary runs south along Northway to its intersection with Shoridge and west along Shoridge to its intersection with Robins Way. It follows Robins way south to its intersection with Barnes Hole Road, and then follows Barnes Hole Road, westerly, to its intersection with Old Stone Highway. It follows Old Stone Highway southwesterly to its junction with Alberts Landing Road, which it follows in an easterly direction to its junction with Cross Highway to Devon. The boundary follows Cross Highway to Devon, southeasterly, to its junction with Abrams Landing Road and east along Abrams Landing Road to its junction with Oceanview Lane. It then follows Oceanview Lane south to its junction with Cranberry Hole Road and west along Cranberry Hole Road, across the Montauk Highway, NYS Route 27, to Bluff Road. All land to the east of this point, including Gardiners Island, is within the coastal boundary.

The boundary runs westerly along Bluff Road to its junction with Indian Wells Highway. It runs north along Indian Wells Highway to its junction with Further Lane and west along Further Lane to the eastern East Hampton Village Line. It then follows the East Hampton Village Line to the Atlantic Ocean. The Village of East Hampton is not included in the Town of East Hampton LWRP. The coastal boundary then follows the western East Hampton Village Line from the Atlantic Ocean north around the eastern shore of Georgica Pond, including Georgica Cove, to the Montauk Highway, NY Route 27, which it follows westerly to its intersection with Wainscott Stone Road. It then follows Wainscott Stone Road in a southwesterly direction to its junction with Wainscott Main Street and westerly along Wainscott Main Street to its junction with the Southampton - East Hampton Town Line at Town Line Road. The boundary then follows Town Line Road, south, to the Atlantic Ocean.

As part of the preparation of the Town of East Hampton Local Waterfront Revitalization Program (LWRP), the Town has reviewed the State designated coastal area boundary for the Town of East Hampton with regard to local waterfront conditions and objectives. This review considered:

- · land uses that affect or are affected by waterfront issues, problems and opportunities
- natural and cultural resources with a physical, social, visual or economic relationship to the waterfront and/or the coastal waters
- areas necessary for the achievement of policies in the LWRP

The Town of East Hampton has determined that the boundary of the coastal area established by the Department of State is appropriate with regard to the Town's local waterfront conditions and the goals and objectives of the LWRP. However, the Town of East Hampton has identified two areas where a minor boundary amendment is necessary to include key wetland parcels around Three Mile Harbor and Accabonac Harbor

The Town of East Hampton proposes to amend the State coastal area boundary within the Town of East Hampton, as follows:

1. In the vicinity of Tanbark Creek, Three Mile Harbor:

.....The boundary then follows Hands Road in a southeasterly direction to Springy Banks Road and along Springy Banks Road to its junction with Three Mile Harbor Road.

The boundary follows Three Mile Harbor Road northerly to its intersection with Abrahams Path, and runs in an easterly direction along Abrahams Path for a distance of 500 feet from Three Mile Harbor Road.....

2. In the vicinity of Pussy's Pond, Accabonac Harbor:

.....The boundary then runs southeasterly and turns southwesterly along Springs - Fireplace Road to its intersection with Sand Lot Road, then follows Sand Lot Road to its intersection with School Street, and follows School Street northeasterly to its junction with Old Stone Highway. It follows the Old Stone Highway in an easterly direction and then south along the Old Stone Highway to its intersection with Winding Way and then east along Winding Way to its intersection with Northway....

The proposed coastal area boundary of the Town of East Hampton is illustrated in Map I-1.

For the purposes of the inventory and analysis, and to facilitate the required use and review of this document by Federal, State, and local officials, the Town has been divided into twelve "reaches", the boundaries of which are illustrated on Map I-2. The reaches are designed for geographic convenience to organize discussion of the Town's coastal resources and issues. The demarcations do not have any particular political or environmental significance. The twelve reaches are as follows:

Reach 1, Northwest Harbor

Reach 1, the northwestern section of the Town's coastal zone, stretches from the Village of Sag Harbor to the east boundary of Cedar Point County Park. It encompasses Barcelona Neck State Park, Northwest Harbor County Park, the Grace Estate Town Preserve and Cedar Point County Park. Reach 1 includes Northwest Harbor, from the Town's western boundary with the Village of Sag Harbor, and Southampton and Shelter Island Towns in Shelter Island Sound, to the east boundary of Cedar Point Park along Hedges Bank on Gardiner's Bay. Little Northwest Creek, Northwest Creek, Barcelona Neck, the Grace Estate, and Cedar Point Park, with the Cedar Point Lighthouse, Alewife Brook and Alewife Pond are major features. The reach has approximately 7.3 miles of bay shoreline, with an additional 4.0 miles of shore in Northwest Creek, and a land area of approximately 2645 acres. The Town Trustees own the bottomlands and adjacent beaches of, and assert their right to manage the following bodies of water: Alewive Brook, Northwest Creek, and Little Northwest Creek (Town Code

§43-3). The Trustees also claim title to the underwater lands of, and assert their right to manage Northwest Harbor and Sag Harbor.

Reach 2, Three Mile Harbor/Hog Creek

Reach 2 extends from Hedges Bank at the east boundary of Cedar Point County Park on Gardiner's Bay to Hog Creek Point, and includes Three Mile Harbor and Hog Creek. The Gardiners Bay shore is approximately 4.1 miles long, with an additional 10.2 miles of interior shore in Three Mile Harbor and 2.2 miles within Hog Creek. Land area within the coastal zone is approximately 3486 acres. The Town Trustees own the bottomlands and adjacent beaches of, and assert their right to manage the following bodies of water: Hog Creek, Hands Creek, Duck Creek and Three Mile Harbor (except Sammy's Beach above mean high water and Maidstone Park Beach from the westerly boundary of Flaggy Hole Road to the Three Mile Harbor Inlet). (Town Code §43-3).

Reach 3, Accabonac

Reach 3 extends from Hog Creek Point to Abraham's Landing on Gardiners Bay and includes Accabonac Harbor and Fresh Pond. It's bay shore is approximately 5.8 miles long, with Accabonac Harbor adding 7.5 miles of interior shoreline. Land area of the coastal zone in Reach 3 is approximately 2010 acres. The Town Trustees own the bottomlands and adjacent beaches of, and assert their right to manage the following bodies of water: Accabonac Creek and Harbor, Pussy's Pond, Fresh Pond and the beaches adjacent to Gardiner's Bay (except between Alberts Landing Road and Barnes Hole Road). (Town Code § 43-3).

Reach 4, Napeague North

Reach 4 stretches from Abrahams Landing to Quincetree Landing at the eastern extent of Hither Hills State Park. It encompasses the land area north of Montauk Highway (NYS Route 27) and includes parts of Napeague State Park and Hither Hills State Park, a land area of approximately 4332 acres. Waterbodies include Fresh Pond in Hither Hills State Park, Napeague Bay and Napeague Harbor. The Napeague Bay shoreline is approximately 7.1 miles long, with Napeague Harbor an additional 5.9 miles of interior shore. The Town Trustees own the bottomlands and adjacent beaches of, and assert their right to manage Napeague Harbor (Town Code § 43-3).

Reach 5, Hither Woods/Fort Pond Bay

Reach 5 begins at Quincetree Landing at the eastern end of Hither Hills State Park and extends along the northern bay shore to Culloden Point. It includes the land area north of Montauk Highway (NYS Route 27), west of Edgemere Street and east to Flamingo Avenue.

Waterbodies within the reach are Napeague Bay, Block Island Sound, Fort Pond Bay and Fort Pond. The Napeague Bay, Block Island Sound and Fort Pond Bay shorelines are approximately 5.2 miles long, and the land area of the reach comprises approximately 2733 acres. Fort Pond is an enclosed freshwater pond covering an area of approximately 159 acres with 3.1 miles of shoreline.

Reach 6, Montauk North Side

Reach 6 stretches from Culloden Point on the west, east to Shagwong Point along the north shore of Montauk. It includes Block Island Sound and Lake Montauk, and Big and Little Reed Ponds in Montauk County Park. The land area is bounded on the west by Edgemere Street and Flamingo Avenue and extends to the east boundary of Montauk County Park and south to Montauk State Parkway (NYS Route 27). The Block Island Sound shoreline is approximately 3.4 miles long, while the interior of Lake Montauk adds 7.9 miles. The reach area is approximately 4365 acres. Big Reed Pond has an area of approximately 55.5 acres with 1.6 miles of shore.

Reach 7, Oyster Pond/North Montauk Point

Reach 7 extends from Shagwong Point to Montauk Point along Block Island Sound, and includes Oyster Pond. It encompasses much of Montauk Point State Park and the Montauk Lighthouse. The land area is bounded on the south by Montauk Point State Parkway (NYS Route 27) and extends to the northern shoreline. The reach is approximately 878 acres in area. The bay shoreline perimeter is approximately 3.0 miles long, with Oyster Pond an additional 4.5 miles, and approximately 126.7 acres in area.

Reach 8, Montauk Bluffs

Reach 8 stretches along the Town's Atlantic Ocean south shore from Montauk Point to the east boundary of the Town's Ditch Plains bathing beach. It encompasses the land area south of the Montauk Point State Parkway (NYS Route 27) and includes part of Montauk Point State Park, Camp Hero and the Sanctuary parcel recently acquired by the State (1997). Montauk Shores, a condominium trailer park, is located at the west end of the reach. The land area is approximately 1595 acres and includes approximately 3.9 miles of Atlantic Ocean shoreline.

Reach 9, Hamlet of Montauk

Reach 9 extends along the south shore from the Ditch Plains bathing beach to the eastern boundary of Hither Hills State Park. The reach is bounded by the Atlantic Ocean to the south and Montauk Point State Parkway (NYS Route 27) on the north, except where the coastal zone jogs to include the northern segment of the Montauk business area. Reach 9's Atlantic Ocean shoreline is approximately 5.4 miles long, and the reach land area is approximately 1495 acres.

Reach 10, Napeague South/Amagansett

Reach 10 extends west along the Atlantic Ocean shoreline for approximately 8.9 miles from the eastern boundary of Hither Hills State Park, and is bounded on the north by Montauk Highway up to the outskirts of Amagansett, then follows Bluff Road and Further Lane to the border with East Hampton Village at Two Mile Hollow. It encompasses parts of Hither Hills State Park and Napeague State Park, and covers approximately 1836 acres. The Town Trustees claim title to the ocean beaches adjacent to Napeague State Park between the beachgrass line and the ocean, in accordance with the long-standing practice of surveyors to locate shoreline boundaries by reference to the line of vegetation. Even were this not so, the 1882 conveyance from the Trustees to Arthur Benson, subsequently accepted by New York State when it acquired the property, excepted and "reserved to the Town of East Hampton the right to land fish boats and nets, to spred (sic) the nets in the adjacent lands and to care for the fish and materials as has been custom heretofore on the south shore of the Town lying westerly of these conveyed premises."

Reach 11, Wainscott

Reach 11 includes the area of the Atlantic Ocean shore from the west boundary of East Hampton Village at Georgica Pond, to the Town's western border with Southampton Town at Town Line Road. The coastal area extends north to Wainscott Main Street and along Wainscott Stone Road to its intersection with Montauk Highway, and east to the Georgica Pond access at the historic marker on Montauk Highway (NYS Route 27). Waterbodies include the Atlantic Ocean, Georgica Pond and Wainscott Pond. This ocean shoreline is approximately 0.9 miles, with the Town's portion of the perimeter shore of Georgica Pond adding 3.3 miles, and Wainscott Pond 1.3 miles. The land area of the reach is approximately 724 acres. The Town Trustees own and/or manage the ocean beaches from the westerly boundary of the Town to the westerly boundary of Hither Hills State Park (see Reach 10 above with reference to Napeague State Park). The Town Trustees also own and manage Georgica Pond and Wainscott Pond. (Town Code § 43-3).

Reach 12, Gardiner's Island

Reach 12 includes all of Gardiner's Island, which is approximately nine miles long, almost three miles wide at its widest point, and encompasses some 3375 acres. Its 15.27 miles of shoreline separates Block Island Sound to the east from Gardiners Bay to the west. The entire island is within the coastal area.

II. WATERSIDE BOUNDARY

For purposes of the LWRP and harbor management the waterside boundary extends along the Town's boundary in the Peconic Estuary with the Towns of Southampton, Shelter Island and Southold. Along the south facing Atlantic Ocean shore the waterside boundary extends 1500' offshore, as authorized in **19 NYCRR Part 603.2**. The waterside boundary is depicted on Map I-3.

Description of the Town of East Hampton LWRP waterside boundary:

Beginning in the Village of Sag Harbor at the intersection of the East Hampton/Southampton Town boundary with the Mean High Water (MHW) mark, then northerly and easterly along the boundary for approximately 5600 feet to a point in Sag Harbor Bay at the intersection with the boundary of Shelter Island Town, then extending easterly for approximately 4400 feet along the boundary with Shelter Island Town to a point in Northwest Harbor, then extending northeasterly a distance of approximately 11,900 feet along the boundary with Shelter Island Town to a point north of Cedar Point in Gardiners Bay, then extending northeasterly a distance of approximately 55,400 feet along the boundaries of Shelter Island Town and Southold Town to a point north of Gardiner's Island in Block Island Sound, then extending easterly a distance of approximately 78,000 feet along the boundary of Southold Town to a point north of Montauk Point in Block Island Sound at N 389,207.06, E 2,578,105.53, then extending southerly to a point 1500 feet east of Montauk Point, thence westerly along a line 1500 feet from the Mean Low Water (MLW) mark of the Atlantic Ocean to an extension of the East Hampton/Southampton Town boundary in Wainscott.

SECTION II

DEVELOPMENT POLICIES #1-6

A. INTRODUCTION

Policies #1-6 of the LWRP address coastal zone development and land use issues, especially waterdependent uses and redevelopment or revitalization of underutilized or deteriorated sites. This section of the LWRP provides land use information and a discussion of development issues. It is formatted to provide a general background as well as reach-specific information directed at the individual policies.

1. Location and Setting

East Hampton is the easternmost town in Suffolk County on Long Island. It extends from a western border with Southampton Town at Town Line Road in Wainscott, through Sag Harbor to the north, and east to Montauk Point, the easternmost tip of the island. The Town has approximately 110 miles of coastline including several sheltered harbors along its northern bay shore.

Like much of the rest of Long Island, the Town traces its geologic origin to sediment deposits from the advance and retreat of the glaciers. Consequently, the Town's coastal zone has two basic kinds of land forms, the original glacial depositions and secondary lands built up from eroded sediments carried by the longshore drift or from offshore. The latter constitute the Town's justifiably famous sandy beaches, infill areas and sandy spits. The glacial topography in the coastal zone exhibits great variety, from knob and kettle terrain to the small harbors and coastal ponds formed by meltwater channels and later closed by littoral drift. Bluffs of glacial till tower over 100' along the Town's shore at a number of locations. Most are composed of sandy/gravelly material but some contain predominantly clay sediments which, as they erode, form spectacular "hoodoos" along the ocean shore in Montauk.

2. Evolution of Land Use in East Hampton

The history of development in East Hampton began with pre-colonial aboriginal settlements, and underwent its first radical change with the advent of the European colonists and their agricultural and fishing subsistence economy.

While pre-contact native culture is generally thought to have had little impact on the landscape, the natives actively managed the landscape in ways distinct from their colonial successors to optimize food production. In accord with their semi-communal tribal culture they regularly burned undergrowth to provide a park-like hunting environment and cleared patches of forest for subsistence agriculture, planting maize, beans and squash, moving the fields when fertility declined. In keeping with their communal concepts of landholding the Indians made few territorial distinctions and shared the abundant natural resources, shifting habitations to follow seasonal food sources, and living flexibly within the limitations of the environment.

The arrival of colonial settlers brought European concepts of land ownership with private property holdings delimited by metes and bounds, English practices of agriculture and husbandry, and the rapid decline of Native American culture due to pestilence, alcohol and colonial persecution. Not only did the land ownership change from communal to private, the establishment of permanent fields and dwellings bounded by fences irrevocably altered the ecology.

Browsing by domesticated swine and cattle and introduction of alien plant species transformed forest floors and meadow communities with consequences that continue to the present day. A mercantile economy based on exploiting natural resources supplanted the subsistence practices of the natives and early settlers. Timber was harvested for construction and export, the oaks and great white pines of Northwest Woods felled for masts and timbers for the British Navy, and the land was cleared for crops, fodder and grazing (Cronon, 1983).

For two centuries there was gradual expansion, evolving in the nineteenth century more and more toward market-oriented agriculture, commodity production and coastal trade. Except for the offshore whaling industry centered in Sag Harbor, until the end of the 19th century East Hampton Town remained an agricultural and fishing outpost linked to the rest of the mid-Atlantic economy by coastal shipping and eventually the railroad.

The second radical transformation in land use occurred with the post-World War II building boom and the metamorphosis to the present day resort and tourist community. The economic expansion and the advent of a leisure time economy coupled with improved transportation made East Hampton's shores an irresistible summer draw for thousands of sweltering New Yorkers.

The early development patterns were largely dependent on resources and geography. The original colonial settlement established in 1648 was located in the fertile coastal plain along Hook Pond in what is presently the incorporated Village of East Hampton, then called Maidstone. Amagansett and Wainscott developed later as outlying areas were settled and cleared for their fertile farmland. Early settlers avoided the sandy storm-raked shores and the exposed sections of the coast. North of the coastal outwash plain in Northwest and Springs, where the soil is generally less fertile, the settlements were characterized by small subsistence farms and lumbering in allotted wood lots. A colonial port was established at Northwest Harbor, but by the mid-eighteenth century its whaling and shipping activities had been supplanted by the deeper port at Sag Harbor. In its heyday Sag Harbor was bustling with shipping activity second only to New York City, but after the collapse of the whaling industry in the late 1800's it relapsed into a quiet coastal village.

Development patterns shifted with changes in economic activity. Although the settlement at Northwest all but disappeared, much of the original hamlet of Springs remained and expanded. After World War II, Springs became known as a community of writers and artists, a reputation persisting to the present.

Overall development patterns changed further as the Town evolved from its colonial agrarian and maritime origins to its present resort character. Residential settlement shifted from the early communities focused in the Villages of East Hampton and Sag Harbor, with outlying farms and summer fishing camps, to the shore. Vacation home and resort sites dispersed along the coast for water views and beach access, with retail enclaves remaining in the villages and hamlets for the service needs and convenience of sophisticated city folk.

The first wave of East Hampton's resort development occurred in the latter 19th and early part of this century, but remained concentrated principally in the Village of East Hampton along the ocean shore.

This period saw construction of the first elaborate "summer cottages", and was also East Hampton's first incarnation as a haven for famous artists, including the Tile Club group. Noted 19th century painters, William Merritt Chase and Childe Hassam, did significant work in East Hampton. As time passed additional resort development arose on the fringes of the fashionable ocean areas and along the bay shores. However, most of the new homes continued to function for summer occupancy only, and many were constructed without heating apparatus for the colder months.

Montauk, one of the last outposts of the native tribes, was used as a common pasture from 1658 and remained little developed until the late 19th century. A few structures still remain from this era, Second House located in Town-owned Kirk Park on the banks of Fort Pond, and Third House, located on County parkland, both of which were used as dwellings for keepers of the livestock. Deep Hollow Ranch adjoining Third House claims to be the first cattle ranch in America. The Town's best known landmark, the Montauk Lighthouse, was authorized for construction in 1795 by George Washington.

The shape and character of development in Montauk is largely a result of influences and events from the late 1800's onward. In 1879, Arthur Benson purchased the entire Montauk peninsula, with the exception of the lighthouse and life-saving station reservation, for the sum of \$151,000. In doing so, he also purchased the last of the lands reserved for the Montauks, and moved the remaining members of the tribe from their home at Indian Field. Benson and friends formed the Montauk Association in 1881, and planned a group of 33 vacation homes on 100 acres overlooking the Atlantic Ocean.

In 1925, the sportsman and developer Carl Fisher arrived in Montauk. In that year he purchased 9,000 acres of land in Montauk which he marketed as the "Miami Beach of the North." He was largely responsible for the layout of the Montauk business district and the shape of residential subdivisions between Lake Montauk and Flamingo Road. He formed the Montauk Beach Development Corporation, which left legacies such as the distinctive Tudor revival buildings of the business district, the Montauk Railroad station, the former Montauk Playhouse, and Montauk Manor, its silhouette still an icon of Montauk's first wave of resort development.

In the 1910-1930 period development began to penetrate the outlying districts of the Town, with the efforts of Fisher in Montauk, and purchases such as the Bell Estate (ca. 1915) along Gardiners Bay in Amagansett, and the Levering homes overlooking bay and ocean at Devon.

It was not until the post-war boom that summer home development really begin to take off in East Hampton. Subdivisions in Amagansett, Springs and Montauk proliferated in this period, waterfront lots began to be in great demand, and small parcels of inland property were even offered as incentive giveaways from banks and other institutions. There was little control over siting or subdivision layout in this period, and a myriad of small lots were created, some of them perilously sited and environmentally inappropriate.

As the popularity and consequent density of the resort community increased with post-war affluence, the necessity for land use planning and zoning became apparent. Zoning was implemented in 1957.

The Town produced a Comprehensive Plan, completed in 1967. It was substantially updated and modified in 1984, with periodic additions since. The Town's Zoning Code and subdivision regulations, recognized as some of the most environmentally progressive in the state, were substantially revised in December 1984 to reflect the Comprehensive Plan update, and have had occasional modifications since. (See Maps II-2A and II-2B)

The character of the Town has continued to evolve from a seasonal resort built on a fishing and farming base to a year-round second-home and retirement community with many service economy jobs. The earlier emphasis on transient hotel and motel accommodations has given way to more permanent vacation and year-round development. Following the national trend, the advent of computer and communications technology has made it possible for residents to operate home businesses and telecommute from the desirable environs of the Hamptons.

A study of **Upland Land Use Acreage by Town for Eastern Suffolk** done in 1995 by the Suffolk County Planning Department, with assistance from the East Hampton Town Planning Department, analyzed land use within the Town. Within a total land area of 46,638 acres land use was distributed in the following percentages: Low Density Residential 15.2%; Medium Density Residential 12.3%; High Density Residential 0.8%; Commercial 1.4%; Industrial 0.5%; Institutional 0.6%; Recreation and Open Space 27.7%; Agriculture 3.2%; Vacant Land 28.9 %; Transportation 8.9%; Utilities 0.4%; and Waste Handling 0.2%. This study area included both of the incorporated villages within the Town, the Village of East Hampton and part of the Village of Sag Harbor, and the unincorporated portion of the Town.

Existing Land Use Maps II-1A, -1B, depicts current land use patterns in the Town under existing zoning regulations. For additional historical information, see **Historic Resources Policy #23**.

Amidst the land speculation and development accompanying the shift to a resort-service economy, traditional agricultural and maritime uses of the coast have persisted, albeit under pressure. As second-home owners and developers have come to realize, the open space of farmlands and the active presence of fishermen and baymen provide amenities and lend character to the community. A growing appreciation of these traditions in the Town's coastal landscape has translated into political willingness to fund public open space purchases. The Town has attempted to preserve water-dependent uses, such as commercial fishing and marinas, through implementation of a Waterfront (WF) District. The statute and its designated locations are described in the Zoning section and in **Policy #2**.

The Permitted Uses in Waterfront (WF) District districts should continue to be redefined as necessary to protect priority water-dependent uses and exclude undesirable uses such as car ferries. The present Waterfront (WF) District zone Permitted Uses (§153-11-10 of Town Code), **Development Policy #2, Commercial Fishing Policy #10, and Public Access and Recreational Resources Policies #9, and #19-22**, reflect the Town's policy priorities. The Permitted Uses emphasize water-dependent uses with traditional economic bases in commercial fishing and recreational boating [marinas], and secondarily (Special Permit Uses) water-related businesses such as fish processing or marine research which support water-dependent uses, or water-enhanced uses such as restaurants which benefit from access to the water without causing undue impacts. In further

redefining Waterfront (WF) Districts the Town should continue to be guided by these planning and policy goals.

In practice maintaining these priorities may be complicated. In some cases trade-offs may be necessary to maintain the economic viability of a site while preserving priority water-dependent uses. Where non-water-dependent uses threaten to supplant water-dependent uses, further development of a site should be coupled to maintenance of the priority water-dependent use. Waterfront (WF) District districts townwide are exposed to increasing pressures for use changes, as exemplified by a proposal for a ferry terminal on Fort Pond Bay.

Ferry terminals raise substantial planning questions. Seasonal traffic is already a substantial problem in the Town, and would be exacerbated and augmented by ferry traffic. Given the infrastructure of the existing two-lane highway system, present summer traffic tie-ups, and lack of bypass routes for the Town's congested hamlets and business areas, the increase from ferry traffic is extremely undesirable. Montauk itself has always been a tourist destination rather than a transit point, and a ferry would substantially alter the character of the community. The ferry-related traffic issues were analyzed in the *Transportation Element of the Town Comprehensive Plan*, prepared by L.K. McClean Associates (1997).

This is a key issue townwide, in response to which the Town amended its Zoning Code (§153-1-20, §153-5-26 and §153-5-50), SEQRA Law (§75-3-20), and Waterways and Boats Law (§149-8) to address potential traffic and environmental impacts associated with passenger ferry boats, and prohibited vehicle ferries in all districts. The Findings and Objectives of Local Law #40 of December 18, 1997 (Zoning Code Amendment) give the Town's rationale for changing the regulations:

"As the year-round, seasonal, and transient populations of East Hampton Town have grown over the years, congestion on the Town's highways has become an increasingly serious threat to public health and safety and to the economic vitality and general livability of the Town. This increased road congestion may be greatly exacerbated by recent and proposed changes in ferry service on the East End of Long Island. The most significant such change has been the popularity of very large casinos established on the Connecticut mainland near New London, Connecticut, which has greatly increased ferry traffic across Long Island Sound by Long Island residents. Technological changes have also vastly increased the speed and, hence, the potential carrying capacity, of ferries. These new developments have made it imperative that the Town update its zoning regulations concerning ferries and ferry terminals.

The Town Board commissioned a Townwide Transportation Study in 1995, the first such transportation analysis since the 1960's. That study, prepared by a respected engineering firm and completed in June of this year, was incorporated into the Town's Comprehensive Plan in June, 1997 following public hearings. The study concluded that "the Town is at a `crossroads' in terms of developing a solution to its worsening traffic congestion in the summer season." The Transportation Study found that traffic volumes on the Montauk Highway (NYS Route 27), the Town's primary thoroughfare, are already at or near capacity

for lengthy periods of time in the summer months. The study also found that traffic on the Town's roadways in the summer has been increasing at an annual rate of eight per cent (8%), far faster than the average rate of traffic growth on Long Island.

These findings merely confirm what has already become obvious to Townspeople: summertime road traffic in East Hampton has become so heavy as to undermine the Town's rural atmosphere, create very inconvenient and even dangerous driving conditions on the Town's roads, and generally diminish the quality of life heretofore enjoyed by residents and visitors alike.

In light of the Transportation Study's findings, it is clear that major ferry operations in the Town would substantially worsen the already bad traffic situation, especially if the ferries included vehicle ferries operating between the Town and the Connecticut shore or included high-speed, high-volume passenger ferries transporting passengers to the large Connecticut casinos. The revisions contained in this Local Law are intended to improve and strengthen the Town's zoning regulations as they pertain to ferries, and to thereby reduce the potential traffic and other impacts of such uses."

The 1994 Governor's East End Economic and Environmental Task Force (Twomey, 1994) recommended several methods to preserve water-dependent uses such as marinas. Included are purchase of development rights, economic incentives, tax reforms which would halt the government practice of valuing marinas at waterfront condominium values [as the "highest and best use"] for estate tax purposes, a grant program or revolving loan fund to assist marinas in making environmentally related improvements, and streamlining of environmental permitting.

Adequate and attractive shoreside facilities including pumpouts, garbage disposal, and other amenities such as restrooms, showers and laundry rooms can enhance a marina's business and also help to meet Town water quality objectives. The Town may wish to consider some form of incentive such as tax abatement to assist operators in installing, maintaining or upgrading these facilities.

As land use patterns have changed, several areas within the coastal zone have fallen into disuse and offer potential for redevelopment or reintegration into the Town's present economy. Primary locations include:

- Marina Lane dredge spoil site, Three Mile Harbor, Reach 2
- Old fish factory site, Napeague, Reach 4
- Former Montauk landfill site, Reach 5
- Montauk Harbor area (linked walkway), Reach 6
- Camp Hero, Montauk, Reach 8
- Montauk business area, Reach 9

These sites are discussed in further detail in the Reach Inventory and Analysis, **Policy #1/1A**, and **Projects**.

3. Zoning

For purposes of zoning the Town of East Hampton is divided into the following districts:

- A. Special districts: Parks and Conservation (PC)
- B. Residential districts:
 - (1) Single family residence districts:

A5 - 1 D.U./ 200,000 sq. ft. A3 - 1 D.U./ 125,000 sq. ft. A2 - 1 D.U./ 84,000 sq. ft. A - 1 D.U./ 40,000 sq. ft. B - 1 D.U./ 20,000 sq. ft.

- (2) Other residence districts: Multifamily District (MF)
- C. Commercial districts:

Central Business District (CB) Neighborhood Business District (NB) Commercial-Industrial District (CI) Resort District (RS) Waterfront District (WF)

The Waterfront (WF) District is designated to encourage water-dependent uses. New uses proposed within the Waterfront (WF) District which are not water-related must meet a set of Special Permit criteria in order to obtain Town approval. The Special Permit criteria have been established to assure that proposals within the Waterfront (WF) District:

- Do not adversely affect existing or potential water-dependent uses;
- Are ancillary to a principal water-related use by providing economic support for the waterdependent use; or
- Enable the general public to gain visual or physical access to the waterfront.

The water-related use must not usurp any land surface area needed by the principal water-dependent use and must have a maritime character or theme (§ 153.5.50, East Hampton Town Code). These regulations recognize that there is a finite and limited amount of waterfront land available for water-dependent use in the Town.

Minimum setbacks from wetlands, waters and beaches are required for filling, clearing, dredging, constructing or siting of structures or materials. These jurisdictional boundaries, setbacks and Natural Resource Special Permit (NRSP) review procedures of the Code are designed to provide adequate protection to the Town's wetlands and watercourses. According to § 153-4-20 of the East Hampton Town Code, an NRSP is required prior to commencing an action within 150 feet of a

wetland or watercourse unless it involves the siting of a new sewage disposal system, in which case the NRSP requirement is invoked within 200 feet of a wetland or watercourse.

Minimum NRSP setbacks from wetlands/watercourses are:

•	Wastewater disposal system structures	150 feet
•	All other structures	100 feet
•	Turf, landscaping, or clearing of natural vegetation	50 feet

Certain relief provisions from these setbacks are provided for in the Code and exceptions to the setbacks are established for approved coastal structures, Waterfront (WF) Districts and marinas (§153-4-37 & 153-4-39 & -39B).

4. Other Planning Efforts in the Coastal Zone

A number of planning efforts have been instituted recently by the Town to improve coastal zone land use, in addition to regional planning initiatives by other government agencies.

The *Town Comprehensive Plan*, the central document for local planning, received a major update in 1984. Since that time a number of studies and initiatives have been incorporated into the Comprehensive Plan, of which the LWRP is the most current element. A 1986 *Trails* report inventoried and identified trails for preservation. In 1987 a *Water Quality Management Plan* was added to the Plan, and in 1988 a GEIS prepared by Suffolk County was incorporated as the *Accabonac Harbor Area Study*. A 1989-90 *Historic Preservation Report* by consultant Robert Hefner inventoried historic buildings and structures for preservation and potential inclusion in historic districts. A study detailing the feasibility of a *Bicycle Path from East Hampton to Southampton* was completed in 1993.

An *Open Space Plan* was produced by the Town Planning Department in September of 1995, which was incorporated into the *Town Comprehensive Plan* in 1996. In 1998 the Town *Open Space Plan* was revised to form a Community Preservation Project Plan, including the Villages of East Hampton and Sag Harbor. It will continue to be updated every 3-5 years. This is an important tool for prioritizing open space acquisitions and other means of maintaining critical open spaces in the coastal zone. Recommendations of the *Open Space Plan* are referenced by reach in the **Development** inventory.

The Town commissioned an updated *Transportation Element* of the Town Comprehensive Plan, incorporated in 1997. Results of the transportation study and accompanying recommendations had important implications for development in general and for the coastal area, particularly regarding beach parking and new ferry services. Results are incorporated where appropriate into the reach inventory and analysis, and subsequent changes in local law are reflected in the policies.

The *Peconic Estuary Program (PEP)* is part of the Federal EPA-sponsored National Estuary Program. PEP has built on earlier work by Suffolk County to combat the Brown Tide algal bloom, which decimated shellfish populations and other marine life in the estuary starting in 1985-86. As

a multi-level initiative to restore productivity in the Peconic/Gardiners Bay system from Riverhead to Montauk Point, PEP includes a consortium of Federal, State, County and Local government agencies, and a Citizens Advisory Committee. As part of its Action Plan, PEP is addressing impacts from nutrients, pathogens and the Brown Tide. PEP is conducting water quality, land use, living resources and economic research to address these problems and is producing a Comprehensive Conservation and Management Plan (CCMP) to be issued in 1998. Included are studies of:

- surface water quality modeling
- sediment nutrient fluxes
- estuary use and economic value assessment
- toxic substances and sediment characterization
- identification of rare, endangered, threatened and wildlife species of special concern and critical habitat areas
- a determination of the abundance, distribution and ecological importance of submerged aquatic vegetation

The results of these studies and the recommendations of the Action Plan will be incorporated into the PEP CCMP, which will characterize the priority water quality problems affecting the Peconic Estuary and identify specific commitments and actions to improve water quality. This CCMP will also examine the protection and restoration of living resources and land use issues, and provide specific recommendations on the following topics:

- marine surface water quality and integrated ecosystem management
- nutrients
- pathogens
- · toxics
- Brown Tide
- living resources
- education/public outreach

The Town of East Hampton has been an active contributor to the PEP, and many LWRP policies and actions complement PEP goals. In turn, many PEP CCMP recommendations will be directly applicable to water quality and harbor management in East Hampton.

In 1994 a Governor's East End Economic and Environmental Task Force published a report titled, *Blueprint for Our Future* (Twomey, 1994), with recommendations for economic revival and environmental preservation, including land use recommendations. A number of them are incorporated or cited in the LWRP.

Also, in response to damaging nor'easters in the winter of 1992-93, New York State appointed a Coastal Erosion Task Force. The resulting report also encompassed coastal land use recommendations. See also **Flooding and Erosion Policies #11-17**.

B. LAND USE IN THE COASTAL ZONE

REACH 1 NORTHWEST HARBOR

1. Description

Northwest Harbor is a large natural embayment formed by Shelter Island, Sag Harbor, and the northerly shore of East Hampton, known as Northwest Woods, which includes Barcelona Neck, the Grace Estate, and Cedar Point County Park. Although it extends to the intensively developed shoreline of Sag Harbor Village, the reach shoreline is sparsely developed, its terrain ranging from saltmarshes surrounding Northwest Creek and the sand spit of Cedar Point, to high bluffs along Barcelona Neck.

The natural harbor of Northwest made Northwest Landing East Hampton's first colonial shipping port, until it was eclipsed by neighboring Sag Harbor during the heyday of whaling in the mid-1800's. Northwest Harbor and Northwest Creek were bountiful fin and shellfishing grounds for the native Americans as well as the European settlers. The geographic attributes of the area, plus the absence of development impacts continue to make Northwest one of the most productive nurseries for shellfish and finfish in the Town.

2. Land Use

Large tracts of parkland and preserved open space including Barcelona Neck, now Sag Harbor State Park, the Town-owned Grace Estate, Cedar Point County Park, and The Nature Conservancy's Mashomack Preserve on Shelter Island have kept the shorelines of Reach 1 in a largely natural state. Recreational and open space comprise the greatest proportion of Northwest. Through a combined effort by New York State, Suffolk County, and East Hampton Town and privately owned reserved areas, approximately 2000 acres in the reach have been committed to permanent open space.

Present development in the reach consists of sparse residential construction in the subdivisions of Settlement at Northwest and Grace Estate, and a small concentration of residential housing at Northwest Landing. The golf course at Barcelona Neck managed by the Sag Harbor Golf Club, the County dock at Northwest Creek, and the infrastructure of Cedar Point County Park are the only additional development.

The parkland properties support a wide range of water-dependent and water-enhanced uses (see also Inventory for **Public Access and Recreational Resources Policies #9 and #19-22**. The County Park at Northwest Creek contains a boat launching area used by commercial fishermen and recreational boaters. Although there are no marinas in the area, a mooring area has been established by the Town Trustees in Northwest Creek. Town holdings and road endings at Northwest Landing Road and Mile Hill Road provide public access to the water, boat launching sites, hunting and fishing opportunities, and nature walks on an extensive trail network. Cedar Point Park provides opportunities for fishing, boating, duck hunting, camping, hiking, nature walks, and beach recreation.

3. Zoning

Zoning in Reach 1 roughly parallels the existing land uses. The large parkland holdings are zoned as Parks and Conservation (PC), and the vacant and residential land is zoned for residential use. The Residential Districts are generally the lowest density in town: A5, A2 and A. With the exception of small pre-existing lots along Northwest Landing Road, most of the residential lots were created as part of clustered open space subdivisions which preserved large reserved areas. This follows the Town Comprehensive Plan's recommendations of very low density residential development in this area. No public water main extensions or other major infrastructure improvements are planned or will be required if the plan is followed. There are no designated Waterfront (WF) Districts in Reach 1.

4. Analysis

There are no deteriorated or underutilized waterfront areas in Reach 1 that can appropriately be revitalized or redeveloped for commercial or industrial purposes without compromising the vital ecological resources in this largely unspoiled area. The filled bulkhead/dock in the County Park at Northwest Creek has been cited in **Flooding and Erosion Policies #11-17** for Reach 1 as overbuilt for its limited function. Revitalization in this instance should include removal or reconfiguration of the dock in a much reduced mode when it deteriorates to the point of requiring maintenance.

Because of the fragile wetland/creek ecology, potential for storm flooding and erosion, and water quality issues in Northwest Creek and Northwest Harbor, the Town should limit expansion of existing residences on sensitive small lots along Northwest Landing Road and surrounding Northwest Creek (see Flooding and Erosion Policies #11-17 and Water and Air Resources Policies #30-44 and proposed Hurricane Damage Mitigation Plan in Projects). There is no infrastructure for public water in this area, nor is it likely there will be, nor should there be in the future. Some existing homes already experience difficulty in obtaining potable water and meeting County Health Department standards in siting septic systems, a practical limit which should be heeded in permitting future development.

In this and other residential areas of the reach, appropriate land use and ecological practices should be advanced both in the coastal zone and upland watersheds to prevent deterioration of surface water quality and habitat (see **Water and Air Resources Policies #30-44** and **Significant Habitats Policy #7**). Residential lots immediately adjoining Northwest Creek fall within the Town Harbor Protection Overlay District which implements a number of these practices.

The former marina site just northeast of Northwest Creek lapsed from use many years ago and should be restored to a natural state. The primary water-dependent use needs in Reach 1, i.e. public access and a sheltered harbor for baymen and recreational fishermen and boaters, are adequately addressed for the present and foreseeable future by the mooring and launching facilities at Northwest Creek. Although the channel to the Creek periodically shoals up and requires maintenance dredging, other infrastructure requirements in the reach remain minimal, and further development is undesirable. While maintenance dredging of the existing channel is needed to preserve the water-dependent uses in the Creek, Town, County and State agencies should also consider reestablishing the historic channel on the east side of the spit as a means of better stabilizing the inlet and improving flushing in Northwest Creek. See also Analysis for Reach 1 in **Flooding and Erosion Policies #11-17**.

Following on the prodigious political efforts and expenditures of public funds used to acquire open space in Reach 1, all levels of government must work together diligently to insure that this area remains protected, and to acquire remaining parcels critical to the habitat, esthetics and environmental values of the reach.

5. Key sites in Reach 1

The primary site for water-dependent uses is Northwest Creek, including the dock and launch facilities and anchorage. Nearby development on the small lots at the end of Northwest Landing Road is a concern for storm flooding and erosion.

The Town has identified a number of Reach 1 parcels in the Open Space Plan for changes in land use. The defunct marina site (SCTM #72-1-2) on the shore of Northwest Harbor is recommended for upzoning to 5-acre Residential A5 District, as it adjoins significant areas of preserved open space. Two lots (SCTM #111-1-3.1 and #111-3-1) draining into the headwaters of Northwest Creek in the County Special Groundwater Protection Area are recommended for public acquisition, or alternatively [for #111-3-1] private conservation. A 33.8 acre parcel (SCTM #72-1-6.1 & 6.2) adjoins protected open space of the Grace Estate, and it is recommended that any subdivision plan here protect slopes, rare and protected species, and preserve a contiguous block of open space. Two parcels near Northwest Creek (SCTM #90-1-2 & #90-1-26.1) contain wetlands adjoining the County park and are recommended for public acquisition. A 19.9 acre parcel (SCTM #112-3-4) adjoining Northwest Harbor is recommended for private conservation or open space subdivision.

6. Key issues in Reach 1

The large amount of preserved open space is the focus for land use in Reach 1. Maintaining the integrity of these tracts by preventing habitat fragmentation and encroachment from future development is a central planning concern. Future land use and development must be consistent with conservation objectives, avoiding adverse impacts on the great variety of natural resources and excellent surface water quality in the reach. Acquisition of additional parcels may be needed to protect existing open space and fulfill the recommendations of the Town Open Space Plan.

Storm flooding of development adjoining wetlands at the end of Northwest Landing Road is a risk in hurricanes and nor'easters. Specific conditions and redevelopment following a catastrophic storm should be further addressed in the Hurricane Damage Mitigation Plan (see **Projects**).

REACH 2 THREE MILE HARBOR/ HOG CREEK

1. Description

Steep bluffs with elevations of 25'-40' comprise the coastline from Hedges Bank to Lafarge's Landing at the end of Old House Landing Road, dipping to near sea level at Sammy's Beach and Maidstone, before ascending to bluffs of almost 60' east of Maidstone Park Beach between Flaggy Hole Road and Runnymede Drive. The rocky beaches beneath the bluffs widen to sandy beaches

at Sammy's Beach and Maidstone Park both enhanced by periodic dredge spoil from the Three Mile Harbor channel.

The baymouth spits of both Hog Creek and Three Mile Harbor were originally closed intermittently by littoral drift, but the harbor entrances were eventually stabilized for navigation in the 1930's and maintained by the installation of a 650' steel sheet and piling jetty to the west and a 600' stone jetty on the east. Dredging of a channel, later extended to the southern end of the harbor, has permitted use of the harbor by medium draft recreational craft and small commercial vessels. The south end of Three Mile Harbor was unnavigable south of Marina Lane until the navigation channel was extended to the head of the harbor.

2. Land Use

Prehistoric native American use of Three Mile Harbor was likely quite active due to the confluence of salt and fresh water from Soak Hides Dreen [Tanbark Creek] and Springy Banks, combined with plentiful shellfish in the harbor. Important archaeological resources have been identified along the western harbor shore (see **Historic Resources Policy #23**, Inventory section).

Present land use in Reach 2 is primarily residential, with relatively few unbuilt lots along the shores of Three Mile Harbor and Hog Creek. Recreational marinas are located on the east side of the harbor close to the channel, making Three Mile Harbor the busiest harbor in the Town for recreational boating on the bays. The Town also operates a commercial dock at Gann Road on the east side which is used extensively by smaller commercial draggers and baymen. The harbor supports nine private recreational marinas, a Town recreational boat basin and the Town commercial dock, plus two homeowners' association marinas and approximately fifty individual private docks. Although the marine character of Three Mile Harbor is primarily recreational, it is also the center for an active inshore fishery, with several small trawlers and numerous baymen using it to tie up and offload (see **Commercial Fishing Policy #10**).

Commercial development, including all of the recreational marinas and associated restaurants and services, is along the east side of Three Mile Harbor where the channel is located. The Town-owned commercial dock at Gann Road is utilized by bay trawlers, lobstermen and baymen, as well as for headquarters of the Town Harbormaster, and the Town's municipal pumpout station. An old fishing station adjoining Maidstone Park near the mouth of Three Mile Harbor was recently acquired by the Town, primarily for recreation and open space use, and is a prospective site for a Town environmental education center (see **Projects**).

3. Zoning

Zoning in Reach 2 generally follows the existing land use. The parks are zoned Parks and Conservation (PC); single family zones of Residential A2, A and B Districts correspond to existing residential development. Most vacant tracts are zoned for lower density Residential A2 and A3 Districts depending on surrounding land uses and environmental sensitivity. However, many pre-existing vacant lots remain at the higher densities. A food and convenience store is zoned Neighborhood Business (NB), and the trailer park at the southeast end of the harbor is classified as a pre-existing non-conforming use in a Residential A District.

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The marinas in Three Mile Harbor are generally in the Waterfront (WF) District, as are most of the restaurants and boat shops. There are seven Waterfront (WF) Districts totaling 49.6 acres located in Reach 2 including the following parcels and facilities:

SCTM#[s]	Use and location
#57-6-23 to 27	Harbor Marina, east side Three Mile Harbor, north of Gann Road (includes a restaurant)
#57-6-3,11.1 #61-1-2	(includes south end of Sedge Islanddredge spoil)
#01-1-2	(includes south end of Sedge Islanddredge spon)
#77-5-1.1, 1.2	Shagwong Marina, east side Three Mile Harbor, west of Harbor Blvd
#75-1-28.5	Maidstone Harbor (Duck Creek Marina), east side Three Mile Harbor, south of Squaw Road (includes a restaurant)
#75-1-29	East Hampton Point Marina, east side Three Mile Harbor, south of Squaw Road (includes non-conforming motel units and a restaurant)
#93-1-5,6	Halsey's Marina, east side Three Mile Harbor, opp. Copeces La
#93-1-8	Gardiner's Marina, east side Three Mile Harbor, west of Hill Rd
#120-1-1	Three Mile Marina (Van de Veer's), southeast end of Three Mile Harbor, adjoining Boat Yard Lane
#120-1-2,3	Three Mile Harbor Boat Yard, southeast end of Three Mile Harbor, adjoining Boat Yard Lane (includes a retail bait & tackle store and chandlery
#120-1-10,11	East Hampton Marina, southeast end of Three Mile Harbor, adjoining Boat Yard Lane

In addition, there are non-conforming marina uses at the northeast corner of the harbor in the B Residential District off Folkstone Drive, at SCTM #38-7-15, Sunset Cove; #57-1-2, East Hampton Landings [Folkstone Marina]; and #38-3-8, the old fishing station, recently acquired by the Town.

The Town maintains a commercial dock at Gann Road (SCTM #59-1-1) as well as a recreational boat basin, Town Dock, near the head of Three Mile Harbor. Additional Town-owned parkland preserves open space on both sides of the mouth of Three Mile Harbor at Sammy's Beach and Maidstone Park. Sammy's Beach is primarily a wildlife preserve, with trails, sand roads and water access for swimming and passive recreation as well as fishing from the beach and the west side harbor jetty. Maidstone Park on the east side of the Three Mile Harbor entrance has more extensive facilities, with a comfort station, picnic tables and parking area, as well as an upland ball field.

The largest tract in the reach, 170 acres of mostly undeveloped land east of Flaggy Hole Road belonging to Camp Blue Bay Girl Scout Camp (SCTM #37-2-1), is presently zoned A3 residential, and contains the only substantially natural coastal bluff remaining in Reach 2 east of Maidstone Park. This parcel would be an important target for preservation should the present use or ownership change. The Town and County also own open parcels at Marina Lane on the east side of Three Mile Harbor, used primarily for holding dredge spoil, and at Hands Creek, a small estuary on the west side.

Hog Creek, at the east end of the reach, is a shallow narrow estuary fringed with saltmarsh, artificially opened to Gardiner's Bay and dredged and widened for development in the 1950's. It is now surrounded by B zone (½ acre) subdivisions. Alteration and destruction of the original Hog Creek shoreline through installation of lawns, filling of wetlands, and construction of bulkheads, docks and piers have all contributed to instability of the present shoreline. Hog Creek is one of the fastest shoaling inlets in the Town, having been dredged four times within the past fifteen years, approximately the same frequency as Accabonac Harbor. The Lions Head and Clearwater Beach property owners' marinas inside the mouth of Hog Creek contain approximately 150 slips for recreational boats, but are contained within the B Residential District as part of the subdivision.

4. Analysis

Reach 2 is intensively developed relative to the rest of East Hampton Town, with dense residential development and a cluster of water-dependent marina uses on the shores of Three Mile Harbor, and extensive residential development along the rest of the coastline, except where parks or the Blue Bay Girl Scout Camp provide open space. The camp provides a significant open space component in Reach 2 and is near existing Town-owned parkland at Maidstone Park. If the Girl Scouts decide not to use it as a camp any longer, public acquisition should be pursued.

Much of the residential construction predates zoning, and from a planning perspective is situated too close to the shore, with a resulting loss of natural protective features and wetlands where structural protections have been introduced. A significant portion of the shorefront development may be at risk from flooding or erosion in time of severe storms (see **Flooding and Erosion Policies #11-17**). Development in many of these areas may be having a significant effect on surface water quality in the harbor, which the Town has addressed through a *Harbor Protection Overlay District* (**Appendix C**). Some parcels, such as those adjoining Soak Hides Dreen at the head of the harbor, are too environmentally sensitive for development.

There are few, if any, parcels in Reach 2 that could be described as underutilized or in need of redevelopment. One potential site for revitalization is the dredge spoil site at Marina Lane on the east side of Three Mile Harbor, which is utilized only at intervals and could become a public access and recreational site as well as be used for wetland restoration and a native plant nursery (see **Policy #1A** and **Projects**). Of the total 49.6 acres presently zoned Waterfront (WF) District, only 2.5 acres remain vacant. Given the limited extent of existing Waterfront (WF) Districts and the low probability these districts will increase in the future, some developed Waterfront (WF) District parcels should be analyzed in terms of current uses, and alternatives examined for future development to preserve priority water-dependent use.

Water-dependent uses in the reach consist primarily of the recreational marinas and related services noted in Zoning, plus a Town Trustee mooring grid in the middle of Three Mile Harbor, and recreational fishing and water sports activities at Town park and bathing beach areas. Existing marina facilities appear to adequately address present demand for slips. Slip occupancy varies from year to year according to economic, fishing and weather conditions, as does economic viability of the marina operations themselves. A 1991 Town Boater Survey (Natural Resources Department, 1991) found 89% slip occupancy at marinas townwide. Boating activity reportedly surged with the economy in the late '80's, took a downturn in the early '90's, and is now recovering significantly. Some local marinas are still experiencing difficult economic times.

Future demand for boat slips is difficult to assess. However, the industry is a significant component of the Town's economic base, and it should do what it can to preserve these water-dependent uses, and to allow flexibility for changes in configuration to accompany industry trends. The Town should also work in conjunction with marina operators and other government agencies to maintain the harbor channel at sufficient depth and width to safely accommodate boat traffic.

The Town's commercial dock at Gann Road in Three Mile Harbor is an important water-dependent use as a launching, mooring and offloading facility for baymen and the inshore fishing fleet (see **Commercial Fishing Policy #10**). These water-dependent uses are a high priority for preservation in the Town.

5. Key sites in Reach 2

Important sites for consideration in Reach 2 include the developed section of Sammy's Beach; watershed and archaeologically sensitive parcels along the west side and southern headwaters of Three Mile Harbor; recreational marinas along east side of Three Mile Harbor; the Town commercial dock at Gann Road; the Marina Lane dredge spoil site on the east side of Three Mile Harbor; and the Camp Blue Bay Girl Scout Camp.

In its recent Open Space Plan the Town has recommended a number of specific land use changes for sites in Reach 2 including: SCTM #74-5-30.1, 74-5-30.2 and 74-5-32, a 71 acre section of the Duke tract on the west side of Three Mile Harbor, recommended for rezoning to A3 residential with private conservation or open space subdivision; SCTM #119-2-2, 119-2-3 and 119-2-4, 32 acres along Soak Hides Dreen (Tanbark Creek) at the head of Three Mile Harbor, for rezoning to A3 residential and/or public acquisition; small tidal wetlands parcels on the Three Mile Harbor side of Sammy's Beach, SCTM #56-2-38, 56-2-39, 56-2-40, 56-2-41, 56-2-42, 56-2-46 and 56-2-48, all less than one acre in size, for public acquisition or obtaining conservation easements; and the Girl Scout Camp, SCTM #37-2-1, for public acquisition if and when the property becomes available.

6. Key issues for Reach 2

In relation to the Town's marina industry, it is important to preserve priority water-dependent uses such as marinas in Waterfront (WF) Districts against encroachment or replacement by non-water-dependent uses. At the same time marina operators need sufficient flexibility to operate their business. These objectives must also be integrated with other policy objectives of the LWRP, for example, water quality enhancement and Harbor Management Plans for the busy harbors.

The Three Mile Harbor channel is in urgent need of dredging, especially opposite the Town commercial dock at Gann Road where shoaling has caused several boats to go aground. In the past maintenance dredging has been performed by Suffolk County Department of Public Works. A channel maintenance dredging project is scheduled for winter of 1998-99.

At Sammy's Beach, the developed area within the flood and erosion hazard zone is also a sensitive ecological area, and the Town should work out equitable ways to limit additional development and restrict expansion of existing development.

Preserving coastal zone open space for public access, parkland and natural resource protection are constant objectives to consider in policy for coastal development, and the Town must work to find creative ways of fulfilling the recommendations of its Open Space Plan.

REACH 3 ACCABONAC

1. Description

Accabonac Harbor, Creek or Crick, is a broad estuary located on a flat coastal plain, and the most significant feature of Reach 3. Barrier spits flank the Accabonac inlet. Gerard Park on the north and Louse Point on the south separate Accabonac Harbor from Gardiners Bay. The low sandy bay shore of Gerard Drive was originally developed with small summer-camp homes in the 1930's, when a sluice at the north end of the harbor was paved over, and has frequently been a problem area for storm induced flooding and erosion.

From Accabonac Harbor, the coastline to the south climbs sharply to Accabonac Cliff, morainal bluffs peaking at 100' that have historically fed the beaches from Louse Point to Devon, but are now stabilized by bulkheads and revetments which have effectively eliminated the beach from the bluff toe. The Barnes Landing subdivision lies behind the bluff, with many of the waterfront lots enjoying fine views but marginal setbacks.

From Accabonac Cliff the terrain descends to Barnes Landing, a municipal beach. Low bluffs ascend in height from Barnes Landing into the Bell Estate, which was subdivided relatively recently (ca. 1985), then descend again to a Town beach at Alberts Landing and Fresh Pond Park at the southerly end of the reach.

2. Land Use

Land use in Reach 3 is primarily residential, with pockets of higher density along Gerard Drive, at Louse Point, in Barnes Landing subdivision, and along Devon Landing Road south of Fresh Pond. Many of the original residences in these areas are small summer cottages. Commercial development in the reach is minimal, the only instance being Springs General Store.

There is considerable preserved open space, including Town parks and municipal bay beaches located at Gerard Park, Louse Point, Barnes Landing, Alberts and Little Alberts Landings, Fresh Pond and Abrahams Landing. The Town also maintains several launching ramps and other public

access points in Accabonac Harbor, at Louse Point, Landing Lane, Shipyard Lane, and Gerard Drive (see **Public Access and Recreational Policies #9 & #19-22**).

There are no sites in Reach 3 that can be characterized as underutilized or appropriate for redevelopment. However, a number of parcels have been recommended for changes in land use in the Town's Open Space Plan and other recommendations may be forthcoming (see **Projects**).

Accabonac Harbor is ecologically significant and an important anchorage for recreational and small commercial fishing boats. Boating and fishing are primary water-dependent uses in Reach 3, as are water-dependent recreational uses of the harbor and bay beaches (see **Commercial Fishing Policy #10, Public Access and Recreational Policies #9 & #19-22**). Extensive cooperative efforts by Town and State government and private agencies such as The Nature Conservancy, along with private donations such as a prospective land bequest by the designer, Ward Bennett, have resulted in preservation of many fragile undeveloped parcels included in Accabonac Harbor's extensive network of salt marshes. However, several large parcels remain eligible for subdivision, and efforts must be continued to preserve them. See Open Space Plan recommendations in Appendix A.

Gerard Drive, the northerly barrier spit enclosing Accabonac Harbor, has numerous small homes on lots which are vulnerable to flooding and erosion (see **Flooding and Erosion Policies #11-17**). Its barrier spit characteristics present obstacles to development beyond flooding and erosion concerns, including proximity to harbor tidal wetlands and marshes, limited potable water supplies (see **Water and Air Resources Policies #31-44**), presence of critical habitat areas (**Significant Habitats Policy #7**), as well as generally small lots with limited siting alternatives.

Flooding and erosion concerns are limiting factors for development of all parcels surrounding Accabonac Harbor, particularly for the Louse Point and Gerard Drive areas, for the bluff sector from Louse Point to Barnes Landing, and for the residences along Cross Highway between Fresh Pond and Abrahams Landing Road at the south end of the reach. Progressive installation of erosion protection structures along the bay shores has led to destruction of beaches and consequent loss of public access and opportunities for water-dependent recreation in these areas (see Flooding & Erosion Policies #11-17 and Public Access & Recreation Policies #9 & 19-22).

3. Zoning

Reach 3 zoning generally follows the existing development. Zoning in the reach varies from high density Residential B Districts in the Clearwater Beach and parts of Barnes Landing subdivisions to low density Residential A2 and A3 Districts surrounding Accabonac Harbor and in the Bell Estate subdivision. A substantial number of parcels are in Parks & Conservation (PC) Districts including Louse Point and Gerard Park, various wetland and meadow tracts, municipal beaches, and the Town owned park at Fresh Pond. Springs General Store, opposite the intersection of School Street and Old Stone Highway, is the sole Neighborhood Business (NB) District in the reach.

4. Analysis

Water-dependent uses in Reach 3 are centered in Accabonac Harbor, used extensively as a launching and mooring area by baymen and recreational boaters and fishermen. Many of their activities, as

well as uses within the harbor such as shellfishing, are contingent on the health of the harbor environment. The harbor is a critical area for environmental protection and regulation of surrounding land use because of the sensitivity of its tidal creek and salt meadow ecology, its importance as a finfish nursery and for shellfish resources, its recreational values, and water quality concerns caused by existing development (see also policies for Significant Habitats #7, Commercial Fishing #10, Public Access and Recreation #9 & #19-22, and Water and Air Resources #30-44).

Extensive preservation efforts, both public and private, have already been made in acquiring sensitive parcels on Accabonac Harbor, including on Louse Point and Gerard Drive. The Nature Conservancy has an extensive Merrill Lake Preserve and significant holdings elsewhere around the harbor. Planning and regulatory initiatives at all levels of government should aim to prevent further development of the harbor shores, improve surface water quality, and target available acquisition funds for purchase of remaining undeveloped parcels (see Town Open Space Plan recommendations, Appendix A). Additional infrastructure, such as roads, public water, etc., is not required in the area, and should not be permitted insofar as it may encourage further development. Other levels of government and government agencies should consult with the Town prior to issuance of any permit[s] for lots surrounding Accabonac Harbor, and should not issue permits that do not meet minimum standards.

The constraints on the barrier spit of Gerard Drive noted above and in other sections of this report argue for stringent limitations on expansion of existing development and accessory structures such as decks and outbuildings. Swimming pools should not be permitted. Where floodproofing measures are required for new construction or reconstruction, the flood requirements should not be construed to allow violation of other provisions of Town Code, such as single story or pyramid law limitations. New development should be discouraged along Gerard Drive, which is effectively a barrier beach. All vacant parcels on Gerard Drive should be considered for acquisition as they come in for development.

For much of the Reach 3 bay shore where previous development has disrupted shoreline processes and caused negative impacts on coastal resources, Town policies should be formulated to halt damage, rebuild deteriorated beaches and dunes, and restore natural coastal processes. Erosion control issues are addressed primarily in **Flooding and Erosion Policies #11-17**. However, future development in flooding and erosion hazard areas must also be addressed through land use controls such as setbacks, reduced density zoning, conservation easements, vegetative buffers, etc.

5. Key sites in Reach 3

Key areas include Accabonac Harbor, Louse Point and Gerard Drive, Accabonac Cliff, Fresh Pond, and the shore of Cross Highway from Fresh Pond Road end to Abrahams Landing. All of these are areas of concern either in relation to preserving Accabonac Harbor or because of potential flooding and erosion problems which may limit future development.

The Town's Open Space Plan contains specific recommendations of land use changes for 40 parcels within the coastal zone in Reach 3, primarily surrounding Accabonac Harbor and in the watershed

for Fresh Pond. Recommendations include a variety of measures ranging from open space subdivision to private conservation, from conservation easements to public acquisition and preservation of historic settings. The recommendations are excerpted in Appendix A.

6. Key issues in Reach 3

Coastal zone land use issues in Reach 3 center on Accabonac Harbor, on the flooding and erosion concerns along the barrier spits and bay shore areas of the reach, and on conflicts between future residential development and maintenance of surface water quality, open space and critical habitat.

In Accabonac Harbor, the primary issues are maintaining present water-dependent uses (see **Commercial Fishing Policy #10**, and **Public Access and Recreational Resources Policies #9, & 19-22**) and the natural resource base on which they depend by improving surface water quality (see **Water and Air Resources Policies #30-44**, Harbor Protection Overlay District, Open Marsh Water Management [OMWM], etc.), and by acquiring ecologically sensitive parcels to protect watersheds, open space and habitat.

On the barrier spits and along the bay shores where erosion control structures have diminished beaches and limited public access to the water for recreation, the issue of public interest in coastal resources vs. structural protection of private development must be further addressed (see **Flooding and Erosion Policies #11-17**). Elsewhere in the reach, land protection and resource conservation, through the measures outlined in the Town Open Space Plan, are crucial to environmental preservation and quality of life in the area.

REACH 4 NAPEAGUE NORTH

1. Description

The area between Devon and Hither Woods is predominantly low and sandy, following the easterly curve of Gardiner's Bay to Napeague Bay. The dominant coastal feature of this reach is Napeague Harbor. The coastal environment varies from the wave-dominated sections of Gardiner's and Napeague Bays, to low-energy tidal conditions in Napeague Harbor.

2. Land Use

Land use in Reach 4 is primarily sparse residential, except for the Devon Yacht Club and its associated marina; the Multi-Aquaculture facility on a private parcel adjacent to the old fish factory on Promised Land, acquired for by New York State Office of Parks, Recreation and Historic Preservation (NYS OPRHP); the "Art Barge", or D'Amico Institute of Art, a Museum of Modern Art summer art school on Napeague Harbor; and several restaurants, a retail store, and a tennis club situated along the north side of Montauk Highway.

A concentrated residential section at Lazy Point borders Napeague Bay and the west side of Napeague Harbor, including two small mobile home parks, one on Bay View Avenue, and numerous small cottages, many of which were originally makeshift summer camps on Town Trustee land along Shore Road. A second trailer park is part of another residential cluster along Crassen Boulevard.

Extensive preserved open space in Reach 4 includes the 1253 acre Napeague State Park and adjoining 1441 acre Hither Hills State Park, as well as some of the Town Trustee lands adjoining the harbor.

3. Zoning

Zoning in Reach 4 is low density Residential (A or A2) with a substantial amount of land in Parks and Conservation (PC) in Napeague State Park. There are a large number of pre-existing nonconforming lots in the reach, particularly in the Lazy Point area, including the trailer parks and the Town Trustee owned residential leases along Shore Road. The Multi-Aquaculture facility next to the old fish factory site is a non-conforming use in an A Residential District. Restaurants including the Clam Bar, Sharkey's [former Napeague Inn], Cyril's Fish House, a retail store, and the Napeague Tennis Club, all on the north side of Montauk Highway approaching Napeague Harbor Road are all non-conforming uses in A or A2 Residential Districts. As a membership club Devon Yacht Club is a specially permitted use in a residential district. There are no Waterfront (WF) Districts in the reach.

4. Analysis

Fragile ecology and high environmental and recreational values for the Napeague area dictate retaining maximum open space through a combination of zoning and development restrictions and private conservation. These recommendations are detailed in the Town's Open Space Plan for the parcels listed in Key Sites above, and should be incorporated into planning processes by all agencies of the town, county, state and federal governments.

Limited redevelopment of the waterfront portion of the old fish factory site for recreation, e.g. with a public fishing pier, accompanied by an educational program relating to the site's historic use and ecology, will transform this former industrial site into a useful recreational facility for both Town and State residents, and should be pursued. Possible reuse of some of the surviving buildings as a finfish hatchery should also be explored. The remainder of the site, because of its fragile ecology and prominent habitat values, should be maintained as undisturbed open space. See also **Public Access and Recreation Policies #9 and #19-22**, and **Projects**.

The old fish factory has been mentioned as a possible site for a car ferry terminal. However, such use would conflict with its park status, and would be particularly inappropriate for this location given its fragile ecology and inadequate road system. The recently completed *Transportation Element of the Town Comprehensive Plan* (L.K. McClean Assoc., 1997) recommended "that the Town adopt zoning regulations to prevent new ferry service from being established to the Montauk area [including Napeague]." The report specifically analyzed traffic concerns related to the Napeague site as follows:

"Cranberry Hole Road would provide the primary access to the site because of its southwestto-northeast orientation. There are concerns with the width of this roadway, as well as horizontal and vertical curves, particularly at the bridge over the Long Island Rail Road. The bridge itself has significant structural deficiencies, which will require correction by the Long Island Rail Road. This route experiences a significant amount of non-motorized travel (i.e. bicyclists and rollerbladers) during the summer season. Due to its current narrow width, lack of shoulders, and alignment deficiencies, significant increases in vehicular traffic would raise safety concerns for these modes of travel."

In response to these and other concerns the Town has amended its Zoning Code (§153-1-20, §153-5-26 and §153-5-50), SEQRA Law (§75-3-20), and Waterways and Boats Law (§149-8) to address potential traffic and environmental impacts associated with passenger ferry boats, and prohibited vehicle ferries in all districts (Local Law #40, 12/18/97). Excerpts from the local law and transportation study pertaining to ferries may be found in the discussion of Permitted Uses in Waterfront (WF) Districts in the Introduction, page II-4, and Appendix D.

Long term objectives for the Lazy Point area are to develop a hazard mitigation and redevelopment plan for hurricane and other storm events, and within that context to maintain and restore the seasonal fishing-camp character of the area, including the sensitive ecology and the simple style of existing camps and cottages. See **Flooding and Erosion Policies #11-17** for Reach 4, and the proposed Hurricane Damage Mitigation Plan in **Projects**. Most actions in the area now require Natural Resource Special Permits (see XV-7). Similar to Gerard Drive in Reach 3 and Sammy's Beach in Reach 2, flood hazards and problems with drinking water supply dictate limiting expansion of existing residences and accessory structures. Swimming pools should not be permitted. Extension of public water to Lazy Point may serve to increase development pressure, and should be carefully monitored from ecological and planning perspectives. The two trailer parks are inappropriate uses in flood zones, and as non-conforming uses should be phased out if substantially damaged or destroyed by storm flooding.

The protected anchorage at Lazy Point inside Napeague Harbor is actively used by local baymen for commercial fishing (see **Policy #10**), and its water-dependent uses should be continued and infrastructure, viz. the channel and launch ramp, maintained.

The Devon Yacht Club has been a long-time feature of the reach's coastal zone with relatively little impact and should be permitted to remain in it's present configuration. Any significant expansion however, would probably be undesirable, and should be examined with great care.

The Multi-Aquaculture facility near the old fish factory is a non-conforming use in a Residential A District, which does not allow it to be expanded or converted to other commercial uses, waterdependent or otherwise. However, the present wholesale fish use is an important distribution component of the local fishing industry, and should not be hindered. With respect to aquaculture/mariculture efforts on the site, see **Commercial Fishing Policies #10 and #10A**, **Aquaculture/ Mariculture**, which express the Town's environmental concerns and views that aquaculture/mariculture should benefit the overall public resource and be compatible with existing traditional fisheries. Note the possibility of developing a compatible finfish hatchery operation at the adjoining NYS OPRHP old fish factory site, which might link with the Multi-Aquaculture facility. If Multi-Aquaculture is for some reason unable to remain at its present site, which is being sub-divided for residential development, the state should consider allowing the use to be moved to the old fish factory site (see **Projects**).

5. Key sites in Reach 4

An extensive and largely pristine wetland system, the Cranberry Hole Marsh, at the intersection of Bendigo and Cranberry Hole Roads in the southwest corner of the reach deserves strenuous conservation efforts.

The old fish factory site acquired by New York State as part of Napeague State Park is a potential site for revitalization (see **Policy #1A** and **Projects**). The Valenti Multi-Aquaculture facility adjoining the old fish factory site is the base for the live-fish industry in the Town, which provides a high value market opportunity for local fisherman.

The Lazy Point area, originally a small colony of local fishing camps, most on Town Trustee leased land in a flood-prone area, has seen expansion of existing cottages into second homes. Land use is intensifying, and includes two non-conforming trailer parks. The Art Barge on the south shore of Napeague Harbor is also in a flood-prone location.

The Town's Open Space Plan identifies a number of parcels for specific changes in land use in the reach: SCTM #127-3-16,-17,-18,-19 & -20, are Napeague Bay shorefront lots in the Devon Colony, some with existing dwellings and containing freshwater wetlands, recommended for rezoning to Residential A3 District; SCTM #128-0-2, 129-0-0, 151-0-0 & 152-0-0 represent the Old Montauk Highway sand road from Cranberry Hole Road to Napeague Meadow Road, a Town Trustee-owned road recommended for retention as a trail corridor [with Trustee consent]; SCTM # 151-2-13.4, -14.1, 14.2, -18 & -19 are woodlands in the Devon Colony estate area, some with freshwater wetlands, recommended for rezoning to A3 with protection for slopes, woodland corridors and open space; SCTM #151-2-21 and 152-1-11.1, -11.2, -11.3, -12 & -13 are Napeague shorefront parcels totaling approximately 64 acres, most containing freshwater wetlands, recommended for rezoning to Residential A3 and protection of the wetlands through private conservation; SCTM #128-1-6 is a 10.7 acre parcel fronting on Napeague Bay with dune and freshwater wetlands recommended for an open space subdivision preserving the wetlands; SCTM #128-1-29.3 is a 1.3 acre parcel on Napeague Bay near the old fish factory, recommended for public acquisition as a means of providing needed public access to the shore in this area (see also Public Access and Recreation Policies #9 & 19-22); SCTM #110-1-5.1 & -5.2, 110-2-10, -12.10, -12.12, -12.16, -12.6, -12.7 & -12.9 are a group of parcels with freshwater wetlands adjoining the southeast part of Napeague Harbor, all recommended for public acquisition; and SCTM #129-2-11, #130-1-1.7 & #152-2-2.1, a LILCO right-of-way through Napeague, now that LILCO lines are being replaced underground, is recommended for private conservation through a donation from LILCO.

6. Key issues in Reach 4

Extensive wetlands and other environmental features around Cranberry Hole make it an area of significant concern for open space preservation and habitat conservation. Maintaining trail and woodland corridors throughout the Napeague area are important from both recreational and wildlife standpoints.

The old fish factory in Napeague State Park must be carefully analyzed to determine what redevelopment or revitalization is appropriate to the site. The site is surrounded by a fragile dune and wetland ecology. Any redevelopment plan must be consistent with preservation objectives for this area, and at the same time should provide increased waterfront recreational opportunities and limited public access to the water (see **Projects**). A proposed use of the site as a ferry terminal would be incompatible with environmental constraints and the capacity of the adjoining rural roads, and has been prohibited by the Town (Local Law #40, 12/18/97 and Zoning Use Tables).

At Lazy Point, land use issues revolve on vulnerability of residential development to storm flooding and erosion, again in a fragile landscape, much of which has already been given over to public parkland and open space. Much of this land is Town Trustee leasehold which, it has been suggested in the *HURRICANE DAMAGE MITIGATION PLAN for the South Shore of Nassau and Suffolk Counties* (LIRPB, 1984) should be reclaimed for public use if a catastrophic storm destroys a significant portion of the homes in question. However, currently the Town Trustees do not agree with the recommendations of said Mitigation Plan. Residences along Cranberry Hole Road are also at significant risk from storm flooding and erosion. See **Flooding and Erosion Policies #11-17**.

REACH 5 HITHER WOODS/FORT POND BAY

1. Description

Nearly all of the Hither Woods section of Reach 5 to Fort Pond Bay is preserved open space, with a naturally receding bluff line and elevations to 60' overlooking boulder strewn beaches. Hither Woods also encompasses the Town's Montauk Recycling Center, a former landfill, with an adjacent "antenna farm" used for radio and cellular telephone communications, and some residential development approaching the hamlet of Montauk.

From the morainal coastal bluffs of Hither Woods, the shoreline topography descend to near sealevel at Rocky Point, then rises once more in 60-80' bluffs before descending to the southerly shore of Fort Pond Bay, where a low marshy infill area divides the bay from Fort Pond. Two of the highest points in Montauk, "Montauk Mountain" to the west and Fort Hill to the east, border Fort Pond Bay and overlook Fort Pond. Approaching Culloden Point the shoreline terrain again rises gradually to a line of 30-50' bluffs along the Culloden shore.

Fort Pond Bay is the deepest (47') harbor of the Town, the original site for the Montauk fishing village prior to the 1938 hurricane, and was used by the military as a torpedo testing facility during World War II. Present development in the reach centers on this southeast shore of Fort Pond Bay and around Fort Pond.

2. Land Use

The western portion of the reach known as Hither Woods includes a large tract of publicly owned open space, the southerly portion of which was purchased by Suffolk County for drinking water recharge and open space as the so-called "Lee Koppelman Preserve", otherwise known as the Montauk County Preserve. Hither Woods has an extensive trail network which is used recreationally, and is a prospective site for a Suffolk County Water Authority well field for Montauk.

The easterly portion of Hither Woods is the site of a former Town landfill, now closed and being used as a recycling facility and transfer station, and also encompasses a communications antenna farm.

Along the Fort Pond Bay shore a former sand mining site is proposed as a residential subdivision. Also along Fort Pond Bay are a condominium on the site of U.S. World War II installations and the former NY Ocean Science Laboratory, Town affordable apartments, the Town Shellfish Hatchery, a motel, the LIRR Montauk Station, the Duryea fish packing operation on Tuthill Road, and a variety of small businesses and a residential enclave that occupy the former site of the Montauk fishing village. The condominium complex, Rough Riders Landing, is of recent construction and is floodproofed to NFIP standards.

Along the eastern shore of Fort Pond Bay extending to the Culloden tract are residential areas interspersed with several guest houses and the Hotel Montauket, a popular bar and restaurant. Several stairways pass over the bluff to the rocky boulder-strewn beach below. A residential subdivision plan recently approved for the 272.2 acre Culloden property, the largest remaining private parcel in the reach, will protect wetlands and other environmental and archaeological resources, and incorporates open space purchases by the Town in conjunction with other levels of government.

Fort Pond itself is bordered by residential and commercial resort construction including single-family homes, restaurants, motels, a day camp, small movie theater, etc. There are a number of residential docks as well as two commercial docks at the south end, including a sailboat rental business. Town and State parkland rims much of the immediate shore of the south end of the pond. At the north end of Fort Pond on Industrial Road there are a number of commercial sites, a Town Highway equipment barn, and a LIPA emergency generating station. The upland area west of Fort Pond and overlooking Fort Pond Bay has considerable residential development and also incorporates the Montauk School.

3. Zoning

Reach 5 encompasses a wide variety of zoning districts, generally following existing development patterns. Residential Districts range from high density B zones on the west side of Fort Pond to low density Residential A, A2, and A3 along the Fort Pond Bay shore and in the future development at Culloden. Most of Hither Woods is in Parks and Conservation (PC), except for the Town Recycling Center and antenna farm, a Commercial-Industrial (CI) District. Two other CI Districts at the north end of Fort Pond cover an area south of the LIRR tracks along Navy and Industrial Roads.

The Rough Riders condominium is in a Resort Business (RS) District, as is the Hotel Montauket along Fort Pond Bay. A seafood packing business constitutes the sole Waterfront (WF) District in the reach, located on the shore of Fort Pond Bay backed by Tuthill Pond, an area prone to overwash and flooding in hurricanes and nor'easters. At the south end of Fort Pond a small section of the reach is within the Central Business (CB) District for the hamlet of Montauk.

4. Analysis

Reach 5 is fortunate in having opportunities to revitalize an existing site and to preserve connected tracts of remaining open space. The recycling center and transfer site at the former Montauk Landfill in Hither Woods should be reclaimed and landscaped as a municipal park since it is one of the highest points in the Montauk area and enjoys excellent views to Block Island Sound, while bordering on the Hither Woods Preserve. The site offers a variety of opportunities for passive and active recreation, to be explored and implemented in a new Town park (see **Projects**). An adjacent 95.5 acre parcel (SCTM #48-3-8.7) would continue the Hither Woods parkland system and substantially complement a municipal park. It should be rezoned to A5 Residential and Water Recharge Overlay District and considered for public acquisition as recommended in the Town Open Space Plan.

Additional recommendations of the Open Space Plan for parcels within the reach should be consulted by all involved agencies, and are an important means of maintaining quality of life. As noted above a table of recommendations for all of Montauk (Reaches 5-9) is included in Appendix B.

Ferry terminal and retail proposals for the sole Waterfront (WF) District site on Fort Pond Bay illustrate the complexity of maintaining water-dependent uses. A change in use would replace a long held commercial fishing, a Permitted Use priority in the only Waterfront (WF) District in the reach. Special Permit Waterfront (WF) District Uses such as "multi business complex", "restaurant", or "retail store" could replace a higher priority "fish market" Permitted Use. Although use of the pier for unloading local lobster or fishing boats has declined, if possible the commercial Waterfront (WF) District Permitted Use should be retained for the future because of the shortage of such facilities. Attendant traffic, parking, and non-point pollution from other uses would substantially increase risks to water quality in neighboring Tuthill Pond and Fort Pond Bay. These impacts could affect the operation of the nearby Town Shellfish Hatchery, and would be contrary to LWRP goals in Water and Air Resources Policies #30-44, Commercial Fishing Policy #10 and Public Access & Recreational Resource Policies #9 and #19-22.

5. Key sites in Reach 5

The former Town landfill at the border of Hither Woods has the potential to be reclaimed as a parkland site for active recreation uses, beyond its current use as a recycling and transfer center (see **Projects**). An adjoining large undeveloped parcel (SCTM #48-3-8.7, 95.5 acres) presently zoned A3 residential should be considered for public acquisition as an extension of the Hither Woods tract.

The proposed Benson Point subdivision at the former sand mine on the west shore of Fort Pond Bay (SCTM #26-1-1.1) is a 22.4 acre site recommended by the Town's Open Space Plan for an open space subdivision.

On the eastern shore of Fort Pond Bay there is concern that the sole Waterfront (WF) District retain its historic use for commercial fish-packing/shipping, which is a policy priority for the Town (see **Commercial Fishing Policy #10**), particularly as this is the last remaining commercial fishing business on Fort Pond Bay. The site was proposed as a car ferry terminal by Cross-Sound Ferry for crossing Long Island Sound, which would have displaced the current water-dependent use and conflicted with the Town's Comprehensive Plan. A subsequent local law (#40, dated December 18, 1997) prohibits vehicle ferry terminals in Waterfront (WF) District.

The Town Shellfish Hatchery, also located on this shore, is an important water-dependent use which relies on the high quality surface waters of Fort Pond Bay. The hatchery furnishes shellfish seed stock for all of the Town's enclosed harbors, as well as for New York State waters (see **Commercial Fishing Policy #10**). Anything that negatively affects surface water quality in Fort Pond Bay will have an adverse impact on the hatchery's operations.

There are three piers on Fort Pond Bay, one at Duryea's fish-packing site, a second at the former Ocean Science Laboratory (now Rough Riders Condominium), and a third at the Navy Road site of the prospective Benson Point development. All of these facilities offer recreational potential for fishing or boating. However, as they are all privately owned, the prospects for improved public access are limited.

The Town's Open Space Plan offers additional recommendations for specific parcels within the reach. Recommendations for Reaches 5-9 are consolidated in a single table for all of Montauk (Appendix B), which should be consulted by any agency contemplating an action on the Montauk peninsula.

6. Key issues for Reach 5

Land use issues in Reach 5 include continuation of the existing water-dependent uses in the sole Waterfront (WF) District and at the Town Shellfish Hatchery, as well as maintenance of the excellent surface water quality in Fort Pond Bay.

A second concern in Reach 5 is to maintain and extend the significant open space, critical habitat, historic resources, and drinking water recharge areas in the developable land adjacent to Hither Woods, in the proposed Culloden subdivision, and elsewhere in the reach. See recommendations for specific parcels in the Town Open Space Plan, Appendix B.

Additional public access to Fort Pond Bay for recreational purposes is a priority (see also policies for Significant Habitats Policy #7, Public Access & Recreational Resources Policies #9 & 19-22, and Historic Resources Policy #23).

REACH 6 MONTAUK NORTH SIDE - CULLODEN POINT TO SHAGWONG

1. Description

Lake Montauk, formerly a large coastal pond known to the colonials as Great Pond, and to the native Montauks as Lake Wyandanee, is the dominant feature of the reach and the Town's largest harbor, covering 1037 acres. It was fresh or brackish until Arthur Benson's purchase of much of Montauk in 1879, then was privately dredged open. It was transformed into a small harbor area in 1926 when Carl Fisher's Montauk Beach Development Company received permits from the Army Corps of Engineers to construct the present inlet to the Lake, which was stabilized with two stone jetties to

form a 500' wide inlet, and later became a Federal channel. Dredge spoil from the inlet was used to raise and enlarge Star Island and connect it to the mainland with a causeway.

From the late 1920's to the 1930's, Montauk Harbor was reserved for the exclusive use of recreational craft and sport fishermen. Until the late 1930's commercial fishing vessels in Montauk were moored five miles away in the unsheltered waters of Fort Pond Bay. As a result of repeated damage from winter storms and hurricanes, culminating in the devastation of the 1938 hurricane, the Town permitted commercial boats to dock in Coonsfoot Cove.

Montauk Harbor is the Town's busiest, and continues to be used as a home port by recreational craft, sport and commercial fishermen. It has the highest dockside values of commercial landings of any fishing port in New York State, exceeding Boston (Sea Grant, and East End Economic and Environmental Task Force). The harbor has also become a popular tourist attraction, with restaurants, accommodations, and other development growing up around the fishing and boating industries, much of it tourist oriented. Fishing and tourism have made the harbor a primary node of Montauk's economic activity along with the downtown business area.

Reach 6 also includes extensive open space and important recreational resources (see **Public Access** and **Recreational Resources Policies #9, & 19-22**).

2. Land use

Northern Lake Montauk, especially in the Coonsfoot Cove and East Lake Drive area, has the highest concentration of water-dependent businesses, recreational and commercial marinas, fish-packing, etc., as well as water-enhanced enterprises such as waterfront restaurants, in the Town. It is the home port for the Town's offshore commercial fishing fleet. On the northwest side of the Lake there is a concentration of residences and resort motels extending to the west along Sound View Drive. South of Star Island the west side of Lake Montauk is primarily a single-family residential area with some condominium development (Stepping Stones) and two restaurants.

A similar land use pattern is present along East Lake Drive in a less intensive fashion, with marina and commercial fishing businesses toward the harbor mouth, and residential development bordering the Lake to the south. Commercial waterfront uses along East Lake are hampered by limited infrastructure, including availability of potable water and the narrow winding roadway of East Lake Drive. As a result development is sparse compared to the west side, and there is also considerable preserved open space, with approximately 900 acres in Montauk County Park. A single non-conforming recreational marina, Montauk Lake Club/Captains Marina in a Regimental A District, is located south of Star Island along East Lake Drive on the southeastern shore. Montauk Airport, a privately owned airstrip with minimal facilities located at the northeast side of Lake Montauk, is also a non-conforming use, in a Residential A2 District.

To the west of the inlet, on Block Island Sound along Sound View Drive and Captain Kidd's Path, erosion problems in front of the motels and waterfront residential lots have resulted from insufficient setbacks, aggravated by the effects of shore-hardening structures and the massive inlet jetties which

interrupt sediment transport, with resultant scouring to their west (see **Flooding & Erosion Policies** #11-17).

Reach 6 enjoys a spectrum of land uses and activity, ranging from the 1920's grandeur of the old Montauk Manor hotel looming over Flamingo Avenue, to small residential lots and large tracts of open space in the Montauk County Park. It includes a world class golf course designed by Robert Trent Jones at Montauk Downs State Park, and contains some of the Town's most significant archaeological resources as one of the last habitations of the Montauk tribe and one of the last areas of the Town to be developed.

3. Zoning

Residential zoning in Reach 6 covers a wide range of densities, with a number of high density B zones on the west side of Lake Montauk in old file map subdivisions, and lower density A and A2 residential primarily on the east side of the Lake. An undeveloped parcel on the west side of the Lake includes a large contiguous open space area east of the Culloden tract (SCTM #12-2-2.19, 97.7 acres), partially in A2 and partially in A3 Residential district.

Reach 6 contains six Waterfront (WF) Districts clustered at the north end of Lake Montauk around Coonsfoot Cove and the north end of East Lake Drive. In addition there are ten commercial Resort (RS) Districts at the north end of the Lake, and two Central Business (CB) Districts around the primary tourist areas of the harbor and in the southwest corner of the reach which encompasses part of the downtown Montauk business area. Where water-dependent and water-enhanced uses remain as pre-existing mixed uses in Resort (RS) Districts in Lake Montauk as a result of changes in the zoning code, the Town may wish to further study the planning implications of these uses. Some parcels may require rezoning to adequately define their current use and to protect existing water-dependent uses as a planning priority.

The Waterfront (WF) and Resort (RS) Districts in Reach 6 include the following parcels and uses:

SCTM#	Use and Location
#06-3-6,7	Duryea's (Montauk Fish Dock & Tuma's Dock), NW side of Coonsfoot Cove (WF)
#06-1-8,28,29,30	Gosman's Dock [and Restaurant], NW side of Coonsfoot Cove (WF)
#06-3-8	Johnny Marlin's Restaurant (WF)
#06-3-9	Salivar's Dock, northwest side of Coonsfoot Cove (WF)
#06-3-10,11,12	Viking Dock, northwest side of Coonsfoot Cove (WF)
#06-3-13,14	Harrington/Merkin, northwest side of Coonsfoot Cove (WF)

#06-3-15,16	Uihlein's Rentals, northest side of Coonsfoot Cove (WF)
#06-3-20.2	Montauk Marine Basin, west side of Coonsfoot Cove (WF)
#06-3-22,24	Montauk Sportsman Dock, west side of Coonsfoot Cove (WF)
#06-3-26	Offshore Sports, west side of Coonsfoot Cove (WF)
#06-3-28	The Landings, west side of Coonsfoot Cove (RS)
#12-1-1,2	Land's End, west side of Coonsfoot Cove (RS)
#12-1-3	West Lake Marina, southwest side of Coonsfoot Cove (RS)
#12-1-4	Captain's Cove, southwest side of Coonsfoot Cove (WF)
#12-1-5	West Lake Fishing Lodge, southwest side of Coonsfoot Cove (RS)
#12-1-8.3	Snug Harbor Marina, south end of Coonsfoot Cove (RS)
#06-4-9,16.1,17	Montauk Resort and Marina (Star Island Plantation, Montauk Yacht Club, Deep Sea Club), east side of Star Island (RS)
#06-4-1	Town of East Hampton Commercial Dock, N end of Star Island (WF)
#06-4-2	U.S. Coast Guard Station, north end of Star Island (WF)
#06-4-3,6	Star Island Yacht Club, west side of Star Island (WF)
#06-2-2,3	Inlet Seafood, north end of East Lake Drive (WF)
#06-2-5,6	Deep Water Seafood, north end of East Lake Drive (WF)
#06-2-15.1	Gone Fishing Marina, East Lake Drive (WF)
#13-3-26	Montauk Lake Club, East Lake Drive (non-conforming use in A- zone)

Two vacant sites on Coonsfoot Cove are presently zoned RS, SCTM #6-3-31.1 and #12-1-8.1, 3.7 and 4.8 acres respectively. See Analysis and Key Sites.

Reach 6 also retains large tracts of open space in Parks and Conservation (PC) Districts, including the Montauk Downs State Park (160 acres) and Montauk County Park (approximately 900 acres).

4. Analysis

As the Town's most active harbor and a primary tourist attraction, planning efforts at Lake Montauk should focus on improving and enhancing facilities and maintaining priority water-dependent uses. While the needs of the area are being addressed by private sector business initiatives, the Town can work with the business and commercial fishing community to improve infrastructure such as parking and lighting in the West Lake loop area, help to make the area more pedestrian-friendly, to improve visual attractiveness and enhance water quality. The Town may also be able to assist with planning support and help in obtaining grants, and investigate other ways to assist businesses in upgrading properties. A planning study in cooperation with the business community should examine possible improvements, look at existing regulations and zoning boundaries, identify essential fishery support facilities, and ascertain whether current standards for Waterfront (WF) Districts adequately reflect the Town's planning priorities and the needs of the fishing and tourist industries, and develop an overall *Harbor Management Plan* (see also *Revitalization of Montauk Harbor* in **Projects**).

In recent years there has been an increasing tendency for traditional water-dependent uses such as commercial fishing support facilities to be displaced by higher value uses such as retail shops and other tourist oriented businesses. Since commercial fishing is dependent on fluctuations in wild fish populations and vagaries of market pricing, there are years when the fishing business and related shoreside support enterprises are economically attractive and years when they are decidedly less so. In the down years pressure mounts to make more profitable use of valuable waterfront real estate.

Commercial fishing is an important input to the Town economy both directly and indirectly, in maintaining the character of a working waterfront that attracts tourists. The Town is committed to retaining necessary infrastructure to insure continuity of its traditional fisheries, as a priority use in its Waterfront (WF) Districts. The primary method used by the Town to preserve water-dependent uses in Waterfront (WF) Districts are the Permitted and Special Permit uses in Waterfront (WF) Districts, in § 153-5-45D of the Town Code (see Policy #2, Water-Dependent Uses). To encourage the commercial fishing industry some incentives may help to retain necessary infrastructure on Montauk Harbor's working waterfront. Possibilities to consider include permitting additional combinations of Special Permit water-enhanced uses in Waterfront (WF) Districts, provided they complement and supplement existing water-dependent fishing uses, or providing tax incentives or grant assistance for improving fishery support facilities.

Fish packing facilities at the north end of East Lake Drive, the Town commercial docks at West Lake and Star Island, and facilities in Coonsfoot Cove are the support core for commercial fishing, and future shoreside infrastructure should continue to be provided in these areas to maintain the health of the industry. As part of the planning study suggested above, the Town should work with local businessmen, landowners and fishermen in developing plans to make sure the upland areas for fishing support facilities remain available. See also **Commercial Fishing Policy #10** and *Fisheries Shoreside Support Infrastructure* in **Projects**.

Recent changes in Zoning Code **§153-1-20**, **§153-5-26**, **§153-5-50** and local SEQRA law **§75-3-20** tighten current regulations pertaining to ferries in Waterfront (WF) Districts. Expansion of existing Special Permit uses such as the present passenger ferry operation could have detrimental

consequences for the waterfront, as well as traffic and environmental implications for the Town. Concerns are cited in Findings for the Town Code amendments discussed in the Introduction and in Reach 5. In addition the recent Transportation Element of the Town Comprehensive Plan (THE, 1997) noted the following site-specific traffic concerns for the Lake Montauk area:

West Lake Drive (CR77) is expected to accommodate the bulk of the traffic destined for this site. The concerns identified for the Fort Pond Bay site are applicable to Lake Montauk as well, because Edgemere Street/Flamingo Avenue (CR 49) also provides access to this site.

An access route to the site via West Lake Drive would pass through the following high accident locations in the Montauk area:

- Route 27/Old Montauk Highway/Second House Road
- CR 49 (Flamingo Avenue)/CR 77 (West Lake Drive)
- Route 27 at CR 77

Introduction of larger ferry vessels into the tightly constrained area of Coonsfoot Cove could also cause boat traffic congestion, as well as altering the dominant fishing industry character of the waterfront to a ferry terminal use. Experience with other ferry ports such as New London and Port Jefferson give some indication of the chain reaction of economic and use alterations that could be expected. As recommended in the Transportation Element, the Town should plan for maximum requirements of existing or future permitted and special-permit uses, and insure that no further expansion of ferry or excursion-boat use occurs without comprehensive review.

Two vacant parcels on either side of the south end of Coonsfoot Cove (SCTM #12-1-8.1 and #6-3-31.1, of 4.8 and 3.7 acres respectively) preserve a sample of the saltmarsh and native forest originally bordering Lake Montauk, and form a visual and natural relief to the otherwise intensively developed shoreline. They are an historical reminder of how the area once appeared, and bear some habitat value, particularly in relation to the south end of the Lake, a designated State Significant Coastal Fish and Wildlife Habitat. The parcels should be maintained in open space to the maximum extent possible, and development potential should be limited by upzoning to one-acre residential [A-zone].

Surface water quality remains a high priority for the Town in Lake Montauk, as it represents both an important commercial and recreational resource, and there is a direct relationship between the Lake's biological productivity, its water quality and its ability to sustain such uses. Requirements for pollution abatement and surface water improvement for lands adjacent to inner harbors have been implemented by the Town in the form of a *Harbor Protection Overlay District*, Appendix C. The Town is also undertaking a pollution abatement project for the south end of Lake Montauk, and stormwater abatement for the remaining perimeter of the Lake, as well as producing *Harbor Management Plans* and undertaking a *Road-end and Beach Access Modification* program (see **Projects**). See also **Water and Air Resources Policies #30-44**.

Documented finds of archaeological resources from Archaic and Woodland aboriginal periods, as well as pre- and post-colonial periods of Montauk tribal occupation, have made Reach 6 one of the most sensitive archaeological areas in the Town. Preservation of these resources is a high priority,

since once disturbed the "layer cake" of antiquity is difficult if not impossible to reconstruct. Structures from more recent recorded history, such as the Montauk Manor hotel and Star Island Coast Guard Station (although it was moved to the present site), retain architectural integrity from Montauk's 1920's heyday under Carl Fisher, when it was touted to become "the Miami Beach of the north" and should also be preserved. See **Historic Resources Policy #23** and accompanying Inventory and Analysis.

5. Key sites in Reach 6

The Montauk Harbor complex incorporating Coonsfoot Cove, Star Island, and the north end of East Lake Drive, is the most intensively used waterfront area in the Town in terms of water-dependent and water-enhanced uses. A number of facilities in the area provide critical shoreside infrastructure for the Town's commercial fishing fleet (see **Commercial Fishing Policy #10**), and future commercial fishing needs will logically be best met here (see **Projects**). There are also a large number of recreational fishing and boating marinas and related businesses in the area, along with water-enhanced uses such as restaurants, lodging and fish markets, which make it a focal area for tourism in Montauk.

The existing uses and zoning status of the Viking dock (SCTM's #06-3-10, -11, & -12) need clarification. Viking has for some years run party fishing boats, and an assortment of passenger ferries. As with all ferry uses, the Town is concerned with the traffic implications, the environmental impacts and the impacts to the recreational and commercial fishing community. The Viking fleet also runs excursions, including whale-watch trips, and in 1997 the firm began conducting gambling cruises. Viking is reportedly constructing a new and larger vessel which may substantially increase the magnitude of its use. Existing infrastructure should be examined to make sure it is adequate to handle any proposed expansion, and no additional ferry use, especially a high-speed ferry, should be introduced on the site without a comprehensive review of additional uses by the Town. The Town recently revised its Zoning Code (**§153-1-20**, **§153-5-26** and **§153-5-50**), SEQRA Law (**§75-3-20**), and Waterways and Boats (**§149-8**) to address potential traffic and environmental impacts associated with passenger ferry boats. See also the discussion of potential ferry impacts and new legislation in Introduction and Reach 5.

On Star Island a 4.8 acre vacant parcel (SCTM #12-1-8.1) in a Resort (RS) District opposite the Montauk Yacht Club was subject to litigation regarding its development. The court settlement limits potential development to 8 units, which should condition any future development efforts. The Town may wish to further limit development by rezoning the parcel to Residential A District, as the site contains extensive wetlands and a significant stand of white and red oak.

A second vacant parcel (SCTM #6-3-31.1) just across Coonsfoot Cove and adjoining the Town launch ramp on West Lake Drive covers 3.7 acres of mostly saltmarsh, and should be kept open to maintain remaining wetlands in Coonsfoot Cove. Together these parcels are representative remnants of the aboriginal vegetative communities of saltmarsh and forest bordering Lake Montauk, and form a visual and natural relief to the otherwise intensively developed shorelines on either side of Coonsfoot Cove. They should be maintained as open space if at all possible, or development limited through other measures, e.g. rezoning to Residential A District.

South of Star Island use of the lake shore is primarily residential and use of the lake itself is almost entirely recreational except for commercial shellfishing, particularly scalloping in season.

The Town Open Space Plan contains a number of parcel specific recommendations for lands in Reach 6, including the Montauk Airport (SCTM #7-1-2.2 & 2.3, 37.6 acres, rezone to A3), numerous parcels of underwater lands in Lake Montauk, the large undeveloped tract south of Culloden (SCTM #12-2-2.19 & #12-3-3, 113 acres total, recommended for open space subdivision and rezoning to A3), and a number of moorlands and downs habitats around the Lake recommended for public acquisition. See Appendix B for a complete list of recommendations for Reaches 5-9.

6. Key issues for Reach 6

As might be expected in the most active of the Town's harbors, harbor management issues in Lake Montauk are at the fore, and are addressed in a number of LWRP policies, projects and initiatives. Water quality issues such as non-point pollution from upland sources are dealt with in the Town's *Harbor Protection Overlay District, or HPOD* (Appendix C), and *Stormwater Abatement* and *Water Quality Monitoring* projects. Boat waste is being addressed in a proposed *No-Discharge Zone*, as well as a *Boater Education* project to promote best management practices (BMP's). The Coonsfoot Cove area will benefit from LWRP projects designed to ensure stability of water-dependent uses and prevent their displacement, and to enhance and improve the appearance of the area and its accessability for tourists. See *Fisheries Shoreside Support Infrastructure* and *Revitalization of Montauk Harbor* is also a **Project**. As part of this project a comprehensive study should be conducted of Lake Montauk's water quality, the relative extent of various nutrients, and sources of potential pollution inputs.

At the north end of Lake Montauk, maintaining priority water-dependent uses, such as commercial fishing, against encroachment or displacement by water-enhanced or non-water-dependent uses is a key issue. As noted, regulations pertaining to ferry uses have been redefined under Town Code. Further refinement of Permitted Uses in the Town Code and other methods for preserving water-dependent uses should continue to be developed.

Continued use of the south end of the lake for commercial fishing and shellfish harvest, and recreational uses is contingent on improving surface water quality. Lake Montauk is the receiving body of water for the north end harbor activity, drainage from Montauk Downs State Park golf course to the west, and residential development, especially the Oceanside subdivision to the south.

Reach 6 is rich in historic and prehistoric resources, and although an important part of the Town's heritage, their preservation often conflicts with new development. New methods for protecting these resources are needed. See **Historic Resources Policy #23** and associated **Projects**.

REACH 7 OYSTER POND/ NORTH MONTAUK POINT

1. Description

Montauk Point and Oyster Pond are the principal features in Reach 7. Montauk Lighthouse is a primary landmark, a scenic and historic site for the Town and the State, and its preservation a priority. All land in this reach is government owned, and the only structures and facilities present are those relating either to Montauk Lighthouse or Montauk State Park.

The Montauk Lighthouse was commissioned by George Washington in 1796 on the Montauk Point headland with a projected 200-year lifetime. It was originally set back some 300' from the ocean but now is protected from the forces of wave action only by rock revetments. Geologically Montauk Point is the most prominent eroding headland on the South Fork, and its sediments have fed beaches to the west since the retreat of the glaciers.

Oyster Pond, a mile east of Montauk Harbor, was known for its abundance of oysters and historic use by the native Montauk tribe.

2. Land use

Land use in Reach 7 is either preserved open space or supports the historic structures and related park facilities of the Montauk Lighthouse. All of the land is government owned.

3. Zoning

All land in Reach 7 is government-owned and designated as a Parks and Conservation (PC) District.

4. Analysis

Operation of the Montauk Lighthouse was recently transferred to the Montauk Historical Society. A major enhancement and expansion of the rock revetment designed to protect the lighthouse and Montauk Point has been underway for about two years and is nearing completion. If this protection should prove ineffective against storm erosion further preservation options would have to be contemplated, such as moving the lighthouse back.

5. Key site in Reach 7

The Montauk Lighthouse complex is the only structure of significance in the reach. Aboriginal presence and historic use patterns suggest that much of the reach should be treated as a sensitive archaeological site. The historic significance of the Montauk Lighthouse is evinced by its listing in the National Register of Historic Places (see **Historic Resources Policy #23**).

6. Key issue for Reach 7

Preservation of the lighthouse and its environs and preventing erosion at the site are the key issues for the reach, also considered in **Flooding and Erosion Policies #11-17**, and **Historic Resources Policy #23**.

REACH 8 MONTAUK BLUFFS

1. Description

Reach 8 includes a large percentage of public parkland in Montauk State Park and Camp Hero, a former U.S. military base now owned by NYS OPRHP. The reach contains significant wetlands systems and moorlands habitat, some of which remains in private ownership.

Dramatic clay bluffs known as "hoodoos" line much of the Reach 8 shoreline, a scenic and natural phenomenon unparalleled elsewhere on the east coast. Along some of the bluff tops, perched freshwater ponds and wetlands support unique communities of rare and endangered plants.

From Montauk Point to the western edge of the reach the moraine terminates at the shoreline in wave-cut bluffs 30'-80' high bordered by narrow boulder strewn beaches. The rocky shore west of the point was the site of numerous shipwrecks in the nineteenth century, and the Montauk Lighthouse still serves to keep boats clear of its hazards.

2. Land use

Land use in Reach 8 consists largely of undeveloped parkland with isolated residences dispersed in the moorlands along the ocean bluffs. The parkland area was recently expanded by State purchase of the Sanctuary (SCTM #15-1-14), a 339.8 acre parcel that includes moorlands, extensive freshwater wetlands, a State designated Significant Coastal Fish and Wildlife Habitat, and the watershed for Oyster Pond. It adjoins the protected open space of Camp Hero.

Other Reach 8 land use includes a Town affordable housing project of converted base housing in Camp Hero, and the Montauk Shores condominium trailer park on the ocean at the west end of the reach. A few of the prestigious resort homes, notably Stone House, are hazardously close to the retreating bluff edge.

3. Zoning

A large portion of Reach 8 consists of State parkland in Parks and Conservation (PC) District, with an inholding in the former Camp Hero airbase that contains Town affordable housing units, zoned Residential B. Because of environmental and other considerations much of the remainder of the reach is in the Town's lowest density Residential A5 District. The trailer park condominium at Montauk Shores is in Resort (RS) District, following its earlier land use. A change to Residential B District is recommended consistent with its present residential condominium structure.

4. Analysis

The Camp Hero site offers redevelopment potential for low-impact recreation, public access to the water, and creative use of its historic resources, but it is limited by environmental constraints.

There are numerous remaining structures, some of which may be reusable as a military or natural history museum complex or theme park, a natural outgrowth of Camp Hero's military heritage from the Spanish American War to the post-World War II period. The facilities from World War II and

the post-war period are in various stages of disrepair and will require renovation or, in some cases, demolition and cleanup.

This section of the Town's shoreline has few approaches and is in demand from recreational fishermen and surfers. The Camp Hero site has the capacity to increase access to the water, which would be welcomed. However, wetlands and habitat values may again be limiting factors (see **Public Access and Recreational Resources Policies #9 and #19-22, and Projects**). Given the fragile ecology, extensive wetlands, rare plants, and other high habitat values of the parcel, only passive or low intensity recreational uses such as hiking, surfcasting, nature trails, birdwatching, photography, or education, etc. are appropriate.

NYS OPRHP is conducting a feasibility study for use of Camp Hero. A public golf course on the site, one of the potential uses proposed by NYS OPRHP, would impair the delicate ecology and habitat and is unworkable given the known constraints of the parcel and chronic water supply problems in Montauk. The golf course use is inconsistent with LWRP policies, and was recently ruled out as an option in an announcement by NYS State Parks Commissioner Bernadette Castro. The military museum concept should be explored as a means of utilizing the remaining buildings and as a way to document Camp Hero's significant military history. Potentially toxic residual materials need to be surveyed and removed before redevelopment can occur. Given the large radar tower and other structures on the site, leasing some structures for communication antennas could be considered in the already developed portion of the property. Likewise, using a disturbed section of the site for wind generation of electricity is another potentially compatible use, given the high wind speeds recorded in Montauk.

Following the feasibility study, a Camp Hero management plan should be developed by NYS OPRHP with consultation and approval by the Town. The primary goals of the management plan should be to preserve ecological/habitat values, and to provide public access and enhance public recreational opportunities without impacting the natural resources. Strenuous efforts were exerted by many levels of government and individuals to preserve Camp Hero's natural resources, and this was the principal reason for its conveyance to the State by the Federal government. The transfer agreement for the parcel from the U.S. Government to New York State specifies that no more than 15% of the site be developed. The original conservation goals expressed at the time of acquisition by the State remain valid, and the Town advocates a management plan consistent with those aims.

The management plan should address the existing habitat, hydrological and historic resource concerns, while encouraging appropriate public access and recreation use. Possibilities for restoration, reuse or demolition and clean-up of the abandoned military structures for recreational, educational or other purposes should be evaluated, along with their historic value, and criteria developed for environmental protection of the site's abundant natural resource base (see **Projects**).

As noted the Montauk Shores trailer park condominium is extremely vulnerable to flooding and erosion in the event of a hurricane with attendant storm surge (see also **Flooding and Erosion Policies #11-17**). This vulnerability and possible strategies for protection and post-storm

redevelopment should be examined in the Hurricane Damage Mitigation Plan (see **Projects**). Zoning should be changed from Resort (RS) to Residential B District consistent with present use.

The undeveloped parcels that remain in private ownership in Reach 8 should be considered for acquisition or private conservation to complement the existing preserved open space and State and Local Significant Coastal Fish and Wildlife Habitats. They would constitute meaningful additions to scenic and recreational resources that contribute to the resort economy of the Town. As suggested in the Town Open Space Plan a variety of measures may be considered to conserve maximum open space with limited public funds, including acquisition, private conservation with attendant tax incentives, and open space subdivision. See Appendix B. See also **Significant Habitats Policy #7** and **Public Access and Recreation Policies #9 & 19-22**.

The Historic District for the National Register listed Montauk Association homes east of Ditch Plains is an important example of the early resort character of the Town, and represents the work of an outstanding architect of the time. The moorlands ecology surrounding the Association is an intact component of the larger Montauk Point community. The Town should develop specific local legislation with standards for preservation of these historic buildings and their surroundings. See **Historic Resources Policy #23** for additional information regarding the Historic District.

5. Key sites in Reach 8

Camp Hero has potential for redevelopment for low-impact recreation use, as a military history museum or theme park, and for subsidiary use as an antenna farm or for wind generated electricity. The site offers public access to one of the Town's least developed and most interesting sections of shoreline, an area of special recreational interest to fishermen and surfers. Only uses that protect the site's fragile wetlands, plant communities and historic resources are appropriate. It should be noted that the agreement between OPRHP and the Federal government conveying the property to New York State allows for amendment by written agreement of both parties, consistent with the purposes for which the property was transferred.

The Montauk Shores trailer park condominium remains a concern for flooding and erosion, particularly in hurricanes and winter storms.

The historic Stanford White homes of the Montauk Association at the west end of the reach (SCTM #32-6-1.1, -10, & -11, 123.3 acres total) form a National Register Historic District. The buildings and their historical context should be preserved, insofar as possible, with the original moorlands landscape. See **Historic Resources Policy #23**.

Because of the large areas of preserved parkland and high habitat values in the reach, remaining parcels of contiguous open space (primarily SCTM #21-2-24.15, 122.8 acres, and #22-1-7, 40.2 acres) should be considered for public acquisition and/or a combination of private conservation and open space subdivision. See the Town Open Space Plan recommendations for Montauk in Appendix B for details.

6. Key issues in Reach 8

Revitalization or redevelopment of Camp Hero is a prominent land use issue in Reach 8, along with protection of its extensive habitat and fragile ecological values.

Other priority concerns are redevelopment of the Montauk Shores condominium in the wake of a catastrophic storm, conservation of the remaining large undeveloped parcels, and preservation of the Montauk Association historic district with attendant moorlands.

REACH 9 HAMLET OF MONTAUK/HITHER HILLS

1. Description

The Montauk hamlet is the Town's second largest commercial center after East Hampton Village. The area including the Montauk business area, Ditch Plains, and Old Montauk Highway to the west in Reach 9 encompasses the highest concentration of motels and other facilities for transient guests in the Town.

Terrain in Reach 9 varies from morainal knob and kettle and outwash formations in the eastern and western extremities, to a sandy floodplain deposited by littoral drift in the Montauk hamlet area. At the eastern extremity of the reach, the Ditch Plains subdivision was erected in a low wetland area that was ditched and drained in the 1950's for housing development. The Ditch Plains beach is a popular Town bathing beach and surfers' mecca.

30-50' bluffs along the shore west of Ditch Plains continue the hoodoo formations of Reach 8, with numerous trails along the bluffs, and traversing an undeveloped Montauk moorlands tract known as Shadmoor. Between Shadmoor and the Montauk hamlet the clay bluffs continue through a residential subdivision, Surfside Estates.

West of the low dunes fronting the business area, the terrain again ascends to 50' morainal bluffs. The beach throughout this area is wider and sandier due to littoral deposition from the east. The bluffs in this area along the Old Montauk Highway are less steep and better vegetated than those to the east.

2. Land use

As the center of business and resort activity for the area, the Montauk hamlet has numerous motels along the oceanfront, many of them built into the dunes themselves. A busy downtown shopping area extends to a traffic circle presided over by East Hampton's sole skyscraper, a six-story artifact from Carl Fisher's day. The area grew up chock-a-block around the circle in Montauk, beginning in the 1930's with the Montauk Beach Company skyscraper and the former Montauk Surf Club, now the site of a condominium. Much of the present motel and other resort construction dates from the post-war boom of the 1950's, pre-dating zoning, site plan review and other planning procedures.

The Town's largest recreational facility in Montauk, Kirk Park, is located along the beach with a large paved parking lot behind the primary dune, and an additional area on the north side of Montauk Highway extending to the shore of Fort Pond.

West of the business area a substantial portion of the brushy upland between Old Montauk Highway and the bluff edge is within the Benson Reservation, an undeveloped buffer which provides access and uninterrupted vistas to the Atlantic and contains a substantial dune/bluff ecosystem. Further west, buildings are again present on the south side of Old Montauk Highway including residences and several resort hotels, with Gurney's, Panoramic View and Wavecrest built directly on the slopes of the bluff.

3. Zoning

Zoning districts in Reach 9 include a Central Business (CB) District in the hamlet, and Resort Business (RS) Districts for a number of the hotel and motel operations. Residential B Districts include several old filed map areas, with Residential A for much of the rest, and the 'Shadmoor' property zoned Residential A5 because of its environmental sensitivity. The Benson Reservation property is in a Residential A3 District, although it cannot legally be developed because of its governing covenants.

4. Analysis

In downtown Montauk, with cooperation from a pro-active business community, the Town has an opportunity to revitalize the aging business area. The Town should form a partnership with local business leaders, and contribute its planning expertise to facilitate an exchange among business owners to improve common infrastructure such as parking, sidewalks, parks and active recreation sites, and to formulate community standards that will enhance the entire area (see **Projects**).

While there are no water-dependent uses in Reach 9, waterfront resort development is enhanced by its proximity to the ocean, which also renders it vulnerable to flooding and erosion damage in storms. The shoreline has already receded considerably over the years, with a paper street, South Edgewater Avenue [sic], that was originally designed as part of the downtown area, now completely underwater. Future vulnerability of the Montauk business district should be assessed in detail in the Hurricane Damage Mitigation Plan (see **Projects**) and a program of remedial actions, contingency mitigation, and post-storm redevelopment plans put in place to respond to post-storm emergency conditions and reconstruction.

The Shadmoor parcel contains significant representation of both the once extensive Montauk moorlands and downs habitats, and of Montauk's historic World War II role in the defense of New York City. Surviving fire control and observation structures, dramatic bluffs and extensive wetlands justify the strenuous efforts being made by the Town and other government and non-governmental agencies to secure its preservation. The Town Open Space Plan recommends protecting its natural features, trails and historic structures, and public acquisition remains the desired alternative for the property.

The nearly 70 acres of the Benson Reservation extending west of the Montauk hamlet between Old Montauk Highway and the ocean is a scenic asset to the community, providing a natural bluff barrier against erosion and a densely vegetated buffer with pedestrian access to the beach. Public access and habitat management remain a concern and permanent preservation is a priority (see Open Space Plan recommendations, Appendix B). Approximately 40 acres of the easterly portion was recently donated to the Town, for which zoning is recommended to be changed to Parks and Conservation (PC) District. The westerly 35-40 acres should be also be permanently preserved, but is privately owned by the Montauk Beach Property Owners Association, and would require the owners' consent.

5. Key sites in Reach 9

The downtown business area in Montauk is a key site for the Town's tourist trade. The resort operations in the Montauk hamlet and along Old Montauk Highway are greatly enhanced by their proximity to the water, indeed their profitability depends on access to the beach. These waterenhanced uses contribute significantly to the Town's resort economy.

The Town Open Space Plan identifies a number of important parcels in the reach. In Ditch Plains these include several freshwater wetlands parcels, SCTM #32-4-31.1, -32, -33 & -34. The largest parcel noted in the Open Space Plan for Reach 9 is Shadmoor (Bear and Schub proposed subdivision), SCTM # 28-9-46.1 & -46.2, 98.8 acres, an important example of the Montauk moorlands community with oceanfront hoodoo bluffs, globally endangered and protected species, locally designated Significant Coastal Fish and Wildlife Habitat (see **Significant Habitats Policy** #7), extensive freshwater wetlands, scenic views, and historic structures. The Town Open Space Plan has been revised (1998) to form a Community Preservation Project Plan, including the Villages of East Hampton and Sag Harbor, and will continue to be updated every 3-5 years.

The Benson Reservation east of the business area, SCTM's #67-4-34, 34.9 acres and #48-3-30, 34.3 acres, is recommended for rezoning to Parks and Conservation (PC) upon consent of the landowner. SCTM #49-2-8 & #51-1-7.2 are small freshwater wetlands of less than an acre adjoining protected open space, recommended for public acquisition. Additional recommendations may be found in the Open Space Plan Recommendations for Montauk, Appendix B.

6. Key issues in Reach 9

The downtown Montauk Central Business (CB) District is an integral part of the Town economy. Revitalizing it is a challenge for both the business owners who operate there, and for the Town, to maintain and improve its infrastructure. Many of the structures are aging and may require renovation in the future. Issues for the Town include: how to redevelop and improve an area that predates present-day planning standards, especially to enhance its visual attractiveness; and how to maintain the recreational and visual resources, and the beaches that draw visitors to the area.

The resorts and the Central Business (CB) District in downtown Montauk, as well as sections of the resorts along Old Montauk Highway, and the Ditch Plains subdivision are within NFIP flood hazard zones and some are also within CEHA hazard zones (see **Flooding and Erosion Policies #11-17**), putting the area at high risk in a catastrophic storm. The business area in Montauk probably constitutes the greatest concentrated liability for storm induced flood damage in the Town.

With remaining open space in Reach 9 at a premium, parcels such as Shadmoor contribute significantly to the habitat and scenic values of the reach, and should be preserved.

The Benson Reservation along Old Montauk Highway should be maintained as a scenic and vegetative buffer greatly enhances this meandering picturesque route and its ocean views.

REACH 10 NAPEAGUE SOUTH/AMAGANSETT

1. Description

From Hither Hills west to Amagansett, Reach 10 is characterized by the beaches and dunes associated with the tombolo complex of spits which formed Napeague. From its origins in littoral deposition much of Reach 10 exhibits characteristics of a barrier beach rather than the outwash plain or moraine structure common to other reaches of the Town. Barrier beaches and dune systems tend to be mobile land forms, which can pose problems for development on them. The broad sandy beach and dune system is backed by low backshore areas extending to the wetlands of Napeague Harbor which are susceptible to storm flooding.

Bluff Road extending to the west parallels an ancient shoreline cliff [or fossil bluff] cut into the Ronkonkoma outwash plain by wave action. A complex system of dunes known as the Atlantic Double Dunes evolved between this ancient shoreline and the present shore, now separated from the fossil bluff by distances up to about 1/4 mile, south of Bluff Road between Atlantic Avenue and Indian Wells Highway.

2. Land use

Most land use within Reach 10 is residential with the exception of open space in the Double Dunes preserved by government (New York State and U.S. Fish and Wildlife Service) and private organizations (The Nature Conservancy).

A large undeveloped section of the reach area is included within Napeague State Park, which encompasses a long segment of the double dunes area bordering the Atlantic Ocean as well as a significant dune and wetland tract along Napeague Bay acquired from the Smith Meal Company (the old fish factory). Segments of the park adjoining Napeague Harbor and extending south to the ocean are within a designated CBRA zone in the Federal Coastal Barrier Resources System. The CBRA zone does not include residential development within the Montauk-By-The-Sea subdivision. However, some previously undeveloped areas within the reach that are proposed for subdivision are within the CBRA. Much of this CBRA zone is also a State designated Significant Coastal Fish and Wildlife Habitat. The 490-acre tract of undeveloped parkland consists of sandy beaches and primary dunes with elevations to 20'-30' above mean sea level (AMSL), some of which are well vegetated. A second CBRA zone is located in Amagansett in the Double Dunes system extending through a National Wildlife Refuge and on Nature Conservancy land from Atlantic Avenue to the west of Indian Wells Highway.

The majority of development in the Napeague stretch consists of single family residences, multifamily condominiums, and one or two restaurants. The inland area contains numerous freshwater wetlands and these low areas periodically flood from heavy rains and/or coastal storm overwash. Most of the residential construction has occurred since the last major hurricane in 1938,

when a massive overwash of the Napeague isthmus occurred. Montauk was cut off by flooding in Napeague for nearly a week, and a number of structures in the Amagansett dunes were destroyed.

Reach 10 encompasses a number of extensively used bathing beaches, at White Sands, Napeague Lane, Atlantic Avenue, and Indian Wells Highway. The beaches and the recreation they afford are a cornerstone of the Town's resort economy, and their maintenance is an important planning consideration. The Atlantic Avenue beach provides the most extensive parking of any of the Town's ocean beaches and receives some of the most intensive use. See also **Public Access and Recreation Resources Policies #9 and #19-22**.

During the summer and fall surf fishing seasons the Amagansett and Napeague beaches receive intensive use from ORV's driving on the beach.

3. Zoning

Reach 10 Parks and Conservation (PC) Districts include parkland owned by New York State in Hither Hills and Napeague State Parks and the Federal USFWS Refuge between Atlantic Avenue and Indian Wells Highway in the Double Dunes. The remainder of the reach is zoned in various Residential Districts ranging from high density B Districts in older sections of Beachampton and in Montauk-by-the-Sea in Napeague, to A, A2 and a few A3 Districts in sensitive dunelands. The only commercial zone in the reach is a Resort Business (RS) District at the east end of the reach encompassing the Driftwood, Sea Crest and Hermitage condominiums.

4. Analysis

The fragile ecosystems of the barrier beach and Double Dunes through Napeague and Amagansett are a high priority for protection and conservation. Fortunately, significant portions have already been preserved through public ownership and private conservation, primarily by The Nature Conservancy. Significant remaining parcels should be acquired where possible by the public, either by Town or other government agencies, or otherwise protected as per the recommendations of the Town Open Space Plan. All government agencies, including semi-autonomous authorities such as Suffolk County Water Authority, should incorporate a policy of protecting the ecological and habitat values of these fragile areas into their planning and permit procedures.

As much of the reach is vulnerable to flooding from hurricanes, future development and/or redevelopment in the wake of a severe storm should be carefully evaluated in the Hurricane Damage Mitigation Plan. This applies particularly to the low-lying areas of Napeague and Beachampton where the resort businesses and intensive residential development have produced concentrated areas at potential risk of inundation.

Other facets of Reach 10 coastal development issues are addressed in other sections of the LWRP, including: Significant Habitats Policy #7, Flooding and Erosion Policies #11-17, Public Access and Recreation Policies #9 & 19-22, and Water and Air Resources Policies #30-44. Also refer to the Hurricane Damage Mitigation Plan (HDMP) in Projects.

5. Key sites in Reach 10

The beach resorts along the Napeague stretch are components of the Town's tourist economy. However, they are located in an environmentally sensitive and flood-prone area, and several are non-conforming uses in Residential Districts. Their continued presence should be evaluated in the HDMP if substantially damaged or destroyed by storm. Dense residential development in Montauk-by-the-Sea and Beachampton is also at risk from hurricanes and storm surge, also recommended for detailed examination in the HDMP (see **Projects**). See also **Flooding and Erosion Policies #11-17**.

A number of sites in the dunes of Reach 10 received specific recommendations in the Town Open Space Plan. SCTM #130-2-2 is a 40.9 acre parcel of oceanfront duneland just east of Dolphin Drive containing freshwater wetlands, protected species and providing scenic views and waterfront access. It is designated as State designated Significant Coastal Fish & Wildlife Habitat, is within a Velocity Flood Hazard Zone and a CBRA Zone, and the Open Space Plan recommends it be acquired by the public. SCTM #189-5-2.5 is a 7.7 acre parcel with an existing dwelling in the Double Dunes off Further Lane, recommended for private conservation to preserve the dunelands. SCTM #189-5-3.3 is 8.5 acres with an existing dwelling, farmland and an old field, where open space subdivision is recommended to preserve the farmland. SCTM #189-5-6, 6.8 acres; #189-5-8, 11.6 acres; #189-5-10.1, 27.6 acres; and #189-6-1.4, 6.4 acres are additional parcels in the Further Lane area recommended for various combinations of private conservation and open space subdivision to preserve farmland and Double Dunes habitat.

6. Key issues in Reach 10

Flooding and erosion and environmental sensitivity of fragile dunelands, wetlands and shallow aquifers are key issues for development in Reach 10. Preservation of remaining open space in the reach is a priority for the Town and should be for other government agencies as well. See Significant Habitats Policy #7, Flooding and Erosion Policies #11-17 and Surface Water Quality Policies #30-44.

Although there are no water-dependent commercial uses in the reach the water-enhanced resort uses at the east end of Napeague are part of the Town's tourist economy. Future planning for the area should determine whether they should be permitted to expand, or in the case of the non-conforming uses, to remain in place or be phased out over time, or in case of destruction by a catastrophic storm (see **Projects**).

Some recreational uses have affected development in Reach 10 by increasing flooding and erosion and diminishing the integrity of natural protective features. Remediation and enforcement measures have not yet been effective in preventing or repairing this damage.

REACH 11 WAINSCOTT

1. Description

The terrain of Reach 11 is flat with sandy beaches, and consists primarily of outwash plains, the ocean beach and dune system, and two coastal ponds, Georgica and Wainscott Ponds. The beach

in Reach 11 acts as a simple barrier, lacking an interdunal buffer or back dune system as in the Double Dune system of Reach 10.

Both of the ponds are Locally designated Significant Coastal Fish and Wildlife Habitats (see **Significant Habitats Policy #7**). Particular consideration should be given to preventing habitat degradation in any applications for development in their vicinity.

Its extensive watershed makes Georgica Pond is prone to substantial fluctuations in water level, resulting in periodic flooding of basements and septic systems on bordering properties, even under relatively normal conditions. To an extent this is due to construction of homes too near the pond edge. The Town Trustees traditionally open the Pond to the sea in spring and fall to increase flushing and enhance fishery productivity by allowing migration of anadromous fish and crustaceans such as blue-claw crab.

2. Land use

The beaches at Beach Lane and Town Line Road provide limited parking but enjoy extensive residential use, and also provide access to Georgica Pond for picnicking and crabbing. A cabana serves as a private community beach facility for the Georgica Association. Significant portions of farmland remain in agricultural use in the reach, some covered by agricultural easements, etc. As part of the outwash plain Wainscott farmland has Bridgehampton loam soils, some of the Town's finest agricultural soils.

3. Zoning

Land use in Reach 11 is in low density Residential Districts A2 and A3. There are no Commercial Districts in the coastal zone in Reach 11.

4. Analysis

Flooding and Erosion Policies #11-17 provide a discussion of storm flooding and erosion and related planning issues in Reach 11. A detailed analysis of hazards and possible mitigation strategies, and a parcel-specific evaluation of vulnerability are proposed to be carried out in the Hurricane Damage Mitigation Plan (see **Projects** section).

The Town Open Space Plan provides a context and recommendations for preservation of open space in the reach, primarily farmland, scenic views, and structures in the Wainscott historic district.

5. Key sites in Reach 11

Key sites in Reach 11 are primarily residences vulnerable to storm flooding and erosion, and farmland and the open space parcels which define the character and history of this community.

The Town's Open Space Plan makes a number of specific recommendations for preservation of open space to maintain significant habitat, scenic vistas, historic farms and buildings, and agricultural uses in Reach 11. SCTM #197-7-9 & -12.6 together form a 39.1 acre tract of Georgica Pond shorefront with an existing dwelling including locally designated Significant Coastal Fish and Wildlife Habitat (see **Significant Habitats Policy #7**), and are recommended for private conservation and/or open

space subdivision to preserve pond shore and upland woods. For SCTM #197-7-13.1, 15.6 acres on Georgica Pond with an existing dwelling, the plan recommends obtaining a conservation easement to buffer or enhance the adjacent nature preserve. SCTM #197-7-15, 4.6 acres of woodland and Georgica Pond shorefront, is recommended for public acquisition or partial development, with the possibility of obtaining public access to the Pond, of which there is a dearth, particularly along the western shore.

Various techniques for preservation of the agricultural lands in Reach 11 are recommended in the Open Space Plan. A 20.4 acre parcel consisting of SCTM #200-2-20, -23, -28.2, & -28.4 is recommended for rezoning to Agricultural Overlay District. SCTM #200-2-29, 30.2 acres on Wainscott Pond, is recommended for private conservation and/or open space subdivision, and to obtain public access to Wainscott Pond. SCTM #200-2-33, at the corner of Five Rod Highway and Wainscott Main Street, has an historic dwelling and scenic views, recommended for a scenic easement. In addition, the following parcels are recommended for various measures to preserve farmland, historic resources, and Locally Significant Coastal Fish and Wildlife Habitat around the ponds: SCTM #200-2-48.2, -48.3 & -51.1, 58 acres; #200-2-48.4, 11.9 acres; #200-2-48.6, 1.9 acres; #200-2-48.7, 2.7 acres; #200-3-37, 4.4 acres; #200-3-38, 24.1 acres; #200-3-45, 4.3 acres; #200-3-46, 6.8 acres; and #200-3-47, 2.8 acres. Please refer to the Town Open Space Plan for details of recommendations.

6. Key issues in Reach 11

Primary development concerns in Reach 11 focus on potential flooding and erosion from storm events to which, depending on storm magnitude, most of the reach is vulnerable. See **Flooding and Erosion Policies #11-17** for delineation of flood and erosion hazard zones.

Other important issues are preservation of open space, especially farmland, and finding a creative mix of techniques to preserve the historic character and scenic vistas that describe the Wainscott community.

REACH 12 GARDINER'S ISLAND

1. Description

Gardiner's Island is one of the largest privately held islands on the east coast, and represents an immensely important part of East Hampton's historical and natural heritage. It was purchased by Lion Gardiner in 1639 from the Montauk Indians, and received a patent from the King of England in 1640, establishing what is usually regarded as the first English settlement in New York State. It remained an independent manorial estate until after the American Revolution when it was annexed to Suffolk County and East Hampton Town. The Gardiner family trust remains the owner of the island, and continues to maintain it for private use.

From an historic and archaeological standpoint Gardiner's Island contains the longest continuous intact record of colonial settlement in the Town and probably for much of New York State. Ecologically it provides exceptional habitat for many rare and endangered species, including the largest concentration of nesting osprey in New York State. The entire island is a State designated

Significant Coastal Fish and Wildlife Habitat. Federal CBRA designations cover zones at the northern and southern spits and surrounding the coastal ponds and associated shorelines.

2. Land use

Since Gardiner's Island is effectively a single residence at present, routine planning and development concerns do not apply. The principal means of entry and egress from the island is by boat, and the private marina/boat basin on Cherry Harbor on the west side is a water-dependent use vital to the maintenance of the island.

3. Zoning

Because of its unique resources and extreme sensitivity, the Town has zoned the entire island a Residential A5 District, the category of lowest residential density.

4. Analysis

To date the Gardiner family heirs have maintained and preserved their heritage on the island with great dedication. If future conditions alter this state of affairs all levels of government should exert their utmost efforts to ensure its preservation without additional development.

Maintaining the present minimal level of use of the island should be encouraged by the Town and other government agencies, including maintenance of the current water-dependent use at the boat basin.

The historic structures and archaeological resources of the island are a vital component of the history of the Town and New York State, and government agencies should encourage intact preservation of the historic and archaeological record, and to the extent possible, record oral history from the surviving Gardiners (see **Historic Resources Policy #23** and Oral History in **Projects**). Town and State agencies should, in cooperation with the Gardiner families, designate the Island's resources in an historic district.

5. Key sites/issues

The primary issue for Gardiner's Island is preservation of its extraordinary historic and natural resources. If in the future development is contemplated for the island, conservation of these resources, indeed preservation of the island as an intact entity, should be the foremost consideration and the focus of all levels of government and whatever private resources that can be brought to bear.

C. PROPOSED LAND USES

The proposed land uses for the Town of East Hampton are illustrated on Map II-3, opposite page II-42. They translate the LWRP policies into a cohesive land use plan for the coastal area. These proposed land uses reflect and implement the policies, applying them to the existing land use patterns and natural resources of the Town, along with its development potential and constraints.

East Hampton's coastal area is included in what The Nature Conservancy has described as one of "The Last Great Places". The LWRP seeks to maintain and enhance the community character of the Town by protecting and preserving the natural and cultural resources that contribute to this unique sense of place. The LWRP proposes to achieve this by sustaining the historic land use patterns of the Town of East Hampton, working with development patterns and trends, and utilizing existing infrastructure.

In recent decades East Hampton has been experiencing one of the highest growth rates in New York State, as demand for second homes has spurred a building boom. Although opportunities for well planned growth continue to exist within the Town's long established land use patterns, increased development pressure means that increasingly marginal areas are being developed on the shore and on the fringes of hamlets, producing increasing stress on resources and municipal infrastructure.

As reflected in the LWRP policies, the Town continues to exert its utmost efforts to preserve its natural coastal resources and, in particular, to protect open space according to the 1995 Open Space Plan addition to the Town Comprehensive Plan. Open Space Plan recommendations are described in some detail in the reach Inventory and Analysis and appended sections of the Open Space Plan. Other efforts to preserve significant habitat areas and natural protective features of the coast are discussed in **Significant Habitats Policy #7** and **Flooding and Erosion Policies #11-17**.

Other proposed land uses pertaining to historic and visual resources and to waterfront infrastructure for commercial fisheries are being considered in various **Projects** of the LWRP. See **Projects** Section XIV and accompanying Map XIV-1.

D. DEVELOPMENT POLICIES #1-6

- POLICY 1 RESTORE, REVITALIZE AND REDEVELOP DETERIORATED AND UNDERUTILIZED WATERFRONT AREAS FOR COMMERCIAL AND INDUSTRIAL, CULTURAL, RECREATIONAL AND OTHER COMPATIBLE USES.
- POLICY 1A RESTORE, REVITALIZE, AND REDEVELOP THE FOLLOWING UNDERUTILIZED SITES FOR CULTURAL, RECREATIONAL, AND OTHER COMPATIBLE USES:
 - (1) MARINA LANE DREDGE SPOIL SITE, THREE MILE HARBOR
 - (2) OLD FISH FACTORY SITE, NAPEAGUE
 - (3) FORMER MONTAUK LANDFILL
 - (4) MONTAUK HARBOR AREA
 - (5) CAMP HERO, MONTAUK
 - (6) MONTAUK BUSINESS AREA

Explanation of policy:

The purpose of this policy is to promote new uses for deteriorated or underutilized sites on the Town's waterfront, particularly those disturbed by previous industrial uses or other activity. Redevelopment and revitalization of these sites will provide economic or other benefits to the Town's coastal area that are consistent with the policies of the LWRP.

In the Town of East Hampton, six sites have been identified as deteriorated and underutilized and worthy of restoration or revitalization:

- 1. Reach 2, Marina Lane dredge spoil site on the east side of Three Mile Harbor
- 2. Reach 4, former fish factory site in Napeague State Park
- 3. Reach 5, former Town Landfill in Hither Woods, Montauk
- 4. Reach 6, Montauk Harbor, including the marina/dock complex and related areas of Coonsfoot Cove, West Lake Drive loop, and Star Island
- 5. Reach 8, Camp Hero abandoned military complex in Montauk Point State Park
- 6. Reach 9, the "downtown" Montauk commercial business area

Two of the underutilized sites, the old fish factory in Napeague and Camp Hero, have been purchased by or transferred to the State, and the Town intends that the consistency provisions of the State coastal program be fully utilized to insure that its concerns are taken into account by State agencies in determining future uses of these lands.

Two other sites, the Marina Lane dredge spoil site and the former Town landfill in Montauk, are Town-owned and represent opportunities to creatively enhance recreation and environmental remediation in the coastal area. The proposed projects on these sites will further a number of LWRP policies and initiatives related to habitats, recreation and water quality, and will have benefits for a wide spectrum of residents and visitors as well as the environment.

The remaining two sites, Montauk Harbor and the Montauk business district, are locations where the Town will form multi-level public/private partnerships to enhance economic activity, improve local planning and environmental protection, and in the harbor area, maintain important water-dependent uses for the commercial and recreational fishing and boating industries.

Implementing redevelopment projects may depend on attracting funding from either the private sector or State or Federal agencies, and may occur over an extended period. Although the Town has thoroughly inventoried the coastal area in preparing the LWRP, additional sites may emerge as priorities for revitalization as changes in economic activity occur in the future, or as the LWRP itself is put into effect and other projects are carried out.

Rather than attempt to institute new development standards in this policy, the existing Town Code, acknowledged to be one of the most forward in the State, should be applied for waterfront revitalization projects. Town standards for waterfront use priorities, zoning, subdivision, site plan review and natural resource protection are cited elsewhere in these **Development Policies**, in the **Local Laws** and in the LWRP.

Potential uses and plans for these sites are summarized as follows, and are discussed in more detail in the **Projects**.

1. Marina Lane Dredge Spoil Site, Three Mile Harbor, Reach 2

The Marina Lane site is underutilized and disturbed, but would be a good waterfront park with exceptional sunset views across the harbor. The Town Natural Resources Department is interested in utilizing the site for a demonstration wetlands restoration project, and using the disturbed upland area as a nursery area for beach grass and other seaside plants. An alternative dredge spoil disposal site would be needed for future dredging of the channel, or parts of the site could continue to be used as a temporary depository from which to move spoil for beach nourishment projects.

2. Old Fish Factory Site, Napeague, Reach 4

The old fish factory (Smith Meal Co.) site at Promised Land was acquired by NYS OPRHP as part of Napeague State Park. Although the site has limitations due to its surrounding ecological features and lack of infrastructure there is potential for limited redevelopment of the waterfront portion as a public fishing pier, and an educational walk or exhibit relating to the history and ecology of the site. A low-impact rustic campsite area for canoers and kayakers is another possible use, as a link in a proposed water trail system extending through the Town from Northwest Harbor to Montauk (see **Public Access and Recreation Resources Policies #9 & 19-22** and **Projects**).

Because of its constraints, the site must be carefully analyzed to determine what kind of redevelopment or revitalization is appropriate, and where it can take place. Any redevelopment plan must be consistent with the preservation objectives of the LWRP. Because of the fragility of its environment and concerns over an influx of undesirable uses such as jetskis, numbers of users,

parking and the area to be used of the site should be restricted. Various proposals for a ferry terminal, or active recreation facilities (ballfields, golf courses, etc.) should be excluded, and Napeague State Park as a whole is of such fragile character it should be classified by NYS OPRHP as a "park preserve".

3. Former Montauk Landfill, Reach 5

The former Montauk landfill is situated in Reach 5 in Hither Woods at one of the highest points in the Town, with impressive views of Block Island Sound to the north. The site would lend itself to reclamation, landscaping and installation of modest park facilities for passive recreation (e.g. sunset viewing) and/or some active recreation use for ballfields, etc. It adjoins an extensive trail network through the preserved open space of Hither Woods, and would also be readily accessible to residents and others making use of the present recycling and transfer facility.

4. Montauk Harbor Area, Reach 6

This project would further LWRP goals to enhance water-dependent commercial and recreational uses in Montauk Harbor. Existing patterns of use in the Waterfront (WF) and Resort (RS) Districts will be analyzed and the Town will work with the marina and fishing industries to maintain or improve existing water-dependent uses. The Town will facilitate a cooperative plan among waterfront business owners to join existing walkways and/or construct connecting links between docks, marinas and other waterfront facilities to improve pedestrian access for tourists and enhance sightseeing, shopping, and recreational opportunities. The plan will also examine realignment of the existing wharf lines to simplify and improve boat traffic, and look at ways to preserve remaining wetlands as natural and scenic buffers.

5. Former Camp Hero, Montauk, Reach 8

The Town's policy for the abandoned military complex, as discussed in the Analysis for Reach 8, is that it should be redeveloped in a limited way for passive or low-impact recreational uses that would provide public access to the water, trails for hiking, etc. Any NYS OPRHP management or use plan must stringently protect the important ecological and habitat components of the site. Active recreational uses such as a golf course are inappropriate to the site. Some of the structures, though deteriorated, may be amenable to restoration or conversion for a military museum or theme park, befitting the site's important military history. Some economic benefit could be derived by leasing existing tall structures for communication antennas, or by utilizing disturbed portions for wind generation of electricity (see **Energy Facilities Policy #27**).

6. Downtown Montauk Business Area, Reach 9

The Montauk business district will progressively require refurbishing and modernization. The Town will form a partnership with Montauk's pro-active business community, to which the Town will contribute overall planning, site plan and design expertise, and facilitate an exchange among business owners and citizens groups to devise community goals and a planning framework for future development or redevelopment. Goals will be to raise development to current planning standards, improve common infrastructure such as parking, traffic flow, sidewalks, parks and active recreation sites, enhance visual appeal, and to address potential problems such as flooding and erosion.

General Reuse Considerations

Sites zoned in Parks and Conservation (PC) Districts under the Town's Zoning Code must be maintained in a substantially undeveloped state for the use and enjoyment of citizens. Other recreational uses and improvements installed to facilitate sports, exercise, picnicking, festivals, concerts or other outdoor activities should only be undertaken after careful consideration of ecological and habitat impacts. Recreational and other uses of such sites must be consistent with policies and guidelines of the LWRP, which in some cases may also include provisions for educational or traditional economic activities.

If an action is proposed to take place within a designated deteriorated or underutilized waterfront area suitable for redevelopment, it should be consistent with LWRP or other Town guidelines for the site, and should only take place with full disclosure to, and consultation and cooperation with the Town of East Hampton.

The development standards cited in **Policy #2/2A** shall be met for redevelopment activities.

POLICY 2 FACILITATE THE SITING OF WATER-DEPENDENT USES AND FACILITIES ON OR ADJACENT TO COASTAL WATERS.

POLICY 2A WATER-DEPENDENT USES AND FACILITIES SHALL BE SITED ON OR ADJACENT TO COASTAL WATERS, PROVIDED THE PROPOSED USE IS CONSISTENT WITH PRESERVATION AND ENHANCEMENT OF OTHER COASTAL RESOURCES, INCLUDING CULTURAL OR NATURAL RESOURCES.

Explanation of policy:

The Town's policy is to protect and maintain those water-dependent uses which contribute to or enhance the traditional character of the Town's waterfront, and to improve the economic viability of water-dependent uses by allowing for appropriate non-water-dependent accessory and multiple uses, particularly water-enhanced and maritime services. In the Town of East Hampton, locations where water-dependent uses exist and are permitted, as well as related issues, are described in the Inventory and Analysis, and are shown on Maps II-1A/-1B, Existing Land Use.

Definition of Water-Dependent Uses and Water-Enhanced Uses

Water-dependent use means a business or other activity which can only be conducted in, on, over, or adjacent to a waterbody because such activity requires direct access to that waterbody, and which involves, as an integral part of such activity, the use of the water. The Town Code (§153-1-20) defines a Water-dependent use as, "A use which cannot be conducted or perform its intended purpose unless it is located or carried out in close proximity to water, such as docking or servicing of boats, unloading of fish, shipbuilding or the like."

Water-enhanced use means a use or activity which does not require a location adjacent to coastal waters, but whose location on the waterfront adds to the public use and enjoyment of the water's edge. Water-enhanced uses are primarily recreational, cultural, retail, or entertainment uses.

See below for a list of Permitted and Specially Permitted water-dependent and water-enhanced uses.

Location of Water-Dependent and Water-Enhanced Uses

Public water-dependent uses include water-related recreational activities at waterfront parks and beaches, boat launch ramps, municipal marinas and docks, etc. These activities are inventoried in **Public Access and Recreation Resources Policies #9 & 19-22**.

The specific areas where private or commercial water-dependent and water-enhanced uses will be accommodated or permitted to expand correspond to locations in Commercial Waterfront (WF) or Resort (RS) Zoning Districts. Special Permit water-dependent uses in other districts are permitted to be maintained but not expanded. Locations where water-dependent uses presently exist are the following:

Reach 2	
SCTM#[s]	Location/facilities (Zoning District)
#57-6-23 to -27	Harbor Marina, east side Three Mile Harbor, north of Gann Road, includes restaurant, (WF)
#57-6-3,-11.1	
#61-1-2	Part of Harbor Marina, includes southern 1/3 Sedge Island (dredge spoil) (WF)
#77-5-1.1,-1.2	Shagwong Marina, east side Three Mile Harbor, west of Harbor Blvd (WF)
#75-1-28.5	Maidstone Harbor (Duck Creek Marina), east side Three Mile Harbor, south of Squaw Road, includes restaurant (WF)
#75-1-29	East Hampton Point Marina, east side Three Mile Harbor, south of Squaw Road, includes motel units and restaurant (WF)
#93-1-5,6	Halsey's Marina, east side Three Mile Harbor, opposite Copeces Lane (WF)
#93-1-8	Gardiner's Marina, east side Three Mile Harbor, west of Hill Rd (WF)
#120-1-1	Three Mile Marina (Van de Veer's), southeast end of Three Mile Harbor, adjoining Boat Yard Lane (WF)
#120-1-2,3	Three Mile Harbor Boat Yard, southeast end of Three Mile Harbor, adjoining Boat Yard Lane, includes a retail bait & tackle store and chandlery (WF)
#120-1-10,11	East Hampton Marina, southeast end of Three Mile Harbor, adjoining Boat Yard Lane (WF)
#38-7-15	Sunset Cove Marina (B Residential)
#57-1-2	East Hampton Landings (Folkstone Marina) (B Residential)
#23-2-1	Lion Head Property Owners Association Marina (B Residential)
#23-3-1	Clearwater Beach Property Owners Association Marina (B Residential)

The Town maintains a Commercial Dock at Gann Road (SCTM #59-1-1), used by commercial fishermen and the Town Harbormaster, as well as a recreational boat basin, Town Dock, near the head of Three Mile Harbor. In addition the Town recently acquired an old fishing station near the harbor mouth (SCTM #38-3-8) which may be utilized for environmental education, recreational or other purposes (see revitalization sites in **Policy #1** above and **Projects**).

Reach 3

Reach 3 has one water-dependent land use, the Devon Yacht Club & Marina, SCTM #127-3-16 & -17, approximately 12 acres in a Residential A2 District.

Reach 5

Reach 5 has one site in a Waterfront (WF) District, occupied by Perry B. Duryea & Son's lobster and fish packing business, located on the west side of Fort Pond Bay on Tuthill Road, SCTM #16-1-8.5,-8.6, & -8.7, 3.9 acres, plus associated underwater lands #16-1-8.1, -8.2 & -6.3 in Tuthill Pond.

Reach 6

Lake Montauk in Reach 6 has twenty-six waterfront sites in Waterfront (WF) and Resort (RS) Districts with water-dependent or water-enhanced uses. Waterfront Districts cover approximately 61.1 acres of the land area bordering Lake Montauk, and Resort Districts approximately 55.1 acres. Some of these sites are mixed uses predating present zoning, where marinas may have been accessory uses with motels under earlier zoning designations.

Reach 6 WF & RS Districts SCTM# Use and Location (Zoning District)		
5C11v1#	Use and Location (Zoning District)	
#06-3-6,7	Duryea's (Montauk Fish Dock & Tuma's Dock), NW side of Coonsfoot Cove (WF)	
#06-1-8,28,29,30	Gosman's Dock [and Restaurant], NW side of Coonsfoot Cove (WF)	
#06-3-8	Johnny Marlin's Restaurant (WF)	
#06-3-9	Salivar's Dock, northwest side of Coonsfoot Cove (WF)	
#06-3-10,11,12	Viking Dock, northwest side of Coonsfoot Cove (WF)	
#06-3-13,14	Harrington/Merkin, northwest side of Coonsfoot Cove (WF)	
#06-3-15,16	Uihlein's Rentals, northest side of Coonsfoot Cove (WF)	
#06-3-20.2	Montauk Marine Basin, west side of Coonsfoot Cove (WF)	
#06-3-22,24	Montauk Sportsman Dock, west side of Coonsfoot Cove (WF)	
#06-3-26	Offshore Sports, west side of Coonsfoot Cove (WF)	
#06-3-28	The Landings, west side of Coonsfoot Cove (RS)	
#12-1-1,2	Land's End, west side of Coonsfoot Cove (RS)	
#12-1-3	West Lake Marina, southwest side of Coonsfoot Cove (RS)	
#12-1-4	Captain's Cove, southwest side of Coonsfoot Cove (WF)	
#12-1-5	West Lake Fishing Lodge, southwest side of Coonsfoot Cove (RS)	
#12-1-8.3	Snug Harbor Marina, south end of Coonsfoot Cove (RS)	
#06-4-9,16.1,17	Montauk Resort and Marina (Star Island Plantation, Montauk Yacht Club,	
	Deep Sea Club), east side of Star Island (RS)	
#06-4-1	Town of East Hampton Commercial Dock, N end of Star Island (WF)	
#06-4-2	U.S. Coast Guard Station, north end of Star Island (WF)	
#06-4-3,6	Star Island Yacht Club, west side of Star Island (WF)	
#06-2-2,3	Inlet Seafood, north end of East Lake Drive (WF)	
#06-2-5,6	Deep Water Seafood, north end of East Lake Drive (WF)	
#06-2-15.1	Gone Fishing Marina, East Lake Drive (WF)	

#13-3-26	Montauk Lake Club, East Lake Drive (Residential A)
Two of the parce	els presently in Resort (RS) zones are recommended for rezoning:
#06-3-31.1	Vacant 3.7 acre parcel, extensive wetlands, recommended for upzoning from
	RS to Residential A
#12-1-8.1	Vacant 4.8 acre parcel, wetlands and forest, recommended for upzoning from
	RS to Residential A

Permitted and Special Permit Water-Dependent and Water-Enhanced Uses

Acreage in the Town within commercial Waterfront (WF) Districts is limited to 21 parcels totaling approximately 45.8 acres in Reach 2, one district with 3.9 acres in Reach 5, and 61.1 acres in Reach 6, plus an additional 55.1 acres in Resort (RS) District fronting on Lake Montauk, which includes a number of marinas in Montauk Harbor. Permitted Uses in the Waterfront (WF) district should be restricted to those which further the objectives of the LWRP by providing priority water-dependent functions and critical shoreside facilities for commercial fishing and water-related recreation. Special Permit Uses should be granted only in cases which further the objectives of the LWRP policies, or help to maintain priority water-dependent uses. The following types of water-dependent and water-enhanced uses are Permitted or Special Permit Uses in the Waterfront (WF) District, as provided in **§153-11-10** of the Town Code:

Permitted Uses

- (1) Marina
- (2) Recreational marina
- (3) Boatyard
- (4) Boat rentals or fishing station
- (5) Fish market (may include combination of wholesale/retail)
- (6) Agriculture
- (7) Nature preserve or sanctuary
- (8) Park
- (9) Accessory uses, buildings or structures (as defined)

Special Permit Uses

- (1) Change of single-family residence
- (2) Conversion (as defined)
- (3) Apartment in single-family residence
- (4) Fire station, police station, or post office
- (5) Semi-public facility
- (6) Public utility (as defined)
- (7) Ferry terminal, passenger
- (8) Antique shop or antique auction gallery
- (9) Auditorium or meeting hall
- (10 Bank
- (11 Custom workshop

- (12) Mariculture, research and development
- (13) Multiple-business complex
- (14) Office; business, utility, professional or sales
- (15) Minor recreation facility
- (16) Restaurant
- (17) Retail store
- (18) Tavern or bar
- (19) Technical or trade school
- (20) Theater community
- (21) Wholesale business
- (22) Wholesale/retail beverage distribution, wholesale bakery
- (23) Fish processing facility
- (24) Fuel storage in tanks
- (25) Laboratory: research, processing or testing

Publicly-Owned Waterfront-Dependent Uses and Facilities

Existing publicly-owned water-dependent uses and facilities including beaches, parks, boat ramps, boat clubs, nature preserves, marinas and docks shall remain in public ownership and be maintained or improved.

Standards to Ensure the Preservation of Water-Dependent Uses (§153-5-45[D])

To ensure that water-dependent and water-enhanced uses will be constructed in an environmentally sensitive manner, and to ensure that water-dependent uses will be preserved and not be displaced by water-enhanced uses, the following standards shall apply.

All Special Permit Uses, other than passenger ferry terminals, are deemed not to be water-dependent uses. All Special Permit Uses shall comply with the following standards. The Special Permit Use:

- (1) Must not adversely affect any existing waterfront use which is water-dependent or any potential water-dependent uses to be made of the lot or of nearby waterfront;
- (2) Must be ancillary to the principal water-dependent use in that the Special Permit Use would economically support the principal water-dependent use and would enhance the ability of the general public to gain visual or physical access to the waterfront;
- (3) Must not usurp any land surface area needed by the principal water-dependent use and must, together with all uses on the lot, be able to demonstrate an integrated and adequate circulation and parking plan; and
- (4) Must have a maritime character or theme.
- (5) As a condition to the following special permit uses in the Waterfront District, the site shall be of sufficient size to accommodate the proposed use with safeguards set forth in *§153-5-50* below, but in no case shall the site be smaller than forty thousand (40,000) square feet per two (2) uses:
 - (a) Auditorium or meeting hall.
 - (b) Fish processing facility.
 - (c) Fuel storage tank.

- (d) Laboratory: research, processing, testing.
- (e) Theater, community.
- (f) Wholesale business, including lumber and building products.
- (g) Transportation terminal.
- (h) Semipublic facility.
- (i) Public utility.

General Standards (§153-5-40)

- (1) **Nature of use.** The use proposed will be in harmony with and promote the general purposes of **§153-1-11** of the Town Code.
- (2) **Lot area.** The lot area will be sufficient, appropriate and adequate for the use, as well as reasonably anticipated operation and expansion thereof.
- (3) **Adjacent properties.** The proposed use will not prevent the orderly and reasonable use of adjacent properties, particularly where they are in a different district.
- (4) **Compatibility.** The site of the proposed use will be a suitable one for the location of such a use in the town, and, if sited at that location, the proposed use will in fact be compatible with its surroundings and with the character of the neighborhood and of the community in general, particularly with regard to visibility, scale and overall appearance.
- (5) **Effect on specific existing uses.** The characteristics of the proposed use shall not be such that its proposed location would be unsuitably near to a church, school, theater, recreational area, or other place of public assembly.
- (6) **Use definition.** The proposed use conforms to the Town Code definition of the special permit use where such definition exists or with the generally accepted definition of such use where no definition is included in the Code.
- (7) **Circulation.** Access facilities are adequate for the estimated traffic generated by the proposed use on public streets and sidewalks, so as to assure the public safety and to avoid traffic congestion; and, further, that vehicular entrances and exits shall be clearly visible from the street and not within seventy-five (75) feet of the intersection of street lines at a street intersection, except under unusual circumstances.
- (8) **Parking.** There will be room for creation of off-street parking and truck loading spaces at least in the number required by the applicable provisions of this chapter, but in any case adequate for the actual anticipated number of occupants of the proposed use, whether employees, patrons and visitors; and further, that the layout of the spaces and related facilities will be made convenient and conducive to safe operation.
- (9) **Buffering and Screening.** Adequate buffer yards and screening can and will be provided to protect adjacent properties and land uses from possible detrimental impacts of the proposed use.
- (10) **Runoff and waste.** Adequate provision can and will be made for the collection and disposal of stormwater runoff, sewage, refuse and other liquid, solid or gaseous waste which the proposed use will generate.
- (11) **Environmental protection.** The natural characteristics of the site will be such that the proposed use may be introduced there without undue disturbance or disruption of important

natural features, systems or processes and without significant negative impact to groundwater and surface waters on and off the site.

- (12) **Compliance with other laws.** The proposed use can and will comply with all provisions of this chapter and of the Town Code, including **Chapters 104 and 106** thereof, which are applicable to it, and can meet every other applicable federal, state, county and local law, ordinance, rule or regulation.
- (13) **Conformity with other standards.** The proposed use can and will meet all of the general standards for special permit uses in particular districts set forth in **§153-5-45** and also meets all of the specific standards and incorporates all of the specific safeguards required of the particular use, if any, by **§153-5-50**.

Standards for Waterfront Development

- (1) Shellfish beds, wetlands, and Significant Coastal Fish and Wildlife Habitats shall not be adversely affected.
- (2) Filling or dredging of wetlands for construction or access is prohibited.
- (3) Buffer zones of natural vegetation should be established between the proposed development and any waterways and wetlands. Where possible, existing shoreline vegetation shall remain undisturbed and kept available for shoreline stabilization.
- (4) Development shall not prevent, hinder, or obstruct access to public lands and navigation channels.
- (5) State water quality classifications shall not be violated.
- (6) If necessary, stormwater runoff retention basins should be utilized to prevent direct discharges and contamination of adjacent wetlands and waters.

Special Standards for Recreational Marinas (§153-5-50)

- (1) No discharges of pollutants or other activities of any kind which are deleterious to surrounding wetlands and surface waters shall be permitted to occur on the site. Specific layouts or facility designs may be required in order to ensure that such impacts will not occur.
- (2) Sanitary restrooms, holding tanks and sewage disposal shall be provided on site in accordance with federal, state and local laws, including county laws.
- (3) There shall be provision made for the safe collection and disposal of boat-generated solid wastes. See **Policy #34, Vessel Discharges, in Water and Air Resources Policies.**
- (4) Outdoor lighting shall be contained on site, and no dock lighting may be more than ten feet above the ground or dock level underneath it. These provisions shall not apply to navigational aids approved by the Coast Guard and the Town.
- (5) Public address or speaker systems shall be designed so as to project little or no noise across the property lines of the facility onto neighboring residential properties, and no such system shall be used between 10:00 p.m. and 8:00 a.m.
- (6) Surface water quality shall be protected and improved to the extent practicable by the applicant through marina design, including protection of wetlands on the site, restricting dredging to the minimum needed, and dredging during periods least destructive to shellfish.

Marina operators shall post signs and distribute information designed to educate boat owners about trash, sewage disposal, non-toxic boat cleaners, avoiding fuel spills, and other best management practices.

Harbor Protection Overlay District (§153-3-70 through -75)

All development within the *Harbor Protection Overlay District* shall conform with the requirements and regulations of the district (Appendix C).

POLICY 3 FURTHER DEVELOP THE STATE'S MAJOR PORTS OF ALBANY, BUFFALO, NEW YORK, OGDENSBURG AND OSWEGO AS CENTERS OF COMMERCE AND INDUSTRY, AND ENCOURAGE THE SITING, IN THESE PORT AREAS, INCLUDING THOSE UNDER THE JURISDICTION OF STATE PUBLIC AUTHORITIES, OF LAND USE AND DEVELOPMENT WHICH IS ESSENTIAL TO OR IN SUPPORT OF THE WATERBORNE TRANSPORTATION OF CARGO AND PEOPLE.

Explanation of why this State policy is not applicable:

This policy is not applicable in the Town of East Hampton. There are no major ports in the Town.

POLICY 4 STRENGTHEN THE ECONOMIC BASE OF SMALL HARBOR AREAS BY ENCOURAGING THE DEVELOPMENT AND ENHANCEMENT OF THOSE TRADITIONAL USES AND ACTIVITIES WHICH HAVE PROVIDED SUCH AREAS WITH THEIR UNIQUE MARITIME IDENTITY.

Explanation of policy:

Three Mile Harbor and Montauk Harbor are traditional small harbors which are the focus for commercial and recreational fishing and boating activity in the Town of East Hampton. Three Mile Harbor is located in Reach 2 and is discussed in the Inventory and Analysis beginning on page II-11, and is shown on Map II-1A, Existing Land Use. Montauk Harbor is located in Reach 6 at the northern end of Lake Montauk, discussed beginning on page II-24 of the Inventory and Analysis, and noted on Map II-1B. The working harbor area generally includes lands in the immediate vicinity of the federal channel at the Lake entrance, the Coonsfoot Cove area, and most of Star Island.

Three Mile Harbor has for many years been the Town's center for recreational boating on the bay side, particularly for sailing. Its marinas have approximately 700 slips, with capacity for another 150 vessels on moorings in the Town Trustee grid. A second vital use of the harbor is made by commercial baymen and fishermen, with draggers, lobstermen and trap fishermen making regular use of the Town Commercial Dock and launch ramp at Gann Road.

The recreational marinas are located along the east side of Three Mile Harbor where the navigation channel parallels the shore, and several combine restaurants that provide waterfront dining with

views of boats and sunsets across the water. Commercial development is sparse enough that Three Mile Harbor maintains a primarily residential shoreline, and parkland on either side of the harbor mouth presents an unspoiled expanse of sand and water. Despite its concentration of boating activity, Three Mile Harbor retains a low-key character that attracts cruising mariners from around the region.

Montauk Harbor is the most active center of maritime activity and home port for the Town's offshore commercial and recreational fishing fleets. A cluster of marinas, restaurants, resorts and other retail establishments occupy the area around the harbor mouth and Star Island, intermixing the working waterfront of the commercial fleet with an assortment of other uses from fishmarkets to the U.S. Coast Guard Station. The entrance is flanked by public beaches outside the harbor jetties, with extensive parklands on the east side. Harbor activities are a prime tourist attraction as well as being a center of fishing and boating operations. They include a seasonal passenger ferry carrying passengers to Block Island, whale watching boats, and charter and party fishing boats available to the public, as well as fishpacking, tackle and marine supply shops, etc.

Shoreside support facilities for commercial fishing and other water-dependent uses are under constant development pressure from tourist-oriented businesses offering a higher return on real estate. This is a particular problem in Montauk, which has a higher concentration of commercial water-dependent uses. The Town tries to preserve and protect priority water-dependent uses through its zoning code (see **Policy #2/2A**), and continues to explore ways to maintain the economic vitality of its working waterfront (see **Commercial Fishing Policy #10** and *Fisheries Shoreside Support Infrastructure* and *Harbor Management Plans* in **Projects, Section XIV**).

The rich maritime traditions of Three Mile and Montauk Harbors will be maintained and encouraged to prosper and grow responsibly through the following means:

- Provision for water-dependent and water-enhanced uses in Waterfront (WF) Districts in the harbor area with provisions to ensure that water-dependent uses will not be adversely affected by Special Permit Uses (see **Policy #2**);
- Consideration of incentives to assist marina operators in installing shoreside facilities such as pumpouts, restrooms, showers, etc., and support of tax reforms to prevent excessive estate valuation of marinas at waterfront condominium values;
- Continued use of the Town commercial dock at Gann Road in Three Mile Harbor, and the two Town commercial docks in Montauk Harbor by commercial fishing vessels;
- Application of the Suffolk County Right-to-Fish Law, and consideration of a local Right-to-Fish Law, the provisions of which shall restrict public nuisance actions against fishing operations;

 Protection and enhancement of water quality through establishment of *No-Discharge Zones* and other measures recommended in Water & Air Resources Policies #30-44, *Harbor Management Plans* and the *Boater Education Project* included in the **Projects** section, and implementation of the *Harbor Protection Overlay District* recently approved by the Town (Appendix C).

The following guidelines shall be used in determining the consistency of actions with this policy:

- (1) The action shall give priority to those traditional and/or desired uses which are dependent on or enhanced by a location adjacent to the water.
- (2) The action will enhance, or not detract from, or adversely effect, existing traditional and/or desired anticipated uses.
- (3) The action shall not be out of character with, nor lead to development which would be out of character with, existing development in terms of the area's scale, intensity of use, and architectural style.
- (4) The action must not cause a site to deteriorate.
- (5) The action will not adversely affect the existing economic base of the community. For example, waterfront development designed to promote residential development might be inappropriate in a harbor area where the economy is dependent upon tourism and commercial fishing.
- (6) The action will not detract from views of the water and Three Mile or Montauk Harbor, particularly where the visual quality of the area is an important component of the area's appeal and identity.
- (7) The action will be consistent with protection and enhancement of water quality as set forth in **Policies #30-44** of the LWRP, and with habitat protection as set forth in **Policy #7**, will not increase risks of flooding and erosion as set forth in **Policies #11-17**, and will not diminish public access or recreational resources as set forth in **Policies #9 & #19-22**.
- (8) The action will be consistent with Town and Town Trustee practices for harbor management as regards mooring, anchorage, docks and bulkheads, boat waste, and harbor management initiatives incorporated within the LWRP such as the *Harbor Protection Overlay District* (Appendix C), Local Laws pertaining to ferries (§153-1-20, §153-5-26, §153-5-50 and §75-3-20), and LWRP **Projects** for *Revitalization of Montauk Harbor, Wetland Restoration, Fisheries Shoreside Support Infrastructure, No-Discharge Zones, Boater Education, Stormwater Abatement, Septic Waste Remediation, Dredging Projects, Montauk Harbor Channel Sand Bypass System, and Open Marsh Water Management.*

- (9) In order to reduce conflict, congestion and competition for space in the use of the harbor area, to allow optimum use of the waterfront and adjacent surface waters, and to reduce the environmental effects of waterfront development and use, the Town will apply the following harbor management guidelines for siting and design of docks, boat ramps, moorings, marinas and marina support facilities:
 - a. Docks will be adequately spaced from each other, shallow areas and adjacent properties to ensure safe movement to and from channels and avoid obstructing adjacent uses.
 - b. Permanent structures will be minimized. Town and Town Trustee policy is to allow removable floating docks only, in locations where docks are permitted. With the exception of the easterly side of Three Mile Harbor from Will Curl Highway (the wire) north to the breakwater, the Town Trustees' practice is not to allow installation of new docks (either fixed or floating) in any of their harbors.
 - c. All new marina proposals or expansion of existing marinas shall include sufficient parking, natural areas, toilet facilities, and marine pumpout facilities. Adequate restroom facilities for the use of marina patrons shall be required to discourage any overboard discharge of sewage from boats and to protect water quality.
 - d. Prevent infringement of federal or other established navigation channels.
 - e. Prevent infringement of Town or Town Trustee owned bottomlands.
 - f. Ensure adequacy of service floats, walkways, gangways, lighting and safe design of utilities, including electric, water and sanitary lines.
 - g. Utilize best management practices to prevent fuel spills, or introduction of toxic or hazardous materials into surface waters, as delineated in **Water and Air Resources Policies #30-44**.
 - h. Avoid oversized structures. Avoid structures that conflict with the visual character of the working waterfront.
 - i. Prohibit on-water residences and all other non-water-dependent uses over the water.
 - j. Non-water-dependent structures should be set back from the shoreline.
 - k. Trash receptacles shall be plentiful and convenient to encourage the proper disposal of trash and waste.

POLICY 5 ENCOURAGE THE LOCATION OF DEVELOPMENT IN AREAS WHERE PUBLIC SERVICES AND FACILITIES ESSENTIAL TO SUCH DEVELOPMENT ARE ADEQUATE, EXCEPT WHEN SUCH DEVELOPMENT HAS SPECIAL FUNCTIONAL REQUIREMENTS OR OTHER CHARACTERISTICS WHICH NECESSITATES ITS LOCATION IN OTHER COASTAL AREAS.

Explanation of policy:

This policy is intended to promote the historical pattern of growth in East Hampton, which has concentrated development in village and hamlet centers, with outlying districts serving as residential and open space areas. This attractive rural pattern should be encouraged for esthetic, quality of life,

and planning purposes as it minimizes expenditures and need for infrastructure, transportation, and other facilities, and serves the greatest number of people most efficiently.

Adherence to this policy will help to strengthen commercial centers and minimize sprawl. Large blocks of preserved open space have been protected in the areas farthest from commercial centers in Northwest, Napeague and Montauk. By maintaining this pattern of decreasing density and intensity of development with distance from town centers, the areas needing infrastructure improvements and services will be reduced. The Town should continue to encourage concentration of development within hamlet areas by not extending public water or other growth inducing infrastructure to remote or environmentally sensitive areas.

The pattern of development which exists and is permitted within the coastal zone in the Town of East Hampton is described in the Inventory and Analysis for this section, and is shown on Maps II-1A and II-1B, Existing Land Use. Most waterfront land uses consist of low density residential and preserved open space uses, or of water-dependent or water-enhanced uses in Waterfront (WF) or Resort (RS) Districts.

There are no areas in the Town which are connected to sewers. The combination of naturally sandy soils and generally low density development has made the use of on-site septic systems suitable for most development. There are two tertiary sewage treatment plants in the Town which serve high density developments in the Town's coastal area: the Rough Rider's Condominium (Reach 5) and the Montauk Manor (Reach 6). Several additional locations have denitrification and other alternative systems to treat septic wastes. Development should continue to be planned to avoid the future need for sewers and sewage treatment.

Similarly, except for the town centers and hamlets, on-site wells rather than public water mains serve most of the area of the town. According to the 1987 Town Comprehensive Water Resources Management Plan (TOEH, 1987), the major portion of full-time residences are served by individual homeowner private wells. In the waterfront areas, the land uses in Reaches 1,2,3,7,8, 11 and 12 are all served by on-site wells. Only portions of Amagansett and Montauk within Reaches 4, 5, 6 and 9 are served by public water. Suffolk County Water Authority is the public water supplier serving the East Hampton community.

Contamination of drinking water supplies in Napeague and more recently in the residential area adjacent to Cedar Point Park (Landfall Subdivision) have led to the decision to extend public water long distances adjacent to low-density residential and parkland uses. The Napeague water main was extended approximately 5 miles, traversing thousands of acres of undevelopable parkland. The Northwest water main is proposed to be extended approximately 7 miles, adjacent to generally low density residential land uses which would not ordinarily require public water service. The estimated cost for extension of public water to these areas is over \$1 million dollars each. Suffolk County Water Authority is planning to extend water mains to connect the Napeague pipeline to Montauk in an attempt to alleviate problems associated with over pumping the existing Montauk wells. The East Hampton Town Board has required, and the Water Authority has agreed to, a limit of 20 million

gallons annually on the amount of water transported from mainland East Hampton to Montauk via this water main.

In addition to the cost constraints, extending public water through low density residential, parkland and other coastal areas outside of town centers and hamlets have other potentially undesirable impacts. Extending water mains is the quintessential growth inducement factor. Additional growth in areas where there is public water, rather than in areas which can sustain development, can degrade sensitive environmental features, encourage growth in flood prone areas, deplete recharge of public water supply wells, alter wetlands and change groundwater conditions. Before public water was extended to these areas, specific environmental impact statements were prepared examining these and other site specific impacts, evaluating alternatives and formulating mitigation. Unless similar thorough environmental analyses are prepared, public water mains should not be extended to the areas in the coastal zone which are not already served. The Town Trustees have supported the extension of public water to Lazy Point, subject to stringent environmental review by the Town.

POLICY 6 EXPEDITE PERMIT PROCEDURES IN ORDER TO FACILITATE THE SITING OF DEVELOPMENT ACTIVITIES AT SUITABLE LOCATIONS.

In the Town of East Hampton, State and local agencies will make every effort to coordinate and synchronize existing permit procedures and regulatory programs for specific types of development activities and in areas suitable for such development, as long as the integrity of the regulations' objectives is not jeopardized. Types of development activities that will be expedited include those which meet LWRP policy objectives of providing significant waterfront access to the general public, which supply or enhance water-dependent or water-enhanced public recreational resources, or which contribute significantly to improvement of surface water quality, as set forth in the applicable policies of the LWRP.

Efforts will be made to ensure that each agency's procedures and programs are synchronized with other agencies procedures at each level of government, and the Town will assume lead agency status in all such applications to ensure adherence to local standards. The Town presently assumes such lead agency status and attempts to expedite processing of permits for coastal development and other applications consistent with the policy objectives of the LWRP and other environmental goals, e.g. for a marina installing toilets or other shoreside facilities leading to water-quality improvements. However, at present such activities in the coastal zone may require permits from the federal Army Corps of Engineers, NYS DEC, and the County Health Department, as well as a local Natural Resources Special Permit.

The Town also has an expedited emergency permit procedure to address storm damage and other emergency conditions, allowing in-place in-kind replacement of waterfront structures for waterdependent uses in Waterfront (WF) District zones and certain other areas identified in **Flooding and Erosion Policies #11-17**. There is also an administrative permit procedure for those activities in the coastal zone which meet existing requirements and setbacks, which can be processed on an expedited basis without public hearings, although the legal notice requirement and accompanying legal interval remains necessary. The Town is willing to work on a streamlined permitting procedure, using a single form, that would include standards of all levels of government, and which could be issued locally. Regulatory programs and procedures will be coordinated and synchronized between levels of government, and if necessary, legislative and/or programmatic changes will be recommended.

When proposing new regulations, an agency will determine the feasibility of incorporating the regulations within existing procedures, if this reduces the regulatory burden on a particular type of development and will not jeopardize the integrity of the regulations' objectives. Proposed new regulations will be submitted to the Town and NYS DOS for determination of consistency with the LWRP and State coastal policy objectives.

SECTION III

SIGNIFICANT HABITATS POLICIES #7-8

A. INTRODUCTION

East Hampton is home to an extraordinary array of wildlife and plants, some rare and endangered, which are an intrinsic part of its heritage. This policy section includes a general description of the Town's ecological communities as well as detailed inventories of the habitats and sensitive species found within the 12 reaches of the coastal area. State and locally designated Significant Coastal Fish and Wildlife Habitats (SCFWH) are identified, and the State's Coastal Policies are adapted for local conditions. State **Policy #7** and local **Policies #7A and #7B** are intended to protect Significant Coastal Fish and Wildlife Habitats and the Town's rich diversity of native flora and fauna.

The following abbreviations are used to describe species status:

E	Listed as Endangered by NYS
Т	Listed as Threatened by NYS
SC	Listed as Special Concern by NYS
E-FED	Listed as Endangered by federal government
T-FED	Listed as Threatened by federal government

The flora and fauna are identified in the text by the common name. Latin names are provided in the summary tables.

B. TOWNWIDE DESCRIPTION OF FLORA AND FAUNA

1. Geologic Setting

The East End of Long Island is a complex ecosystem consisting of physical (non-living) and biological (living) components and their interactions. The physical components include the open waters and embayments of Gardiners Bay, Napeague Bay, Block Island Sound and the Atlantic Ocean, and the coastal lowlands, headlands, bluffs, adjacent upland areas and small offshore islands. These features continue to develop and change through the action of tides and offshore currents, weathering from precipitation and surface runoff, and the effects of human development. The biological components include the plants and animals in a wide range of ecological communities in and around the East End.

Long Island lies on the boundary between the ancient rocks of New England and the more recently formed sediments of the coastal plain that stretches along the East Coast from Florida to New York. Long Island itself was created by the vast forces of ice sheets which covered the region during two glacial advances. The retreating ice sheets left behind the geologic features, moraines, and glacial outwash deposits that dominate the topography and surface soils of Long Island today. Long Island is marked by two terminal moraines that indicate the extent of the glaciers' progress. The Ronkonkoma moraine stretches from Lake Success to Montauk and marks the southern reach of glaciation in the region. The more northerly Harbor Hill moraine extends from Brooklyn to Orient Point.

The outline of the coastline began to emerge about 20,000 years ago, as the waters of the Atlantic flowed into the breach formed by the land forms rising in the wake of the retreating glaciers. The present shoreline was formed in the last 3,000 years as the rise in sea level and land surface stabilized. As the shoreline began to take shape, embayments and shallows formed which supported a vast system of wetlands. When the last glacier finally melted, approximately ten thousand years ago, pioneer arctic plants followed the receding ice. As the climate warmed, more southerly species became established. The process continues to this day with the result that a wide variety of plants and animals, including both northern relicts and southern pioneer species, occur on Long Island (Peters, 1973).

The South Fork of Long Island is the richest area in New York State for rare plant species, a good percentage of which occur in East Hampton; one of these, sandplain gerardia is listed as a Federally Endangered species. Many of New York State's species of Endangered, Threatened and Special Concern Animals occur at one time or another during the year over the lands or in the waters of East Hampton. The Town also contains many species of commercial and recreational importance. The integrity of native upland and aquatic communities is an important factor in the Town's economic well-being.

2. Ecological Communities

The following sections contain brief descriptions of the various ecological communities and the plants and animals found within the Town's coastal area and an analysis of their distribution within each reach. This is followed by an analysis of those significant ecological communities within East Hampton that have been recognized on the local, county and state levels.

To appreciate the complexity of East Hampton's living components, it is useful to recognize the region's many ecological communities, and to understand how various ecological communities interact as ecological systems and complexes. An ecological community can be defined as a variable assemblage of interacting plant and animal populations that share a common environment (Reschke, 1990, pg. viii). The ecological communities within the Town of East Hampton can be categorized in a number of different ways:

(a) Site Types

The Town of East Hampton Comprehensive Plan (Town of East Hampton, 1984) organizes the town's upland areas into site types. These are defined as "subregions which share common characteristics and capabilities. The major influences and characteristics which distinguish each site type are soil, water, vegetation and land form". The Comprehensive Plan identifies the following twelve site types:

Estuarine	Semi-enclosed bodies of coastal water where fresh and salt water
	mix.
Beaches and Dunes	A dynamic land form composed of sand which is easily transported by wind and water and is subject to the forces of waves, ocean
	currents and wind.

Moorlands	A maritime dwarf forest characterized by the dominance of shad bush (<i>Amelanchier spp.</i>) and interconnected perched ponds and wetlands.
Krumholz Forest	A maritime influenced forest characterized by a low, wind-clipped canopy.
Downs	One of the few remaining natural prairies in New York State.
White Pine Forest	A native white pine forest, the only example of this site type on Long Island.
Deciduous Forest	Oak-hickory woods containing varying number of beech, birch, dogwood, tupelo and red maple depending on the location.
Pine Barrens	A fire dependent, pitch pine and scrub oak vegetation association with dry and infertile soils, roughly corresponds to the location of the prime aquifer recharge areas.
Prime Agricultural Land	Areas of prime agricultural soils capable of being farmed.
True Groundwater Table Pond	The visible portion of the groundwater reservoir.
True Groundwater Table Streams	Streams fed by groundwater.
Perched Water Table	Wetlands, ponds or streams that occur over clay strata or clay lenses above the true groundwater table.

(b) Aquatic Site Types

There is no major work that describes all of East Hampton's aquatic communities. However, these could be categorized as follows (Hassler, Penny, 1989):

Bays and Harbors	Bar-built estuaries or drowned river valleys. Salinities vary from 15 - 30 ppt., serve as nurseries for migratory fish. Prime area for shellfish. High species diversity. Often bordered by	
	marsh ecosystems.	
Ocean Edges	Dynamic underwater land form. Salinities greater than or equal to 30 ppt. Characterized by long shore currents and migration of sand. Low species diversity.	
Fresh Ponds	Depressions formed by glacial deposits of ice or low elevations which are surrounded by higher elevations. These depressions either catch rain and runoff or expose a portion of the water table.	
Coastal Ponds	Enclosed bodies of coastal water. High species diversity. Can be seasonally influenced by surrounding coastal water due to spring tides.	
Streams	A directional, confined, freshwater flow across and from a source to an escapement. Low species diversity.	
Tidal Creeks	A directional, confined flow of seawater that reverses its direction according to tidal flow. Low species diversity, high productivity.	

Springs and Seeps

Groundwater that trickles out the side of banks or slopes. Low species diversity. Support unique floral communities.

(c) New York Natural Heritage Program

The categorization of specific ecological communities within East Hampton can also be achieved using the more comprehensive classification system developed by the New York Natural Heritage Program (Reshke, 1990). The classification is organized by "systems" and each system is composed of "subsystems" which are in turn composed of many community types. A wide variety of different systems, subsystems and ecological communities are identified in East Hampton. The classification is designed to be used by biologists to identify communities in the field and can be used in combination with the Natural Heritage ranking system to gauge the relative rarity of community types and to help make natural resource management decisions.

The following ecologically significant natural communities have been identified and documented through field work within East Hampton by the New York Natural Heritage Program:

Maritime Grassland	Coastal Plain Pond Shore	Brackish Intertidal Shore
Maritime Oak-holly Forest	Maritime Interdunal Swale	Brackish Tidal Marsh
Maritime Heathland	Coastal Salt Pond	Salt Marsh

(d) Ecological Complexes and Significant Coastal Fish and Wildlife Habitats

Although ecological communities are identified as units, they are not discrete. Individual ecological communities are linked through geophysical, biochemical, and biological characteristics with other ecological communities to form larger ecological systems. These ecological systems can be grouped into geographic areas termed ecological complexes. Understanding these ecological systems, and not solely their component communities, is crucial to effectively managing a region's living resources.

In some areas of East Hampton, assemblages of ecological communities make up rare ecological systems or provide particularly significant benefits to populations of fish and wildlife. These assemblages comprise Significant Coastal Fish and Wildlife Habitats (SCFWH), designated under the Waterfront Revitalization of Coastal Areas and Inland Waterways Act, and these can, in turn, be grouped as a series of broader regional ecological complexes. The delineation of these ecological complexes in East Hampton is based on the information on ecological communities and habitat requirements of various species presented in the Department of State's Coastal Fish and Wildlife Habitat Rating Forms and the Northeast Coastal Areas Study (USFWS, 1991).

In 1991 the USFWS identified four regionally significant ecological complexes within East Hampton:

- Shelter Island Harbor Bays Complex
- · Accabonac Harbor Area
- · Gardiners Island and Point

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Montauk Peninsula Complex

Locations of these complexes are shown on Significant Habitats Map III-1. These areas are comprised of groupings of SCFWH's, surrounding waters and upland areas and locally significant coastal fish and wildlife habitats.

SCFWH's are defined as geographic areas that have been determined to be of statewide significance, based on a quantitative evaluation of a combination of ecological factors. These factors include whether the area serves one or more of the following functions:

- · Is essential to the survival of a large portion of a particular fish or wildlife population
- Supports populations of species which are endangered, threatened, or of special concern
- Supports populations having significant commercial, recreational, or educational value
- Exemplifies a habitat type which is not commonly found in the state or in a coastal region

Sixteen areas within the Town of East Hampton have been designated as SCFWHs by the NYS DOS (DOS, 1987):

Sag Harbor/Northwest Harbor Northwest Creek Cedar Point Peninsula Alewife/Scoy Pond Wetlands Three Mile Harbor Accabonac Harbor Napeague Harbor Hither Hills Uplands Fort Pond Culloden Point Lake Montauk

Big and Little Reed Ponds Oyster Pond Napeague Beach Atlantic Double Dunes Gardiners Island

Locations of these designated SCFWHs are illustrated on Significant Habitats Map III-1. Not all of the designated SCFWHs are located within an assemblage of communities identified as regionally significant ecological complex.

In addition, the Town of East Hampton has designated five Locally Significant Coastal Fish and Wildlife Habitats. These areas have been assessed using the same methodology as the State designated SCFWH's. This assessment showed that although these areas had not been State designated, they were of equivalent local importance. These locally designated SCFWH areas are:

Three Mile HarborMontauk PointFresh Pond-Bell Estate WetlandsGeorgica Pond

Wainscott Pond

Locations of these Locally Significant Coastal Fish and Wildlife Habitats are also denoted on Significant Habitats Map III-1, opposite.

Although the ecological complexes and individual habitats of East Hampton continue to support large and healthy assemblages of plants and animals, advancing development has destroyed, fragmented, or otherwise impaired many of the original natural communities. Development has modified the physical characteristics of shoreline and upland areas, removed food sources and cover, introduced non-indigenous species, degraded the waters of the Town, and otherwise altered the natural environment.

Impairments to the ecological complexes and individual habitats can be categorized as follows:

Physical loss:	Immediate physical loss of elements within ecological complexes is the most obvious impact and also may be referred to as a primary impact.
Degradation:	Degradation of elements within ecological complexes does not refer to the outright physical loss of these elements, but rather to a negative change in the quality of these elements, caused by factors within or adjacent to a complex. This degradation usually occurs over a more extended period of time than with a physical loss and also may be referred to as a secondary impact.
Functional loss:	Functional loss results not from major physical changes or even from changes in the basic quality of elements within a complex, but rather from inappropriate adjacent or internal uses (homes, marinas, various recreational uses) that are disruptive to certain species of animals and cause a change or shift in their activities.

As will be seen in the detailed examination of the ecological complexes and individual habitats, all three types of impairments have had and continue to have negative impacts on the Town's natural coast.

The following narrative identifies the main features of the ecological complexes, component habitats and individual habitats in each reach within the Town of East Hampton, and a consideration of activities likely to impair them. Information has been extracted from the Northeast Coastal Areas Study (USFWS, 1991) and the Department of State's Coastal Fish and Wildlife Habitat Rating Forms (DOS, 1987).

C. DETAILED REACH INVENTORY

1. Ecological complexes and Significant Coastal Fish and Wildlife Habitats

The location of the Ecological Complexes and Significant Coastal Fish and Wildlife Habitats are illustrated on Significant Habitats Map III-1.

(i) Reach 1

(a) Shelter Island - Harbor Bays Complex

Location:

This habitat complex of land and waters is located between the two eastern forks of Long Island, and includes portions of Shelter Island, Shelter Island Sound, Sag Harbor Bay, Northwest Harbor and Gardiners Bay and a narrow section of coastline along the bay shoreline in the vicinity of Sag Harbor. This habitat complex is located in the Towns of East Hampton, Southampton, and Shelter Island. The area of the complex located within East Hampton is situated in Reach 1.

General habitat description:

There are three principal habitat units within this complex: Shelter Island; Open Bay Water; and South Fork Wetlands and Beaches. The larger peninsular area of Shelter Island is included entirely within the Mashomack Preserve and contains some of the finest examples of undisturbed coastal ecosystems in the region. This area contains a large diversity of habitats from mature deciduous forest and an extensive system of freshwater and brackish wetland to coastal beaches, dunes and bluffs. Deciduous forests are particularly diverse on Shelter Island, and are primarily dominated by oaks, of which scarlet, red, black and chestnut oaks are the most characteristic. The ground layer is dominated by dwarf heaths, mostly black huckleberry and blueberries. Sand and pebble beaches and dunes in the area are often sparsely vegetated closest to the water and increasingly vegetated away from the water with such characteristic species as beach grass, seaside goldenrod and beach pea. Freshwater wetlands include shrub swamps of sweet pepperbush, swamp azalea and highbush blueberry, white pine and red maple swamps, and freshwater marshes of diverse floristic composition, with many species of ferns, grasses, sedges and herbs.

The embayed areas of Sag Harbor and Northwest Harbor, as well as the portions of Shelter Island Sound and Gardiners Bay included within the boundary, are broad expanses of moderately shallow water, ranging in depth from 6 to 20 feet, and bordered by mostly undeveloped lands and tidal marshes. Mean tidal range in this area is approximately 2.5 feet. The marshes at Northwest Creek display classic marsh vegetation, with cordgrass, groundsel bush and marsh elder grading into oak and pitch pine forests. Alewife and Scoy Pond wetlands on the South Fork shore consist of a network of freshwater and brackish ponds, kettles and creeks with a diverse assemblage of swamps, marshes and aquatic vegetation.

Significance/uniqueness of area:

This area, particularly the eastern section of Shelter Island, contains one of the highest nesting densities and numbers of osprey (T) in the region, second only to Gardiners Island. It is likely this population will continue to expand under present conditions. The sand beaches of Mashomack Preserve, Cedar Point, Northwest Creek and others in the reach are regionally important, though seasonally variable, nesting beaches for piping plover (E, T-FED) and least tern (E). Sea-beach knotweed, a regionally rare plant, also occurs on beaches in this area. The tidal marshes and freshwater wetlands are used extensively as feeding areas for colonial wading birds and overwintering waterfowl, and American black ducks nest here. The open bay waters and tidal

marshes along the shoreline support large numbers of wintering waterfowl of regional significance, including common loon (SC), American black duck, mallard, Canada goose, greater and lesser scaup, common goldeneye red-breasted merganser, bufflehead, old squaw and canvasback.

Northern diamondback terrapins (SC) feed and nest in the tidal marshes and sandy creek banks throughout the area, particularly around Coecles Harbor. Recent evidence indicates that the waters and bay bottoms of the Peconic Bays, Gardiners Bay and other bodies of water in this area may serve as significant summer feeding and nursery habitat for juvenile Atlantic Ridley (E, E-FED) turtles, one of the rarest sea turtle species. Harbor seals use several rock areas in Sag Harbor Bay and Northwest Harbor as haulouts during winter and early spring, often in fairly large concentrations. The harbor areas and bays are also productive habitats for finfish and shellfish, supporting a regionally significant commercial shellfishery for bay scallop and, to a lesser extent, American oyster. These waters serve as important nursery and feeding areas for weakfish, winter flounder and porgies or scup. Scoy and Alewife Ponds and their associated stream system are one of the few remaining alewife spawning areas on Long Island.

In addition to its significant fish and wildlife populations, this area, particularly Shelter Island, contains forests and other vegetation types that are both unusual in their composition and associations as well as being relatively undisturbed and well-developed. Examples include a nutrient-poor white pine swamp with several northern plant species growing in association with it, and a maritime oak forest exposed to salt spray with a shrub under story dominated by black huckleberry and bayberry.

Threats:

Residential development along the South Fork shoreline in this area poses a potential threat to water quality and elimination of shoreline habitat of regionally important fish, wildlife and plant species. The impressive and growing population of ospreys in the area attests to the present quality of their nesting and feeding habitat. It could, however, be reversed by poorly-planned development or shoreline construction. Human disturbances to nesting beaches of piping plovers (E, T-FED) and terns, in the form of destruction of nests or eggs through trampling, off-road vehicles, boat landings, vandalism or pets, are a common problem throughout the area and can lead to seasonal or even permanent abandonment of nesting sites. Vegetation succession can also lead to seasonal or even permanent abandonment of nesting sites if they become unsuitable for nesting. Ospreys (T) are also affected by human disturbances during the nesting and fledging periods.

Conservation considerations:

Protection of water quality and significant aquatic habitats should be given the highest priority to ensure the continued high value of this area to wintering and migrating waterfowl, shellfish spawning and juvenile finfish, marine and estuarine turtles, nesting waterbirds and ospreys (T). Protective measures should include the full array of available mechanisms, including regulatory and permitting overview, enforcement of existing environmental laws and regulations, implementation of ecologically sound planning and zoning policies, cooperative conservation and management agreements, conservation easements, land exchanges and acquisition. There are a number of

opportunities and challenges here for various governmental agencies, conservation organizations, citizen groups and private landowners to work cooperatively to conserve and protect the living resources of this area. Disturbances to nesting shorebirds, overwintering waterfowl and ospreys should be minimized or eliminated by a variety of means, including protective fencing, area closures, posting warden patrols and public education. Where predation of nesting terns and piping plovers by pets or feral animals is a problem, predators should be removed. Objectives and tasks outlined in the piping plover recovery plan should be implemented. Conservation and management plans, including fire management for certain rare plants, for example, sea-beach knotweed, or unique plant communities on Suffolk County parklands should be developed to enhance, restore and protect regionally important natural communities.

The Shelter Island - Harbor Bays Complex contains the Sag Harbor and Northwest Harbor SCFWH, the Northwest Creek SCFWH, the Alewife and Scoy Pond wetlands SCFWH and the Cedar Point Peninsula SCFWH. All are located within Reach 1.

(b) Sag Harbor and Northwest Harbor SCFWH

Location and description of habitat:

Sag Harbor Bay and Northwest Harbor are adjoining bays on the north shore of the south fork of Long Island. The bays are located between North Haven and Cedar Point, in the Towns of East Hampton, Southampton, and Shelter Island, Suffolk County (7.5 Quadrangles: Greenport, NY; and Gardiners Island West, NY). This area is approximately 3000 acres in size, consisting primarily of open water. However, the fish and wildlife habitat also includes the tidal wetlands associated with Little Northwest Creek and its tributary Rattlesnake Creek, the embayments and creeks on the eastern shore of North Haven, and the exposed rocks located near the Sag Harbor Cove jetty. Eelgrass beds fringing the eastern shore of the North Haven peninsula to Tyndal Point are included in this habitat. The New York Natural Heritage Program has documented globally rare sea level fen at Little Northwest Creek. Water depths in most of Sag and Northwest Harbors range from 6 to 20 feet below mean low water. The harbors are bordered by much undeveloped land, including Suffolk County's Cedar Point Park, the Town-owned Grace Estate, Sag Harbor State Park or Barcelona Neck (190 acres of land surrounding Little Northwest Creek), and the Nature Conservancy's Mashomack Preserve. The only major developments along the entire shoreline of these bays are the boating facilities in Sag Harbor Cove.

Fish and wildlife values:

Sag Harbor Bay and Northwest Harbor are generally representative of the Peconic Bays ecosystem, with broad expanses of moderately shallow water. This habitat type is unlike the very shallow bays on the south shore of Long Island or the relatively narrow bays on the north shore. Little Northwest Creek is an important component of this ecosystem, contributing to the biological productivity of the area. Little Northwest Creek supports the globally rare sea level fen community. The eelgrass beds fringing the Bay and Harbor are critical for the area's important shellfishery, and as feeding grounds for several federally endangered and threatened sea turtles frequenting the region.

Sag Harbor Bay and Northwest Harbor are important to fish and wildlife throughout the year. Least tern (T), roseate tern (E), common tern (T), piping plover (E, T-Fed), and osprey (SC) feed in the harbor area. Diamondback terrapin have been observed along the harbor coastline and tidal creeks but the importance of the area to this species is not well documented. From November through March, Sag Harbor Bay and Northwest Harbor support wintering waterfowl concentrations of county-level significance. Mid-winter aerial surveys of waterfowl abundance for the ten year period 1986-1996 indicate average concentrations of over 1,295 birds in the bays each year (10,772 in peak year--1994), including Canada goose, scoter, old squaw, bufflehead, goldeneye, scaup, canvasback, merganser, American black duck, and mallard.

The undeveloped forest areas surrounding the harbors, such as the Barcelona Neck coastal oak-heath forest, are an important buffer area and support a variety of breeding birds, including black-throated green warbler, brown creeper, whip-poor-will (SC), veery, Virginia rail, wood duck, and sharp-tailed sparrow. Some of these species breed in the wetlands of Little Northwest Creek.

Concentrations of harbor seals also occur in Sag Harbor Bay and Northwest Harbor from November 15 through May 15. Exposed rocks near the Sag Harbor Cove jetty provide an important "haulout" area, which seals use for resting and sunning. This location is one of about five major haulouts around Long Island, serving as a focal point for seals feeding in the Sag Harbor Bay area.

Portions of Northwest Harbor and the Northwest Creek estuary may be important feeding and resting habitat for juvenile Atlantic ridley sea turtles (E), especially during the late summer and fall. Prey species for Atlantic ridley (lady crab, spider crab) have been documented within and outside of Northwest Creek, and these sea turtles are frequently caught in pound nets in the Northwest Harbor area. Spider crabs, also primary prey items of loggerhead (T) sea turtles, have been documented at locations in Sag Harbor Cove, and loggerheads have been caught in pound nets in the Sag Harbor Bay area. Extensive eelgrass beds occur along the shorelines of Sag Harbor Bay and Northwest Harbor, and may provide important feeding habitat for Green turtles (T), which have been documented in this area.

Sag Harbor Bay and Northwest Harbor are productive habitats for marine finfish and shellfish. This area is one of the most important bay scallop producing areas on Long Island, supporting a commercial shellfishery significant in the northeastern United States. Oysters are present in lesser numbers, providing limited recreational and commercial shellfishing opportunities. The bays serve as nursery and feeding areas (April-November, generally) for many estuarine fish species, such as weakfish, winter flounder, and scup. Northwest Harbor sustains a commercial and recreational winter flounder fishery of county-level significance. Fishing effort in the area extends from spring through fall.

The marsh habitats in the Little Northwest Creek area support southern leopard frog (SC), spotted turtle (SC), and a number of listed and rare plant species documented by the New York Natural Heritage Program, including: marsh straw sedge (*Carex hormathodes*), slender blue flag (*Iris prismatica*), reticulate nutrush (*Scleria reticularis* var *pubescens*), slender spikegrass (*Chasmanthium*

laxum), velvety lespedeza (*Lespedeza steuvei*), seabeach knotweed (*Polygonum glaucum*), silverweed (*Potentilla anserina var egedii*), salt marsh aster (*Aster subulatus*), long-tubercled spikerush (*Eleocharis tuberculosa*, T), and the best location in New York State of seaside goldenrod (*Solidago sempervirens var mexicana*, E). The rare Rambur's forktail damselfly (*Ischnura ramburii*) is also found in this area.

Impact assessment:

Any activity that would substantially degrade the water quality in Sag Harbor Bay or Northwest Harbor would affect the biological productivity of this area. All species of fish and wildlife would be adversely affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity or sedimentation, and waste disposal, including vessel wastes. It is essential that high water quality be maintained in the area to protect the shellfishery. Increased fertilizer and water use, or introduction of pesticides and herbicides in the area may adversely affect water quality. Efforts should be made to control discharges of sewage from recreational boats and upland sources. Thermal discharges, depending on time of year, may have variable effects on use of the area by marine species and wintering waterfowl. Installation and operation of water intakes would have significant impacts on juvenile (and adult, in some cases) fish concentrations and sea turtles, through impingement or entrainment.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of bays, harbors, and tidal creeks can have adverse effects on aquatic vegetation and fish and wildlife populations. Use of motorized vessels should be controlled (*e.g.*, no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and vegetated wetlands.

Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development (*i.e.*, natural beach or salt marsh), may result in the loss of productive areas which support the fish and wildlife resources of Sag Harbor Bay and Northwest Harbor. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches. Human disturbance to marsh habitats should be limited to protect rare plants in the Sag Harbor Bay and Northwest Harbor area. Encroachment of marshes by common reed is a significant threat in the Little Northwest Creek area. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Undeveloped woodlands bordering Sag Harbor Bay and Northwest Harbor are particularly important for maintaining the water quality and habitat value of the harbors and should be preserved as a buffer zone. These upland areas, including Cedar Point County Park, Northwest Harbor County Park, the Town-owned Grace Estate, and State-owned Barcelona Neck and Little Northwest Creek, are considered core forest areas in the Town of East Hampton, essential for the preservation of forest interior bird species.

Any permanent alteration or human disturbance of the harbor seal haulout area, or obstruction of seal migrations, would adversely affect this species. Significant underwater noise, from dredging or other activities, could also preclude harbor seals from using the area.

(c) Northwest Creek SCFWH

Location and description of habitat:

Northwest Creek is located south of Northwest Harbor, on the south fork of Long Island, in the Town of East Hampton, Suffolk County (7.5' Quadrangles: Greenport, NY; Gardiners Island West, NY; and Sag Harbor, NY). The fish and wildlife habitat consists of approximately 440 acres of tidal wetlands, of which about one-third is a shallow bay (less than 4 feet deep at mean low water) which connects to Northwest Harbor through a narrow inlet. This area displays a classic zonation of natural estuarine habitats, including maritime beach and dunes, intertidal creek banks, cordgrass marshes, salt marsh shrub communities, red maple-black gum swamp, and transition areas into the surrounding oak-pine forests. The habitat area also includes approximately 25 acres of immediately adjacent upland forest areas, including coastal oak heath, coastal oak-hickory, maritime post oak, and maritime red cedar forest communities. The New York Natural Heritage Program has identified Northwest Creek as containing the best example of globally rare sea level fen in New York State. Northwest Creek is located within an undeveloped parkland owned by Suffolk County. The only human development within the area is a residential area at Northwest Landing at the northeast end of the bay. A small amount of shoreline in this area has been bulkheaded for Town of East Hampton public boat docking facilities.

Fish and wildlife values:

Northwest Creek is one of only a few examples of relatively large, undisturbed, estuarine ecosystems on Long Island, outside of the major coastal bays on the south shore. The diversity and well-defined zonation of plant communities is especially rare in the region, as is its location within a watershed which is almost entirely undeveloped. This area contains the best example of globally rare sea level fen in New York State. Northwest Creek is utilized by a variety of fish and wildlife species, including several which are of special ecological and economic significance.

Osprey (SC) have nested successfully in the area. Sharp-tailed sparrow and willet nest in the creek's high marsh zone. Other probable nesting bird species at Northwest Creek include green heron, Canada goose, belted kingfisher, horned lark (SC), and red-winged blackbird. The creek serves as an important feeding area for osprey, canvasback, American black duck, bufflehead, mallard, Virginia rail, herons, egrets, and other wildlife. Northern harrier (T) feed during winter in Northwest Creek marshes. Diamondback terrapin nest on the beach bordering the creek. The tidal creek and salt marshes provide feeding areas and cover for the terrapins during their nesting period (April-July).

The sand peninsula which separates Northwest Creek from the harbor was replenished with dredged material in 1995 and 1999, and is suitable nesting habitat for least terns (T) and piping plovers (E, T-Fed). Least terns nested here in the 1970's; during the late 1980's between 10 and 45 pairs annually were observed nesting at this location. This species was observed nesting here once again

in 1996 and 1997 after a five-year absence. Piping plover were observed nesting intermittently during the 1987-1996 period (a total of three pairs over that span), and two pairs at Northwest Creek in 1997. Town of East Hampton piping plover monitoring documented three fledges at this site in both 1998 and 1999.

The Northwest Creek estuary and nearby portions of Northwest Harbor may be important feeding and resting habitat for juvenile Atlantic ridley sea turtles (E), especially during the late summer and fall. Prey species for Atlantic ridley (lady crab, spider crab) have been documented within and outside of Northwest Creek, and these sea turtles are frequently caught in pound nets in the Northwest Creek/Northwest Harbor area. Eelgrass beds outside the creek inlet and along the nearby eastern shore of Northwest Harbor provide suitable feeding habitat for Green sea turtles (T).

The New York Natural Heritage Program has identified a number of rare and listed plant species in the Northwest Creek site. These include: bushy rockrose (*Helianthemum dumosum*, T), marsh fimbry (*Fimbristylis castanea*, T), clustered bluets (*Hedyotis uniflora*, T), slender blue flag (*Iris prismatica*), coastal goldenrod (*Solidago eliotii*), marsh straw sedge (*Carex hormathodes*), pine barren sandwort (*Minuartia caroliniana*), and the best example of slender marsh-pink (E) in New York State.

Northwest Creek is a highly productive area for marine finfish and shellfish. This area serves as a nursery and feeding area (from April 1 - November 30, generally) for many estuarine fish species, including scup, winter flounder, and bluefish. Northwest Creek is an important fishing area at the local level. All of Northwest Creek and its tributaries, however, are closed to shellfishing year round. The area is locally important for waterfowl hunting, especially American black duck, scaup, and canvasback.

Impact assessment:

Any activity that would substantially degrade the water quality in Northwest Creek would adversely affect the biological productivity of this area. All species of fish and wildlife would be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), road runoff, oil spills, excessive turbidity, and waste disposal, including vessel waste. Forest bordering the wetlands, including Barcelona Neck, is particularly important for maintaining the water quality and habitat value of Northwest Creek, and functions as an important buffer zone.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of bays, harbors, and tidal creeks can have adverse effects on aquatic vegetation and fish and wildlife populations. Use of motorized vessels should be controlled (*e.g.*, no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and vegetated wetlands.

Alteration of tidal patterns in Northwest Creek (*e.g.*, by modifying the inlet) could have major impacts on the fish and wildlife species present. Elimination of salt marsh and intertidal areas, through loss of tidal connection, dredging, excavation, or filling, would result in a direct loss of

valuable habitat area. Dredged material disposal in this area would be detrimental, but such activities may be designed to maintain or improve habitat for certain species of wildlife. The tidal marshes of Northwest Creek are currently threatened by the expansion of *Phragmites australis*, especially along vector control ditches. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Nesting shorebirds inhabiting Northwest Creek are highly vulnerable to disturbance by humans, especially during the nesting and fledging period (March 15 through August 15). Diamondback terrapin are vulnerable to disturbance from April 1 through July 30. Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site as a breeding area and should be minimized during this period. Recreational activities (*e.g.*, boat and personal watercraft landing, off-road vehicle use, picnicking) in the vicinity of bird nesting areas should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or continued annual posting of shorebird nesting areas should be provided to help protect these species. Control of vegetative succession, through beneficial use of dredged material or other means may improve the availability of nesting habitat in this area.

Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development, may result in the loss of productive areas which support the fish and wildlife resources of Northwest Creek. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches.

(d) Alewife and Scoy Pond Wetlands SCFWH

Location and description of habitat:

Alewife and Scoy Pond wetlands are located on the north shore of the South Fork of Long Island, between Northwest Harbor and Three Mile Harbor in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Gardiners Island West, NY). The fish and wildlife habitat consists of an approximately 310 acre network of freshwater and brackish ponds, wetlands, kettles and creeks interconnected by direct surface water or subsurface hydrologic connections. The wetland areas have a diverse assemblage of vegetative types including swamp forest, swamp shrub, emergent marsh, floating aquatic, and submerged aquatic communities. Scoy Pond is considered a good example of the rare coastal plain pond community by the New York Natural Heritage Program. The wetland areas are bordered by mature oak-pine forest. Alewife Pond is an approximately 25 acre brackish pond, connected to Northwest Harbor by a relatively narrow tidal creek (Alewife Brook). Scoy Pond connects to Alewife Pond through a stream. Part of the habitat is in Cedar Point County Park; this area receives much recreational use for camping and picnicking, and non-motorized boats are available for use on Alewife Pond. The Scoy Pond area is part of the Town-owned Grace Estate Park.

Fish and wildlife values:

The undeveloped kettle-type wetlands found in the Alewife and Scoy Pond area are unusual on Long Island. The Alewife and Scoy Pond habitat is important to many species of fish and wildlife.

Alewife Pond and Brook comprise a significant osprey (SC) feeding and nesting area; osprey historically have nested here in trees bordering these waterbodies. Other rare bird species which regularly use this wetland system include northern harrier (T), and 1993-1994 breeding bird surveys found scarlet tanager, cerulean warbler (SC) and acadian flycatcher. Between 19 and 28 species were found breeding in the vicinity of Scoy Pond during the 1993-1994 surveys, and an extremely high nest density of 184 nests per 100 acres was observed. Several waterfowl species, including bufflehead, red-breasted merganser, and hooded merganser, feed and overwinter here; American black duck, wood duck, mallard, Canada goose and mute swan also breed here. Eastern bluebird, broad-winged hawk, red-tailed hawk, and great horned owl nest in this area. Belted kingfishers and herons also feed in the waters of this system.

Amphibians found here include large concentrations of spotted salamander and marbled salamanders (SC), as well as the eastern spadefoot toad (SC), spring peeper, bull frog, wood frog, green frog, and gray tree frog. Reptiles found here include snapping turtle, painted turtle, spotted turtle (SC), and diamondback terrapin. A rare damselfly, the New England bluet (*Enallagma laterale*), is also found here.

The ponds and wetland system contain chain pickerel and other recreationally valuable freshwater fishes. Alewife spawn in Alewife Pond at the end of the annual run upstream from Northwest Harbor; this is one of only four documented alewife spawning runs on Long Island. The historical run between Alewife Pond and Scoy Pond is blocked by barriers and no longer occurs. The concentration of wildlife and fish in this readily accessible location provide valuable recreational opportunities for local residents and other visitors to the park. Alewife Brook and Alewife Pond are closed to shellfishing year round.

Scoy Pond supports several listed and rare plants documented by the New York Natural Heritage Program, including long-tubercled spikerush (*Eleocharis tuberculosa*, T), bushy rockrose (*Helianthemum dumosum*, T), and fibrous bladderwort (*Utricularia fibrosa*).

Impact assessment:

Any activities that would degrade water quality, increase turbidity, or alter water depths would have a significant impact on fish and wildlife species inhabiting the Alewife-Scoy Pond wetlands. All species may be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, waste disposal (including boat wastes), and stormwater runoff. The waters of Alewife Brook and Alewife Pond have been decertified for shellfishing since 1990 because of high fecal coliform levels.

Alewife would be most sensitive April 1 through July 30, when spawning takes place. Barriers to fish migration, whether physical or chemical, have a significant effect on the biological resources of this area. Removal of barriers, such as the inadequate culvert under Alewife Brook Road, would restore the alewife run to Scoy Pond. This culvert has also promoted extensive invasion by *Phragmites australis*. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Any substantial alteration or human disturbance of the vegetative communities, such as changes to wetland or brook hydrology or configuration, filling, or introduction of invasive or exotic species, within or adjacent to the habitat, may adversely affect wildlife species in the area, especially the area's important populations of amphibians. Alterations to site hydrology, including loss of tidal connection, ditching, excavation, or filling, would result in a direct loss of valuable habitats. Collection of amphibians and reptiles from this area could also have a significant impact on these populations.

In addition, the oak-pine forest uplands bordering the peninsula form an important core forest area in the Town of East Hampton. Clearing or fragmentation of this habitat would be detrimental to forest wildlife, including breeding birds, and could affect water quality in the ponds.

Access to the area for compatible recreational uses during appropriate time periods, such as birdwatching, hiking, or recreational fishing, should be maintained. Public use of the area should be limited or managed to prevent or minimize disturbance, especially to the sensitive shoreline areas of the coastal plain pond community.

(e) Cedar Point Peninsula SCFWH

Location and description of habitat:

Cedar Point Peninsula is located on the north shore of the south fork of Long Island, between Northwest Harbor and Three Mile Harbor, in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Greenport, NY; and Gardiner's Island West, NY). The fish and wildlife habitat consists of a mile-long sand peninsula extending out to Cedar Point. Cedar Point peninsula is a natural barrier spit formation, with patchy vegetative cover, with gradually sloping sand and pebble beaches, and a few areas where dredged material has been deposited. This area is bordered by mature hardwood forest. There are eelgrass beds fringing the peninsula and running along the shore east to Three Mile Harbor. Cedar Point County Park receives much recreational use for camping and picnicking.

Fish and wildlife values:

Cedar Point Peninsula is one of only several major undeveloped sand peninsulas on Long Island. Barrier beach habitats such as this are relatively rare outside of Long Island's south shore.

This area has served historically as an important nesting site for least tern (T) and piping plover (E, T-Fed). The annual average number of piping plover nesting pairs for the 1987-1996 period was three; these numbers increased from the mid-1980's through the mid-1990's, attaining a peak value of six pairs in 1996, with seven young fledged. Town of East Hampton plover monitoring documented an average of 6 nesting pairs annually between 1995 and 1999, producing an average of 3 fledges each year.

In the early 1980's, the least tern population at this site was one of the largest on the south fork of Long Island (85 nesting pairs), of county-level significance. Least tern have been largely absent from this site according to New York State Department of Environmental Conservation annual surveys

and Town of East Hampton plover monitoring; least tern were documented only during two nonconsecutive years during the 1986-1996 period. However, The Nature Conservancy cites annual activity by least terns at this site, with frequent fledgings. Additional data is required to assess the importance of this site for least tern nesting.

Osprey (SC) nest on a platform at Cedar Point Peninsula and on the lighthouse at the end of the peninsula. Horned lark (SC), diamondback terrapin, and horseshoe crabs also breed at Cedar Point Peninsula. This area provides important overwintering habitat for large concentration of shorebirds, including sanderlings, ruddy turnstones, and black-bellied plovers; roseate terns (E) congregate during spring migrations. Concentrations of terns and other wildlife in this readily accessible location provide valuable birdwatching opportunities for local residents and other visitors to the park. This site supports waterfowl hunting of local significance.

Impact assessment:

Nesting shorebirds inhabiting Cedar Point Peninsula are highly vulnerable to disturbance by humans, especially during the nesting and fledging period (March 15 through August 15). Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site as a breeding area and should be minimized during this period. Recreational activities (*e.g.*, boat and personal watercraft landing, off-road vehicle use, picnicking) in the vicinity of bird nesting areas should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or continued annual posting of shorebird nesting areas should be provided to help protect these species. Dredged material disposal in this area would be detrimental, but such activities may be designed to maintain or improve the habitat. Control of vegetative succession, through beneficial use of dredged material or other means may improve the availability of nesting habitat in this area.

(ii) Reaches 2 and 3

(a) Accabonac Harbor Area

Location:

The Accabonac Harbor habitat complex is located along the shore of Gardiners Bay and southwest of Gardiners Island. Its components form part of a closely-related beach system. The complex is situated in Reaches 2 and 3 of the Town of East Hampton's coastal area.

General habitat description:

The Accabonac Harbor habitat complex consists of shallow open water of less than 6 feet deep, extensive tidal salt marshes dominated by cordgrass, mud flats, spoil disposal areas, and small wooded islands. The landward areas around the harbor and marshlands are mostly undeveloped woodlands. East of the enclosed water and marsh system is a barrier spit that serves as the primary boundary between the harbor and Gardiners Bay. This sandy and pebbly beach and dune complex is sparsely to moderately vegetated and in some areas contains dredging spoils. Lionhead Beach and Sammys Beach provide similar habitat. Mean tidal range in this area is approximately 2.3 feet.

Significance/uniqueness of area:

The Accabonac Harbor area serves as an important feeding area for osprey (T), both for birds nesting around the harbor and those from Gardiners Island four miles to the northeast. Other birds of special emphasis in the region believed to nest in this area are green-backed heron, American black duck, mallard, gadwall, norther harrier (T), American oystercatcher, black skimmer and seaside sparrow. The harbor is also a productive area for finfish and shellfish, serving as a nursery and feeding area for scup, summer flounder, bluefish and winter flounder. There is a commercial and recreational shellfishery for bay scallops and hard clams in the harbor. The beaches at Accabonac, as well as Sammys Beach and Lionhead Beach, are important nesting areas for least tern (E) and piping plover (E, T-FED), although the number of breeding pairs has been very variable for the latter. Sea-beach knotweed has been reported from these beaches in the past and may still occur here. Portions of Accabonac Harbor have been designated under the Coastal Barriers Resources Act.

Threats:

Ownership of some surrounding parcels by the County, Town and The Nature Conservancy, partially protects Accabonac Harbor from development threats, although water quality impacts from existing development is a significant problem. Primary concerns include animal predation (foxes, gulls, etc.) and human disturbance to nesting beaches of least terns (E) and piping plovers (E, T-FED). Such disturbances range from destruction of eggs and nests by beach-walkers, unleashed pets and off-road vehicles to deliberate acts of vandalism. Illegal or unregulated dredge spoil deposition can also be a problem at such sites. Much of the harbor area receives relatively little human disturbance although there is extensive use of the beaches for recreation.

Conservation considerations:

Protection of nesting beaches of least terns (E) and piping plovers (E, T-FED) during the critical nesting period (April through August) from human-related disturbances is a high priority. All available means should be used to prevent human-related disturbances of these areas, including fencing, area closures, posting, warden patrols, trapping of pets and other predators and public education programs. Tasks should be identified in the piping plover recovery plan that may be applicable to the beaches in this area, including to enhance, restore or protect habitat through control of vegetation in nesting areas or use of dredge spoil. Rigorous enforcement, monitoring and proactive conservation programs should be pursued to ensure long-term maintenance of water quality and fish and wildlife habitat with compatible human use.

The Accabonac Harbor Area includes parts of the Three Mile Harbor SCFWH, located in Reach 2, and the Accabonac Harbor SCFWH, located in Reach 3. The Three Mile Harbor SCFWH is located in Reach 2 and the Accabonac Harbor SCFWH is located in Reach 3. Reach 2 also includes the Three Mile Harbor Locally Significant Coastal Fish and Wildlife Habitat and Reach 3 contains the Fresh Pond - Bell Estate Wetlands Locally Significant Coastal Fish and Wildlife Habitat.

(b) Three Mile Harbor SCFWH

Location and description of habitat:

Three Mile Harbor is located two miles north of the Village of East Hampton on Gardiners Bay in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Gardiners Island West, NY) The fish and wildlife habitat is approximately 1270 acres in size consisting of 1070 acres of open water and fringing wetlands and a barrier beach/wetland area of 200 acres (Sammy's Beach). The open water of Three Mile Harbor has an average depth of five to six feet during mean low water with a tidal range of 2.5 feet. The harbor's waters are stressed by increasing shoreline development, boat and watersports use, and runoff from roads, drainage and septic systems in the immediate Three Mile Harbor area. The beach area consists of sparsely vegetated dunes, dredged material areas, sand beach, salt marshes, mudflats and a tidal inlet. The mouth of Hand's Creek is a high quality example of brackish intertidal shore. Most of Sammy's Beach is owned by the Town of East Hampton and the NYS DEC, and receives moderate recreational use by pedestrians and off-road vehicles during the summer. Portions of the area have been posted historically as bird nesting areas.

Fish and wildlife values:

The bay/beach/wetland ecosystem found at Three Mile Harbor is rare in the Peconic Bays area and provides an important habitat for a large variety of fish and wildlife. Sammy's Beach has been designated as part of the national Coastal Barrier Resources System, one of 67 such areas on Long Island. Uncontrolled recreational use of the area has resulted in some degradation of the habitat.

The mainland peninsula at Sammy's Beach is an important nesting site for least tern (T) and piping plover (E, T-Fed). While piping plover were absent from this site during the late 1980's and early 1990's, there was an annual average of one nesting pair at this site between 1992 and 1996. A peak value of three pairs was documented in 1994. Town of East Hampton plover monitoring documented an average of one pair nesting at Sammy's Beach during the 1995-1999 period, producing an average of 2 fledglings.

The 1987-1996 annual average number of pairs of least tern was five, with a peak value of 18 pairs occurring in 1987. Sammy's Beach was one of the largest least tern nesting colonies on Long Island in the early 1980's; the number of breeding pairs at this location since then has been steadily declining, possibly due to plant succession. Since 1989, least tern have nested inconsistently at Sammy's Beach: nine pairs were documented in 1992, ten pairs in 1999. However, no eggs or young were produced at the Sammy's Beach site in the 1990s.

This area was an important tern nesting area since at least the mid-1970's when roseate tern (E) and common tern (T) were also present, inhabiting dune and salt marsh habitats, including Sedge Island and Dayton Island. Common tern exhibited an annual average of 22 breeding pairs over the 1987-1996 period, during which there was sporadic usage. The peak number of 67 pairs of nesting common tern occurred in 1987. Roseate tern were observed in 1987 but have not been present since. No young were produced in the Three Mile Harbor habitat area by either of these species in the 1990s.

Osprey (SC) nest at two locations in the Three Mile Harbor habitat area, at Sammy's Beach and at Hand's Creek. The Sammy's Beach location has fledged young every year between 1988 and 1999. Other nesting birds in the area include willet, American oystercatcher and black skimmer (SC). Sharp-tailed sparrow nest annually in Three Mile Harbor area salt marshes, and horned lark (SC) nest in the Sammy's Beach dunes and dredged material areas.

The inlet, fringing wetlands and open water of Three Mile Harbor provide important feeding areas to the terns and to osprey. The marshes fringing the harbor produce food for wading birds such as snowy egret, great egret, green heron, and lesser yellowlegs. Diamondback terrapin nest in large numbers on Sammy's Beach (20 individuals observed in 1999), Dayton Island and Sedge Island. Overwintering waterfowl observed between 1986 and 1996 included merganser, mallard, scaup, scoter, old squaw, American black duck, bufflehead, and goldeneye.

Large populations of finfish and shellfish inhabit the bay, marshes and tidal creeks, including summer flounder, fluke, sand lance, Atlantic silversides, mummichogs, and killifish. Hands Creek is thought to be a spawning and nursery area for the flounder. Migratory species include bluefish, weakfish, striped bass and scup. Bay scallops, once abundant in Three Mile Harbor, were not present in harvestable numbers in the 1990s. Eelgrass beds, a critical habitat for the bay scallop, covered approximately 25% of the Three Mile Harbor bottom in the 1970s, but now account for only 5% of the bottom. The most sizable bed in the harbor is located off Hand's Creek. Other shellfish include soft clams, surf clams, and American oysters. Soft clams are found mainly along the eastern shoreline south of Duck Creek; surf clams are concentrated from Dayton Island north through the channel and into Gardiners Bay; oysters occur along the banks of the mouth of Creek and are currently the most important commercial species of shellfish in this habitat area. Hard clams occur south of Sammy's Beach and in the southern end of the harbor. Hands Creek and its tributaries are closed to shellfishing between May 1 and November 30. The waters east of Sedge Island are closed to shellfishing between May 15 and October 15.

Prey for several species of sea turtle, such as lady crabs, spider crabs, and green crabs, have been observed in Three Mile Harbor in abundance. These species, which include the Atlantic ridley (E), loggerhead (T), and green (T) sea turtles, and especially juveniles, are thought to utilize the bays and embayments of the Peconic Estuary in moderate to high concentrations during certain periods of the year. Atlantic ridley turtles have been documented in Three Mile Harbor. More information is needed about the importance of this area for other sea turtle species.

Three Mile Harbor has supported an active fishery providing varied opportunities for commercial and recreational fishermen. Three Mile Harbor remains an important nursery area for the commercial species of fin and shellfish, as well as forage species, and contributes to the overall productivity of Gardiner's Bay, where fish traps have been traditionally used. Shellfish closures—year-round in the most southerly portion, seasonal in the eastern, southeastern and northeastern segments of the harbor and in Hands Creek to the west—have had a major impact on the valuable shellfisheries.

Impact assessment:

Any activity that would further degrade the water quality in Three Mile Harbor would adversely affect the biological productivity of this area. All species of fish and wildlife may be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, waste disposal (including boat wastes), and stormwater runoff. Installation of runoff catchment structures on roads adjacent to the Harbor have likely contributed to a decrease of shellfish closures due to coliform contamination, however continued shellfish closures emphasize the need to identify and minimize all point and non-point sources of pollution in the Harbor. Pollution in upwelling groundwater, including septic system leachates, may be a significant source of contamination in the Harbor. Recent loss of important vegetated buffer areas from new development may also contribute to existing water quality problems.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of bays, harbors, and tidal creeks can have adverse effects on aquatic vegetation and fish and wildlife populations. Use of motorized vessels should be controlled (*e.g.*, no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and vegetated wetlands.

Elimination of salt marsh and intertidal areas, through loss of tidal connection, excavation or filling, would result in a direct loss of valuable habitat area. Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development, may result in the loss of productive areas which support the fish and wildlife resources of Three Mile Harbor. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Alteration of tidal patterns in Three Mile Harbor (including changes to inlet configuration) could have major adverse effects on the fish and wildlife communities present. However, restoration of water circulation patterns may benefit the fish and wildlife species of the area. Dredging to maintain boat channels in the harbor should be scheduled between September 15 and December 15 to minimize potential impacts on aquatic organisms and to allow for dredged material disposal when wildlife populations are least sensitive to disturbance. Dredged material disposal in this area would be detrimental, but such activities may be designed to maintain or improve the habitat for certain species of fish and wildlife, especially nesting shorebirds.

Nesting shorebirds inhabiting Three Mile Harbor are highly vulnerable to disturbance by humans, especially during the nesting and fledgling period (March 15 through August 15). Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site as a breeding area and should be minimized during this period. Recreational activities (*e.g.*, boat and personal watercraft landing, off-road vehicle use, picnicking) in the vicinity of bird nesting areas should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or continued annual posting of shorebird nesting areas

should be provided to help protect these species. Control of vegetative succession, through beneficial use of dredged material or other means may improve the availability of nesting habitat in this area.

(d) Accabonac Harbor SCFWH

Location and description of habitat:

Accabonac Harbor is located approximately two miles east of Three Mile Harbor, on Gardiners Bay, in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Gardiners Island West, NY). This approximate 660 acre area consists of shallow open water (less than 6 feet deep at mean low water), extensive salt marshes, sand spits, dredged material disposal areas, and small wooded islands. The fish and wildlife habitat is surrounded by largely developed woodlands. The sand spit north of the harbor inlet along Gerard Drive has considerable residential development on it. The Nature Conservancy owns a number of parcels in the area, totaling approximately 90 acres. The spit of land south of the inlet (forming East Harbor), Louse Point, is used as a recreational beach and a mooring area for commercial and recreational small craft. Residential development borders much of eastern, southern and southwestern portions of the harbor. Most of the Accabonac Harbor area receives relatively little human disturbance, but there is extensive recreational use of the beaches.

Fish and wildlife values:

Accabonac Harbor comprises one of the major undeveloped coastal wetland ecosystems on Long Island. Portions of the habitat have been designated as part of the national Coastal Barrier Resources System, one of only 67 such areas on Long Island. This diverse area is important to a variety of fish and wildlife, including several endangered, threatened, and special concern species.

Nine pairs of osprey (SC) nested in Accabonac Harbor in 1996; there are a number of man-made platforms placed at various locations in the harbor to encourage nesting.

Least tern (T) frequently nest on the sand spits along the eastern edge of Accabonac Harbor. The annual average number of nesting pairs of least tern for the 1987-1996 period was 16; a peak number of 48 pairs was observed in 1993. Colonies of least tern have been established at the Louse Point location (*e.g.*, 25 individuals in 1998), but have been abandoned during the nesting season. In the 1990s, few least tern offspring fledged at this and other East Hampton nesting locations.

For piping plover (E, T-Fed), the annual average number of nesting pairs for the 1987-1996 period was three; a peak number of seven pairs was attained in 1997. The numbers of nesting piping plover increased from one pair annually in the late 1980's to four or five pairs annually during the early 1990's.

Other probable or confirmed nesting bird species in Accabonac Harbor include green-backed heron, American black duck, mallard, sharp-tailed sparrow, willet, and Virginia rail. During the winter months, northern harrier (T) and short-eared owl (SC) are regularly seen foraging among the marshes in this area. Christmas counts have documented several hundred white-winged scoter, old squaw, common eider, and red-breasted merganser in Accabonac Harbor, as well as Canada goose, horned grebe, common loon (SC), green-winged teal, bufflehead, and other bird species.

In addition to having significant bird concentrations, Accabonac Harbor is a productive area for marine finfish, shellfish, and other wildlife. The Accabonac Harbor wetlands contribute significantly to the biological productivity of Gardiners Bay. There are fringing eelgrass beds to the north of the harbor, which are likely to contribute to the overall value of the area as nursery for fish and habitat for shellfish species. The harbor serves as a nursery and feeding area (from April through November, generally) for many estuarine fish species, including scup, summer flounder, bluefish, and winter flounder. Bay scallops were formerly abundant in the harbor but populations have declined. Soft clams and hard clams are found most years in abundance, supporting a commercial and recreational shellfishery of county-level significance. Most of East Harbor is closed to shellfishing year round. All waters of Accabonac Harbor south of Sage Island, and the northernmost waters of the Harbor, are closed to shellfishing between May 1 and November 30. Horseshoe crabs breed on Accabonac Harbor beaches in large numbers during the spring. Diamondback terrapin breed in the harbor wetlands. Spotted turtles (SC) occur in the south end of the harbor, inhabiting the ditches and marshes of that area.

The New York Natural Heritage Program documents several listed and rare plant species at the Accabonac Harbor site. These include: bushy rockrose (*Helianthemum dumosum*, T), New England blazing star (*Liatris scabiosa* var *nova-angliae*), silverweed (*Potentilla anseina* ssp *egedii*), and the best example of creeping spikerush (*Eleocharis fallax*) in New York.

Impact assessment:

Any activity that would substantially degrade the water quality in Accabonac Harbor would adversely affect the biological productivity of this area. All species of fish and wildlife would be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, and waste disposal. It is essential that high water quality be maintained in the area to protect the bay scallop and hard clam fishery. A particular threat in this regard stems from continued development of parcels surrounding the Harbor. Alterations in water circulation patterns for habitat and water quality management and improvement, including Open Marsh Water Management, may be beneficial to fish and wildlife species using the habitat.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of bays, harbors, and tidal creeks can have adverse effects on aquatic vegetation and fish and wildlife populations. Use of motorized vessels should be controlled (*e.g.*, no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and vegetated wetlands.

Alteration of tidal patterns in Accabonac Harbor could have major impacts on the fish and wildlife communities present. Accabonac Harbor has the most frequently dredged inlet and channels in the Town of East Hampton. No new navigation channels should be excavated in the area. Dredging to maintain existing boat channels in the harbor should be scheduled between September 15 and

December 15 to minimize potential impacts on aquatic organisms, and to allow for disposal when wildlife populations are least sensitive to disturbance. Dredged material disposal in this area would be detrimental, but such activities may be designed to maintain or improve the habitat for certain species of wildlife.

Elimination of salt marsh and intertidal areas, through loss of tidal connection, ditching, excavation, or filling, would result in a direct loss of valuable habitat area. Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development, may result in the loss of productive areas which support the fish and wildlife resources of Accabonac Harbor. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches. There is considerable potential for preservation of vegetated buffer areas and restoration of tidal wetlands in the Accabonac Harbor area. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Nesting shorebirds inhabiting Accabonac Harbor are highly vulnerable to disturbance by humans, especially during the nesting and fledgling period (March 15 through August 15). Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site as a breeding area and should be minimized during this period. Recreational activities (*e.g.*, boat and personal watercraft landing, off-road vehicle use, picnicking) in the vicinity of bird nesting areas should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or continued annual posting of shorebird nesting areas should be provided to help protect these species. Control of vegetative succession, through beneficial use of dredged material or other means may improve the availability of nesting habitat in this area.

(e) Fresh Pond - Bell Estate Wetlands Locally Significant Coastal Fish and Wildlife Habitat

Location and Description of Habitat:

The Fresh Pond-Bell Estate wetlands are located south of Accabonac Harbor along the shore of Gardiner's Bay. The fish and wildlife habitat is approximately 260 acres, including all of Fresh Pond and the surrounding Town property, Nature Conservancy land north of Albert's Landing Road, the Bell Estate III Reserved Area south of Quality Row and several privately owned parcels and one Reserved Area south of Fresh Pond Road. This area is identified by the following Suffolk County tax map parcel numbers: #103-6-22.4, #103-11-19.1, #126-2-25, #127-1-1, -2.3, -5, -8, -14.1, #127-2-49, and #127-5-6, & -7. The habitat includes Fresh Pond with its outlet (gut) to Gardiners Bay, the surrounding open space areas and the unnamed stream which feeds into the pond.

Fish and Wildlife Values:

The Fresh Pond estuary begins in the freshwater wetlands north of Barnes Hole Road. A stream flows south through two large reserved areas and town parkland into Fresh Pond and out through

Fresh Pond inlet to Gardiner's Bay. Vegetation is lush, including tall red maple and tupelo trees. A NYS protected species of orchid, *Platanthera ciliaris* (T), occurs in the Fresh Pond system.

These wetlands comprise a large, preserved open space within a section of the town that is otherwise largely subdivided. This open space functions as refuge and reservoir for a variety of wildlife. Breeding birds include red-tailed hawk, black duck, chuck-will's widow, screech owl, and red-bellied woodpecker as well as a variety of waterfowl and waterbirds. A great-horned owl has also been reported in the area, which also provides breeding habitat for spotted salamander and feeding opportunities for green heron, snowy egret and black-crowned night heron.

A variety of shellfish and finfish inhabit Fresh Pond, making it an important nursery for local commercial fisheries. Species of commercial importance include white bait (spearing), blue crab, soft clams, eel, herring, alewife and white perch,

Picnic areas are located north and south of the pond. These areas, as well as the beach along Gardiner's Bay are used throughout the summer by local residents.

Impact Assessment:

Any activity that would substantially degrade the water quality in Fresh Pond would adversely affect its biological productivity and the fish and wildlife species that inhabit it. All species may be affected by pollution or chemical contamination (including food chain effects), oil spills, stormwater runoff, septic system infiltration, etc. Any substantial alteration or human disturbance of the vegetative communities within or adjacent to the habitat may adversely affect the habitat and fish and wildlife species in the area. Use of pesticides and introduction of exotic species should therefore be discouraged. If after careful study, reduction of insect or other pest populations is deemed necessary, biological controls should be utilized, with pesticides considered only as a last resort. Activities that improve water quality, such as catchment of road run-off or improved tidal flushing through the gut, contribute to enhancement of the habitat and should be included in management practices (see Water & Air Resources Policies #30-44 and Projects). Collection of native flora and fauna from this area could have a significant impact on important populations of these species, and should be prohibited. Access for recreation and commercial fishing should be maintained but carefully managed to minimize disturbance to the fish and wildlife habitat. This area should be considered for designation as a SCFWH by New York State during any review of designated SCFWHs.

(iii) Reaches 4, 5, 6, 7, 8 and 9

(a) Montauk Peninsula Complex

Location:

Located at the eastern end of East Hampton, this complex stretches from Napeague to Montauk Point and includes surrounding nearshore waters. The complex is situated in Reaches 4, 5, 6, 7, 8 and 9 of the Town of East Hampton's coastal area.

General habitat description:

Five ecological/geographical subcomplexes, or groupings, of sites can be identified within the greater complex as being of particular regional significance to fish, wildlife, plants or biological diversity: Napeague Harbor; Hither Hills; Montauk moorlands; embayed aquatic habitats; and nearshore open water aquatic habitats. The complex as a whole contains an impressive diversity of upland, wetland and shoreline habitats and communities of a maritime nature, including some of the largest undeveloped tracts of maritime deciduous forests in the region, including stands of the globally rare maritime oak-holly forest. The forest type is restricted in this region to south shore barrier beaches at the eastern end of Long Island and it composed of holly, black oak or beech as dominant trees, often with sassafras, and with an abundance of vines and ericaceous shrubs in the under story. Large expanses of cordgrass-dominated salt marshes and sparsely-vegetated, narrow sandy or pebbly beaches and spits occur on the northern Napeague Bay/Block Island Sound side, of the peninsula, especially in the vicinity of Napeague Harbor. On the Atlantic Ocean side the shoreline is dominated in stretches by steep bluffs or large dunes and broad expanses of sparsely vegetated or unvegetated sandy to cobbly beach. There are several types of dune and interdunal plant communities in this area, for example, beach grass-dominated ocean dunes, mixed associations of beach heather, bearberry and bayberry in interdunal areas, and extensive stands of pitch pine and oak One of the most characteristic, interesting and regionally significant natural woodlands. communities is maritime grassland, which is well-developed on the Montauk Peninsula and often occurs as part of a mosaic of other maritime plant communities, particularly heathlands and shrublands, comprising what are collectively referred to as moorlands. Maritime grasslands are under the influence of a maritime climate, which is generally dominated by turf-forming grasses such as little bluestem, common hairgrass and poverty-grass, often with low heath shrubs and reindeer moss.

The embayed aquatic habitats include both estuarine-brackish water and freshwater systems. Napeague Harbor, Lake Montauk and Oyster Pond are brackish, with openings into Block Island Sound; Big and Little Reed Ponds are transitional between brackish and freshwater ponds; and Fort Pond is freshwater. Lake Montauk, nearly 900 acres in size, supports a substantial growth of eel grass. Waters and bottom habitats in the nearshore areas here are fully exposed to storms and open ocean conditions. The mean tidal range of the open ocean waters at Montauk Point is 2.0 feet (0.6 meters).

Significance/uniqueness of area:

The maritime moorlands and forest communities of the Montauk Peninsula are regionally significant and noteworthy not only for their uniqueness and restricted geographical occurrence, but because of the relatively pristine condition in which they are found here. These communities, which are in themselves rare, provided essential habitat for a number of regionally and globally rare plant species, including sandplain gerardia (E, E-FED), found here in maritime grasslands, Nantucket serviceberry (E) and New England blazing-star, both candidates for listing under the U.S. Endangered Species Act, and bushy rockrose (T). The Walking Dunes area, just east of Napeague Harbor, is of regional significance and contains outstanding examples of maritime interdunal swales. The rare curly grass fern (E) is found in this community. Sandy and gravelly beaches along the Atlantic Ocean and Block Island Sound shorelines are important nesting areas for a diversity of colonial nesting birds of special emphasis in the region, including roseate tern (E, E-FED), piping plover (E, T-FED), least tern (E), common tern (T), black skimmer and American oystercatcher. Sea-beach knotweed and sea-beach pigweed, the latter a candidate plant species for listing under the Act, have also been reported from beaches in this same area. Barrier beaches in the Napeague Harbor system have been designated under the national Coastal Barriers Resources Act.

The nearshore open waters surrounding Montauk Point provide regionally significant and critical wintering waterfowl habitat and concentration area and contain extensive beds of blue mussel and kelp. Found here in significant numbers, particularly in winter are several species of special emphasis in the region, such as common loon (SC), common eider, white-winged scoter, surf scoter, black scoter, bufflehead, common goldeneye, great cormorant and red-breasted merganser. Also occurring here regularly during the winter are harlequin duck and king eider. On the Block Island Sound side of the peninsula, in somewhat more protected areas, American black ducks and old squaw occur in large wintering concentrations. Peregrine falcons (E, E-FED) are common migrants during the fall and spring. Gray and harbor seals often use the rocks around Montauk Point as haulout areas. Recent studies indicate that the nearshore waters within Peconic and Gardiners Bays, Block Island and Long Island Sounds and off Montauk Point are important feeding and nursery habitats for juvenile Atlantic Ridley sea turtles (E, E-FED) and perhaps for other sea turtles as well, including loggerhead (T, T-FED). The blue-spotted salamander, a rare glacial relict, is found in this region only on the Montauk Peninsulas, where it may occur locally in fairly high densities.

The open waters of the embayed ponds and harbors are important waterfowl wintering areas for greater and lesser scaup, red-breasted and common merganser, Canada goose, American black duck, bufflehead and common goldeneye. These same areas and associated marshes are productive nesting and feeding areas for American black duck, least bittern (SC), mallard, osprey (T), and northern harrier (T). Finfish and shellfish populations in both nearshore and embayed aquatic habitats in this area are diverse and abundant, particularly bluefish, weakfish, fluke, winter flounder, striped bass, hard-shelled clams, American oysters and bay scallops. The pond and stream system of Big and Little Reed Ponds is one of the few spawning areas on Long Island for alewives.

Threats:

Although much of this area is under public ownership, there are several privately-held sites of regional significance to fish, wildlife or plant species. Poorly-planned development could result in the destruction or degradation of aquatic and terrestrial habitats of species of special emphasis. Suppression of wildfires, essential to the maintenance of regionally important maritime and inland communities, could result in vegetation changes and consequent loss of the characteristic biota of these communities, including several rare plants dependent on fire.

Nesting populations of colonial waterbirds and piping plovers (E, T-FED) on sand or gravel beaches in this area, particularly around Napeague Harbor and the Atlantic Ocean beaches, are especially vulnerable during the nesting season (April through August) to human-caused disturbances such as trampling or destruction of nests from beach-walking, picnicking, boat landings, off-road vehicle use, predation by dogs and cats, and unregulated dredge spoil disposal. The nearshore and embayed open water habitats and associated waterfowl and marine mammal populations surrounding the Montauk Peninsula are vulnerable to oil spills, contaminants, waste disposal, boat and ship traffic and dredging activities.

Conservation considerations:

Attention needs to be directed towards the continued protection of the offshore waters around Montauk Point, particularly as regards the area's regionally significant concentrations of wintering waterfowl, especially seabirds, sea turtles and marine mammals. This high-risk ocean-fronting area is subject to the full fury of winter storms and hurricanes and would be extremely vulnerable to an oil spill, ship collision or contaminant discharge that, at certain times of the year, could result in devastating impacts on fish and wildlife populations throughout the region. Comprehensive containment and response plans and procedures should be developed and equipment placed in readiness to ensure the protection of this area and its living resources in the event of such a catastrophe. In recognition of the history of shipwrecks, weather and navigational hazards, and the extraordinary vulnerability of habitats in the area, the Town shall encourage the U.S. Department of Transportation to establish a Tanker-Free Zone in the Block Island Sound waters between Block Island and Montauk (see **Surface Water Quality Policy #36**, Shipment and Storage of Petroleum and Other Hazardous Wastes, and **Projects**).

Disturbances to wintering and nesting bird populations need to be minimized or eliminated entirely, particularly for colonial beach-nesting birds such as roseate terns (E, E-FED), least terns (E) and piping plovers (E, T-FED). Human intrusions into beach nesting areas during the critical nesting season (April through August) should be prevented using a variety of methods, including protective fencing, posting, warden patrols and public education. When determined to be a problem, as it is at most mainland-connected nesting beaches, predator removal should be instituted. Those tasks and objectives of the piping plover and roseate tern recovery plans that might be applicable to beaches and nesting populations of these species in this area should be undertaken, including restoration or enhancement of degraded sites.

Many of the public parklands are in need of specific resource management plans directed at their long-term conservation. Perpetuation of the area's unique maritime communities and associated rare plants, particularly those in which fire has historically played an important ecological role, such as grasslands and pinelands, needs to be the primary management goal for the individual sites and the complex as a whole. Fire management plans, among others, need to be specifically developed for the full spectrum of ecologically significant sites, utilizing the experience and talents of The Nature Conservancy and other groups in cooperation with State and County park managers and private landowners in the vicinity.

While more than half of the land on the Montauk Peninsula is publicly-owned, including the majority of significant sites, some of the regionally important sites are privately-owned and vulnerable to development or mismanagement of the resources. Opportunities should be sought by governmental

agencies and private conservation organizations to develop cooperative agreements, secure conservation easements, implement zoning restrictions or planning policies, engage in land exchanges, acquisitions or other options to ensure the long-term conservation and protection of these unique sites (see **Development Policies #1-6** and accompanying recommendations from the Town Open Space Plan).

The Montauk Peninsula Complex includes the Napeague Harbor SCFWH, located in Reach 4, the Hither Hills Upland SCFWH, Fort Pond SCFWH, and Culloden Point SCFWH, located in Reach 5, the Lake Montauk SCFWH and the Big and Little Reed Ponds SCFWH, located in Reach 6, and the Oyster Pond SCFWH in Reach 7. The Complex also includes the Montauk Point Locally Significant Coastal Fish and Wildlife Habitat, located in Reaches 7 and 8.

(b) Napeague Harbor SCFWH

Location and description of habitat:

Napeague Harbor is located on the north shore of the south fork of Long Island, approximately five miles west of the hamlet of Montauk, in the Town of East Hampton, Suffolk County (7.5' Quadrangles: Gardiners Island East, NY; and Napeague Beach, NY). The fish and wildlife habitat includes the entire harbor, Napeague Meadows, and Hicks Island, most of which are within the undeveloped Napeague State Park. The habitat also includes Goff Point, in Hither Hills State Park. This approximate 1,300 acre area contains relatively shallow open water (less than 10 feet deep at mean low water), eelgrass beds, a large expanse of salt marsh, upland meadows, and sparsely vegetated sand and pebble peninsulas. The rare sea level fen plant community is found at this site. Napeague Harbor is generally bordered by undeveloped land, with the exception of small residential areas on the southeast and west sides.

Fish and wildlife values:

Napeague Harbor is one of the least developed of several large coastal bays in eastern Long Island. A portion of the habitat has been designated as part of the national Coastal Barrier Resources System, one of 67 such areas on Long Island. This area is a high quality and productive estuarine ecosystem, supporting a diversity of fish and wildlife species that is rare on Long Island, outside of the major coastal bays on the south shore.

Napeague Harbor is an important nesting and feeding area for many migratory bird species. Osprey have historically nested in Napeague Meadows; in 1996 2 pairs of osprey (SC) nested here using a man-made nesting platform placed in the marsh and the old IT&T tower. These sites fledged 4 osprey in 1999.

Hicks Island and Goff Point are important nesting areas for piping plover (E, T-Fed), least tern (T), roseate tern (E), common tern (T), black skimmer (SC), herring gull, great black-backed gull and horned lark (SC). The annual average number of pairs of piping plover nesting at this location during 1987-1996 was three; the annual number of nesting pairs of this species has increased steadily from one or two pairs in the mid-1980's to five or six pairs annually in the mid-1990's. Town of East

Hampton plover monitoring documents an annual average of 2 plover pairs nesting at Hick's Island between 1995 and 1999, with an average of 2 fledglings annually.

During the early 1980's Napeague Harbor supported one of the 10 largest common tern colonies and one of the 5 largest roseate tern concentrations on Long Island. Several hundred pairs of common tern nested at this location annually during the 1988-1990 period; however, these numbers declined sharply to a low of two pairs in 1997. Roseate tern were observed nesting in the Napeague Harbor area during the late 1980's (16 to 36 pairs), but since 1992 have not nested. An annual average of 40 nesting pairs of least tern were observed at this location during the 1987-1996 period. The annual number of least tern nesting pairs increased from the late 1980's through the early 1990's to reach a high of 98 pairs; however, this species nested sporadically at this site in the late 1990s.

Other probable or confirmed nesting bird species in the Napeague Harbor area include Canada goose, American black duck, wood duck, red-breasted merganser, northern harrier (T), fish crow, grasshopper sparrow (SC) and sharp-tailed sparrow. Locally significant concentrations of wintering waterfowl occur in open water portions of the harbor. Mid-winter aerial surveys of waterfowl abundance for the 1975-1996 period indicate average concentrations of over 100 birds in the harbor each year (676 in peak year), including scoter, American black duck, bufflehead, common goldeneye, and red-breasted merganser. In addition to these species, 1996 Christmas counts observed high numbers of old squaw and herring gull, and moderate numbers of common loon (SC), black-bellied plover, Bonaparte's gull, great black-backed gull, and ring-billed gull.

Napeague Harbor is a highly productive area for marine finfish, shellfish, and other wildlife. Sandy upland areas around Napeague Harbor provide suitable habitat for eastern hognose snake (SC). The wetlands around the Harbor support a large spotted turtle (SC) population, and eastern spadefoot toad (SC) breed in the area. The harbor serves as a nursery and feeding area (April-November, generally) for winter flounder, summer flounder, bluefish, striped bass, and scup, providing an excellent sport fishery for local residents. Healthy eelgrass beds are present along the eastern shore of Napeague Harbor, and southeast of Goff Point and Hick's Island, respectively. The hard clam population in Napeague Harbor is the largest in East Hampton Town. Soft clams are also abundant in the harbor, and both species are important in Suffolk County for recreational and commercial shellfishing. The once-abundant bay scallop population has undergone substantial decline.

The New York Natural Heritage Program cites an excellent occurrence of the rare seabeach knotweed at Goff Point, considered a high priority survey site; a number of rare plants occur in Napeague Meadows, including marsh straw sedge (*Carex hormathodes*), coast flatsedge (*Cyperus polystachyos var texensis*), marsh fimbry (*Fimbristylis castanaea*, T), New England blazing-star (*Liatris scabiosa var nova-angliae*), pine-barren sandwort (*Minuartia caroliniana*), evening primrose (*Oenothera oakesiana*), seaside plantain (*Plantago maritima ssp juncoides*), sea-pink (*Sabatia stellaris*), and heart sorrel (*Rumex hastatulus*, T). This area supports an example of the rare sea level fen community.

Impact assessment:

Any activity that would substantially degrade the water quality in Napeague Harbor would adversely affect the biological productivity of this area. The water quality in this area is extremely high, and Napeague Harbor is open for shellfishing year-round. Road runoff from New York State Route 27 is identified as a significant contributor to non-point pollution in Napeague Harbor. All species of fish and wildlife would be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, and waste disposal, including vessel wastes. A 1996 Peconic Estuary Program study recommends Napeague Harbor as an appropriate location (one of four areas) to implement eelgrass restoration; the success of this type of restoration depends primarily on water quality.

Docks may be detrimental to nearshore eelgrass beds because of shading, and review of proposed new docks in the area should be conducted with potential impacts to eelgrass beds fully considered. Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of bays, harbors, and tidal creeks can have adverse effects on aquatic vegetation and fish and wildlife populations. Use of motorized vessels should be controlled (*e.g.*, no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and vegetated wetlands.

Alteration of tidal patterns in Napeague Harbor could have major impacts on the fish and wildlife communities present. Dredging to maintain boat channels in the harbor should be scheduled between September 15 and December 15 to minimize potential impacts on aquatic organisms, and to allow for dredged material disposal when wildlife populations are least sensitive to disturbance.

Elimination of salt marsh and intertidal areas, through excavation, filling, or loss of tidal connection, would result in a direct loss of valuable habitat area. Invasion by *Phragmites australis*, frequently along eroding vector control ditches, is a potential threat to the tidal wetlands surrounding Napeague Harbor. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values. Dredged material disposal in this area would be detrimental, but such activities may be designed to maintain or improve the habitat for certain species of wildlife.

Construction of shoreline structures, such as docks, piers, bulkheads, or revetments, in areas not previously disturbed by development (*i.e.*, natural beach or salt marsh), may result in the loss of productive areas which support the fish and wildlife resources of Napeague Harbor. Alternative strategies for the protection of shoreline property should be examined, including innovative, vegetation-based approaches. Effort should be made to acquire private wetland parcels surrounding Napeague Harbor. Overnight mooring of recreational boats is prohibited by the Town of East Hampton to prevent adverse impacts to sensitive habitats and fish and wildlife populations.

Nesting shorebirds inhabiting the Napeague Harbor area are highly vulnerable to disturbance by humans, especially during the nesting and fledgling period (March 15 through August 15). Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site as a breeding area and should be minimized during this period. Recreational activities

(*e.g.*, boat and personal watercraft landing, off-road vehicle use, picnicking) in the vicinity of bird nesting areas should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or continued annual posting of shorebird nesting areas should be provided to help protect these species. Control of vegetative succession, through beneficial use of dredged material or other means may improve the availability of nesting habitat in this area.

(c) Hither Hills Uplands SCFWH

Location and description of habitat:

Hither Hills Uplands is located between Napeague Harbor and the hamlet of Montauk, on the south fork of Long Island, in the Town of East Hampton, Suffolk County (7.5' Quadrangles: Gardiners Island East, NY; and Montauk Point, NY). The fish and wildlife habitat consists of approximately 2,700 acres of undeveloped coastal land, bounded generally by Napeague State Park to the west, Napeague Bay to the west and north, the Montauk landfill to the east, and the Montauk Highway (NYS Route 27) to the south. Vegetative communities within the area include second growth and mature hardwood (oak-hickory) forest, maritime moorlands, dunelands (including the Walking Dunes), freshwater wetlands, old field ("downs"), shrublands, and an approximate 25 acre, shallow, freshwater pond (Fresh Pond). The New York Natural Heritage Program has documented high quality examples of several rare communities in the Park, including coastal oak-heath forest, coastal oak-laurel forest, globally rare maritime oak-holly forest, maritime interdunal swales, and maritime pitch pine dune woodlands. The only human developments within the area are the Long Island Railroad, a power transmission line corridor, and a network of unpaved roads and trails providing public access. Hither Hills Uplands includes nearly all of the undeveloped portion of Hither Hills State Park north of the Montauk Highway, a contiguous area of privately owned land to the east of the park, the County-owned Lee Koppelman Preserve, and the State-, County-, and Town-owned Hither Woods Preserve. Portions of the Hither Hills State Park area of this site were disturbed by fire in 1987.

Fish and wildlife values:

Hither Hills Uplands represents one of the largest undeveloped tracts of coastal upland area on Long Island, including one of the largest deciduous forests in the region. The Walking Dunes contain maritime interdunal swales of regional significance. Globally rare maritime oak-holly forest is also found in the Park.

The area provides much suitable habitat for a variety of wildlife species, including white-tailed deer, red fox, striped skunk, raccoon, gray squirrel, eastern cottontail, ruffed grouse, broad-winged hawk, mallard, wood duck, red-tailed hawk, red-shouldered hawk (SC), northern harrier (T), eastern bluebird, bobwhite quail, American woodcock, great-horned owl, Acadian flycatcher, blue-gray gnatcatcher, red-eyed vireo, eastern hognose snake (SC), spotted turtle (SC), eastern box turtle (SC), four-toed salamander and Fowler's toad. Several of these species are dependent on relatively large tracts of undeveloped forestland for their survival. A 1993-1994 breeding bird survey recorded high nest densities of black-and-white warbler, prairie warbler, blue-winged warbler, rufous-sided towhee,

and whip-poor-will (SC). In 1993, the NYS DEC selected Hither Hills State Park as one of only two sites on Long Island for reintroduction of wild turkeys.

Spotted salamanders and blue spotted salamanders (SC) are common in the area around Fresh Pond. The populations of blue spotted salamander in Montauk are unique because they are comprised of non-hybridized, sexually-reproducing animals. Most mainland populations of this species have hybridized with Jefferson salamander. Fresh Pond contains a warm water fish community, dominated by largemouth bass, yellow perch, and banded killifish. Pumpkinseed, bluegill, black crappie, brown bullhead, and smallmouth bass were stocked in Fresh Pond prior to 1994, and are now established and support a relatively productive recreational fishery. The acid nature of the pond may limit fish species diversity and production.

The New York Natural Heritage Program has documented a number of rare plant species in the Park, including Nantucket juneberry (*Amelianchier nantucketensis*, E), pine-barren sandwort (*Minuartia caroliniana*), and bushy rockrose (*Helianthemum dumosum*; T). The Walking Dunes area on the western side of this site contains excellent examples of a maritime interdunal swales community, and is of regional significance. The rare noctuid moth, *Euxoa pleuritica*, is found in the Walking Dunes.

The Hither Hills Uplands area provides significant opportunities for human use and enjoyment of fish and wildlife resources. Hunting is allowed throughout much of the area, and sportsmen from throughout Long Island come here to pursue a variety of game species, especially white-tailed deer. Relatively few public deer hunting areas exist in this region. Fresh Pond, because it is accessible to the public, is an important freshwater fishing area for residents of Long Island. Hither Hills Uplands is also locally popular for birdwatchers seeking hawks, owls, woodpeckers, and a variety of passerine bird species.

Impact assessment:

The fish and wildlife resources of Hither Hills Uplands would be affected primarily by major habitat alterations, or modification of public access to the area. Habitat modifications which substantially change the natural character of the area, such as residential, commercial, industrial, or public utility developments, would have a significant impact on many wildlife species in the area. Fragmentation of, or development within, large areas of mature woodland or wetlands would be especially detrimental, particularly to forest interior bird species that rely on large, undisturbed blocks of woodland for habitat. Any substantial habitat alterations, if other than for fish and wildlife management purposes, should be avoided in interior areas of Hither Hills Uplands.

Phragmites australis has invaded the interdunal swales in this area. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Proposed development of drinking water wells to serve Montauk could lead to a lowered water table, adversely affecting area wetlands and reducing flow in Flaggy Hole and other water table dependent areas.

Activities designed to enhance human access to the area for fish and wildlife related recreation may be compatible with protection of the existing resources. The addition of trails through the area, however, may promote the invasion of nuisance and exotic species. Uncontrolled recreational vehicle use of the area can contribute to erosion and may result in loss of habitat in Hither Hills Uplands, and should be carefully monitored and managed.

Fresh Pond and a buffer area around it should be maintained as an important component of the Hither Hills Uplands fish and wildlife habitat. The low pH of the pond makes it vulnerable to increased acidification. However, pH stabilization should not be attempted without further study. Prescribed burning within the Hither Hills Uplands site may be beneficial in maintaining rare vegetation communities and their associated wildlife species. The Town of East Hampton recommends the development of a coordinated fire management plan for state, county, town and The Nature Conservancy holdings in this area.

(d) Fort Pond SCFWH

Location and description of habitat:

Fort Pond is located on the south fork of Long Island, north of the hamlet of Montauk, in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Montauk Point, NY). This freshwater pond is approximately 160 acres in size and has a maximum depth of approximately 26 feet. Fort Pond is bordered by residential, commercial, and industrial development, with only a few areas of undeveloped shoreline remaining. A public boat launch is located on the southern end of the pond.

Fish and wildlife values:

Fort Pond is the second largest freshwater pond on Long Island (after Lake Ronkonkoma) and the largest coastal freshwater pond. However, extensive land development has reduced its quality and importance to fish and wildlife from that of an undisturbed freshwater ecosystem. Signs of increased disturbance in recent years include loss of water clarity, sporadic algal blooms, invasion of nuisance vegetation, stunted fish populations, and loss of submerged aquatic vegetation.

Spotted turtle (SC) and least bittern (SC) live and breed at the pond margins and adjacent wetlands. Osprey (SC) feed regularly in the pond. There is a relatively large population of freshwater mussels in the pond. Fort Pond supports a relatively productive warm water fishery, including largemouth bass and smallmouth bass. This is one of only three significant smallmouth bass populations on Long Island. Fort Pond has also been stocked with walleye since 1997. Residents from throughout Long Island are attracted to the freshwater fishing opportunities at Fort Pond.

Fort Pond is an important waterfowl wintering area (November-March) in Suffolk County. During the 1970s and early 1980s, average concentrations of nearly 300 birds were documented in the pond each winter (1,140 in peak year), including scaup, red-breasted merganser, common merganser, Canada goose, and American black duck. The area was used sporadically during the 1990s, with observed numbers ranging from 35 to 488 individuals per year. Species included Canada geese, merganser, scoter, American black duck, redhead, and mallard. Waterfowl use of the pond during winter is determined largely by the extent of ice cover each year. Concentrations of waterfowl also

occur in the area during spring and fall migrations (March-April and October-November, respectively). In addition to waterfowl, Fort Pond is a gathering place for a variety of gull species, including Bonaparte's gull, herring gull, great black-backed gull, and ring billed gull.

The New York Natural Heritage Program has documented several listed and rare plant species at Fort Pond, including: golden dock (*Rumex maritimus* var *fueginus*, T), water penny-wort (*Hydrocotyle verticillata*, E), salt marsh spikerush, and southern arrowwood (*Viburnum dentatum* var *venosum*).

Impact assessment:

Any activities that would degrade water quality, increase temperature or turbidity, or alter water depths would impact on the fish and wildlife species utilizing Fort Pond. All may be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, waste disposal (including boat wastes), and stormwater runoff. The watershed of Fort Pond has been degraded by point source discharges, road runoff and other non-point pollution, and clearing of vegetation. The extensive populations of waterfowl and gulls using the pond contribute a substantial level of nutrients.

The wetlands adjacent to Fort Pond are being encroached by *Phragmites australis* and purple loosestrife (*Lythrum salicaria*). Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Construction activities along the shoreline or in productive underwater areas (*e.g.*, spawning areas) may have a significant impact on the fisheries resources of Fort Pond, through sedimentation or direct loss of habitat. Warm water fish species in the pond are most sensitive to disturbance during spawning and incubation, which generally extends from April 1 through July 30. Acquisition of the few remaining vacant parcels on the shoreline should be considered. The Town of East Hampton has identified restoration opportunities associated with fringing freshwater wetlands and submerged aquatic vegetation of Fort Pond.

Elimination of public access areas could significantly reduce recreational fishing opportunities in Fort Pond. Recreational activities should be timed appropriately to minimize disturbance of sensitive habitat attributes relying on the Fort Pond habitat.

(e) Culloden Point SCFWH

Location and description of habitat:

Culloden Point consists of 222 acres located on Block Island Sound and Fort Pond Bay in northern Montauk in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Montauk Point, NY). This tract was subdivided and developed in the early 1990s, resulting in the creation of 54 residential lots and 188.3 acres of protected land in a contiguous block. The protected block is a Town of East Hampton, Suffolk County, and New York State preserve, encompassing all of the property's wetlands. The fish and wildlife habitat at this site consists of varied knob and kettle terrain with a surface area consisting of about 20% wetlands and 80% uplands. The wetlands are of the riparian and kettlehole type. The uplands are vegetated with alternating areas of oak-hickory hardwoods and brushy downs grasslands.

Fish and wildlife values:

The Culloden Point area is a relatively uncommon ecosystem type on Long Island. The varied knob and kettle terrain provides an excellent habitat for several species of fish and wildlife.

The fern covered stream banks and regularity of stream flow (running to Block Island Sound) make this an ideal habitat for certain amphibians, particularly the blue-spotted salamander. A very large group of blue-spotted salamander (SC) lives in the stream system. Forty-five individuals were found occupying one small breeding hole in 1985. A 1992 herpetological survey in the area encountered 18 individuals. Other species observed were: Four-toed salamander, spring peeper, bull frog, green frog, gray tree frog, snapping turtle, painted turtle, eastern box turtle (*Terrapene carolina*, SC), eastern ribbon snake, and eastern garter snake. The eastern newt occupies several kettleholes including the largest freshwater pond, Culloden Pond.

The habitat area is also important to several species of birds for feeding and nesting. A 1993 breeding bird survey found 25 species of breeding birds here, and is an especially important site for yellow-billed cuckoo, blue-grey gnatcatcher, American goldfinch, and blue-winged warbler. Nest density reached 137 nests per 100 acres. Great horned owls breed in the Culloden Point habitat area; northern harrier (T) is a probable breeder but is not confirmed. Colonies of bank swallows nest in the coastal bluff faces of the area, and wild turkeys and ruffed grouse are found at this site. The littoral zone of Culloden Point is a prime feeding area for the common loon (SC) which overwinters in large numbers (several hundred) in the inshore waters between Montauk Point and Napeague Harbor each year. Other overwintering species observed in the area include Canada goose, common eider, white-winged scoter, bufflehead, red-breasted merganser, old squaw, and mallard.

A variety of mammals occupy the area, most notably the gray fox which is quite rare on Long Island. The long, undisturbed coastline is an important area in the winter months as a haul-out area for harbor seals that feed in Block Island Sound and Fort Pond Bay.

The New York Natural Heritage Program has documented several listed and rare plants at this site, including scotch lovage (*Ligusticum scothicum*, E) and southern arrowwood (*Viburnum dentatum* var *venosum*).

Impact assessment:

The fish and wildlife resources of Culloden Point would be affected primarily by major habitat alterations, or modification of public access to the area. Habitat modifications which substantially change the natural character of the area, such as residential, commercial, or industrial developments which would fragment important vegetative communities, clear woodlands, or disturb wetlands vegetation, would have a significant impact on the wildlife species in this area. *Phragmites australis* is encroaching on the wetlands in this area. Control of invasive nuisance plant species, through a

variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Any activity that would degrade water quality or increase turbidity in the streams and wetlands of Culloden Point would also have a significant impact on fish and wildlife resources. All species may be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, waste disposal (including boat wastes), and stormwater runoff.

Collection of amphibians or reptiles from this area, as well as other fauna or flora, could have a significant impact on survival of species of special concern in New York State. Any permanent alteration or human disturbance of the harbor seal haulout area along the coastline of Culloden Point would adversely affect this species.

(f) Lake Montauk SCFWH

Location and description of habitat:

Lake Montauk is located three miles west of Montauk Point on the South Fork of Long Island in the town of East Hampton, Suffolk County (7.5' Quadrangle: Montauk Point, NY). Lake Montauk was the largest freshwater lake on Long Island, but it has been estuarine since its inlet into Block Island Sound to the north was permanently opened in the 1920's. The approximately 900 acre lake had a healthy growth of eelgrass on the bottom. Presently, eelgrass beds are located only in the northern and western portions of the lake. The fish and wildlife habitat also includes a small freshwater pond (Stepping Stones Pond) off the southwest shoreline of the lake. The lakeshore has been extensively disturbed by residential, commercial and marine development. The water quality is progressively deteriorating due to chronic runoff, boat wastes and increasing subsurface wastewater contributions from shoreline development.

Fish and wildlife values:

Lake Montauk was a rare ecosystem when it was freshwater but as a coastal embayment, with a maintained inlet and extensive shoreline development, it is not unusual in Suffolk County. Despite the development, Lake Montauk remains a high quality estuary supporting significant populations of fish and wildlife. A comprehensive study of the lake found nearly fifty species of birds, primarily shore and water birds, feeding, nesting, or roosting along the lake shore. Over-wintering waterfowl include common loon (SC), American black duck, red-breasted merganser, Canada goose, white-winged scoter, scaup, goldeneye and bufflehead. During the 1987-1996 period, the annual average number of waterfowl observed was 153 individuals; a peak value of 477 birds was observed in the early 1990s. Other wildlife includes the spotted turtle (SC) which resides in the freshwater tributaries and the small freshwater pond adjacent to Lake Montauk.

The Lake Montauk area provides a variety of marine and estuarine habitats for a wide diversity of fish and invertebrates. The commercial bay scallop fishery is significant on Long Island and other regions of New York State. The hard clam and bait fisheries are significant in Suffolk County. Portions of this habitat area are closed to shellfishing between April 1 and December 14, and

between May 15 and October 15. The lake is also the only enclosed embayment on the South Fork supporting a large lobster population.

Fish species that reside and are harvested in the area include bluefish, weakfish, fluke, flounder, blowfish, white bait and striped bass. Lake Montauk is an important commercial fishing port on the South Fork (in 1989 Montauk Harbor was the largest commercial fishing port in the state with respect to landing and number of vessels); the concentration of bait fish is important to this fleet.

In the vicinity of Stepping Stones Pond, the New York Natural Heritage Program has documented several listed and rare plant species, including: coast flatsedge (*Cyperus polystachyos* var *texensis*), long-tubercled spikerush (*Eleocharis tuberculosa*, T), and the best example in New York State of salt marsh spikerush (*Eleocharis halophila*).

Impact assessment:

Any activity that would further degrade the water quality in Lake Montauk would adversely affect the biological productivity and viability of the commercial fishery in this area. All species of fish and wildlife may be affected by water pollution, such as chemical contamination (including food chain effects), oil spills, excessive turbidity, waste disposal (including boat wastes) and stormwater runoff. Use of pumpout facilities in the no-discharge zone should be encouraged and enforced. Existing sources of pollution, both point and non-point, should be identified and then eliminated or reduced so as to improve water quality in Lake Montauk. The fringing wetlands around Lake Montauk have been impacted and/or lost by increased development along the lake shore. Restoration of wetlands in and around this area should be explored to reduce water pollution in the lake. Restoration opportunities may exist at this site for eelgrass beds, but improvement of water quality may be required before this is possible.

Unrestricted use of motorized vessels including personal watercraft in the protected, shallow waters of bays, harbors, and tidal creeks can have adverse effects on aquatic vegetation and fish and wildlife populations. Use of motorized vessels should be controlled (*e.g.*, no wake zones, speed zones, zones of exclusion) in and adjacent to shallow waters and vegetated wetlands.

Alteration of tidal patterns in Lake Montauk could have major impacts on the fish and wildlife communities present. Dredging to maintain the inlet and boat channels in the lake should be scheduled between September 15 and December 15 to minimize potential impacts on aquatic organisms and to allow for dredged material disposal when wildlife populations are least sensitive to disturbance. Dredging and its effects are a particular threat to submerged aquatic vegetation habitats, such as eelgrass, in Lake Montauk.

Elimination of salt marsh and intertidal areas through excavation, filling, or loss of tidal connection, would result in a direct loss of valuable habitat area. Construction of shoreline structures, such as docks, piers, bulkheads, or revetments in areas not previously disturbed by development (*i.e.*, natural beach, tidal flat, or salt marsh), may result in the loss of productive areas which support the fish and wildlife resources of Lake Montauk. Alternative strategies for the protection of shoreline property

should be examined, including innovative, vegetation-based approaches. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values.

Also, the increasing resident mute swan population in this area may contribute to nutrient loading in small or enclosed waterbodies, and may affect usage by other waterfowl species. Mute swan control or removal may be beneficial to native waterfowl use of these waterbodies.

(g) Big and Little Reed Ponds SCFWH

Location and description of habitat:

Big and Little Reed Ponds are located northeast of Montauk Harbor, on the south fork of Long Island, in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Montauk Point, NY). The fish and wildlife habitat is approximately 200 acres in size, and includes a large freshwater pond (Big Reed Pond), extensive cattail marsh, a brackish pond and marsh (Little Reed Pond), and surrounding wetlands and woodlands. Big Reed Pond supports a rich population of submerged aquatic vegetation, and Little Reed Pond supports beds of widgeon grass. A small stream flows from Big Reed into Little Reed Pond, which is connected to Lake Montauk by a tidal creek channel. Most of the habitat is located within undeveloped County parkland. The area is bordered on the west side by a landing strip for small aircraft.

Fish and wildlife values:

Big and Little Reed Ponds comprise a relatively uncommon ecosystem type on Long Island. Big Reed Pond is one of only three areas on Long Island that have been designated as National Natural Landmarks by the National Park Service. The cattail marsh adjoining Big Reed Pond is one of the largest contiguous areas of emergent freshwater wetland in the region, whereas Little Reed Pond is an undeveloped brackish wetland area. Together, Big and Little Reed Ponds represent an unusual example of the natural transition between these habitat types, and contain a relatively diverse assemblage of fish and wildlife species.

Bird species breeding in this area include northern harrier (T), least bittern (SC), Canada goose, mallard, and American black duck. Red-shouldered hawk (SC) historically bred in this area, but has not been documented recently. Immature bald eagles (T) use the area, and short-eared owls (E) frequently overwinter here. Big and Little Reed Ponds serve as valuable feeding areas for these species, as well as for osprey (SC), redhead, hooded merganser, herons, egrets, and many passerine birds.

Blue-spotted salamanders (SC) have been reported breeding in the moist wooded swales draining into Big Reed Pond. This is one of the few locations on Long Island where this species is known to occur. The populations of this species in Montauk are unique because they are comprised of non-hybridized, sexually-reproducing animals. Most mainland populations of blue-spotted salamander have hybridized with Jefferson salamander. Spotted turtles (SC) are found in the ponds and adjacent wetlands. The adjacent wetland and upland areas are valuable as hunting areas for northern harrier

and red-shouldered hawk. In addition, the rare coastal heathland cutworm moth (*Abagotis crumbi benjamini*) is found at this site.

Big and Little Reed Ponds also comprise a significant warm water fisheries habitat. This area contains one of only four documented spawning streams on Long Island for alewives, which migrate from the ocean to spawn in shallow freshwater in spring. Recreational fishing opportunities in Big Reed Pond, primarily for largemouth bass, attract residents from throughout Long Island to the area.

The New York Natural Heritage Program has documented several rare plant species in this area, including clustered bluets (*Hedyotis uniflora*, T), sandplain wild flax (*Linum intercursum*, T), pinebarren sandwort (*Minuartia caroliniana*), southern arrowwood (*Viburnum dentatum*), and the best example of water-pennywort (*Hydrocotyle verticillata*, E) in New York State.

Impact assessment:

Any activities that would degrade water quality, increase turbidity, or alter water depths would have a significant impact on fish and wildlife species inhabiting Big and Little Reed Ponds. All species may be affected by water pollution, such as chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, waste disposal (including boat wastes), and stormwater runoff. Warm water fish species would be most sensitive from April 1 through July 30, when spawning takes place. Barriers to fish migration, whether physical or chemical, would have a significant effect on the biological resources of this area. Passage into Big Reed Pond is difficult and intermittent, and removal of debris and other impediments should be considered for enhancement of migratory fish habitat.

Wildlife species would be most sensitive during the breeding season, which generally extends from April 1 through August 30. Collection of amphibians and reptiles from this area or adjacent areas could have a significant impact on an important population of blue-spotted salamanders. The introduction of exotic, non-native fish, wildlife or plant species should be prohibited.

Any substantial alteration or human disturbance of the wetland and upland vegetative communities, such as changes to wetland or stream hydrology or configuration, filling, introduction of invasive or exotic species, and/or reduction or fragmentation of woodland buffer areas within or adjacent to the habitat may adversely affect wildlife species in the area. The cattail marsh in this habitat area is the largest on the South Fork and is notable in being largely free of *Phragmites australis*. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values. Expansions or alterations to the existing air strip could impact wildlife species and their habitat at this site.

Access to the area during appropriate time periods for compatible recreational uses of fish and wildlife should be maintained.

(h) Oyster Pond SCFWH

Location and description of habitat:

Oyster Pond is located approximately one mile east of Montauk Harbor, on the south fork of Long Island, in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Montauk Point, NY). The fish and wildlife habitat is approximately 275 acres in size, including all of Oyster Pond, its headwaters, and adjacent lands up to the approximate 10 foot contour. Oyster Pond is a relatively large brackish pond, bordered by salt marsh, freshwater wetlands, maritime forest, and small tributaries and drainage swales. The New York Natural Heritage Program identifies Oyster Pond as the largest, highest quality example of the coastal salt pond community in New York State. The pond is periodically opened to Block Island Sound by natural processes. Most of the habitat is located within Montauk Point State Park.

Fish and wildlife values:

Oyster Pond is a relatively large, brackish pond, located within a completely undeveloped watershed. It is the largest, highest quality example of the coastal salt pond community in New York State. This area supports several rare species, comprising an ecological community that is unique on Long Island.

Blue-spotted salamanders (SC) inhabit several wooded swales which drain into Oyster Pond. The populations of this species in Montauk are unique because they are comprised of non-hybridized, sexually-reproducing animals. Most mainland populations of blue-spotted salamander have hybridized with Jefferson salamander. A population of southern leopard frog (SC) exists in a wetland area bordering Oyster Pond. This is one of the few locations on Long Island where this species is known to occur. Spotted turtles (SC) may also occur in the area but this has not been adequately documented. Spotted turtle are common in the watershed. The Pond is also one of the few locations on the South Fork where mink are found.

Oyster Pond is a productive nesting and feeding area for a great variety of birds including herons, egrets, waterfowl, Northern harrier (T), common loon (SC), flycatchers, swallows, thrushes, warblers, blackbirds, and sparrows. The pond serves as an important overwintering area for a number of species of waterfowl, including mallard, American black duck, merganser, bufflehead, and Canada geese. Christmas counts in the Oyster Pond vicinity have observed large concentrations (several thousand) of common eider, black scoter, surf scoter, white-winged scoter, and several hundred individuals of herring gull and great black-backed gull. Several tern species feed in Oyster Pond. Piping plover (E, T-Fed) have been observed on the beach to the north of Oyster Pond, but the importance of this area for this species has not been determined. The area provides bird-watching opportunities of local significance.

A variety of estuarine fish and shellfish species occur in Oyster Pond, including white perch, striped killifish, Atlantic silversides, horseshoe crab, American oyster, soft clam, and barnacles. The pond is uncertified for shellfishing year-round.

Several rare plant species have been documented by the New York Natural Heritage Program in the Oyster Pond area, including Mitchell sedge (*Carex mitchelliana*, E), seabeach knotweed (*Polygonum glaucum*), sea purslane (*Sesuvium maritimum*, E), and southern arrowwood (*Viburnum dentatum*).

Impact assessment:

Any activity that would degrade water quality, increase turbidity, change water depths, or alter salinity patterns in Oyster Pond would have a significant impact on fish, wildlife, and botanical resources. Former Camp Hero to the south drains into Oyster Pond, and has contributed contamination and a serious oil spill in the past. All species of fish and wildlife may be affected by pollution from chemical contamination (including food chain effects resulting from bioaccumulation), pesticides, oil spills, waste disposal, or stormwater runoff. Wildlife species would be most sensitive during the breeding season, which generally extends from April through August.

Any substantial disturbance of the upland and wetland vegetative communities within or adjacent to Oyster Pond may adversely affect wildlife populations in the area. Control of invasive nuisance plant species, through a variety of means, may improve fish and wildlife species use of the area and enhance overall wetland values. Collection of native flora and fauna from this area or adjacent areas, especially important amphibian or reptile species, would have a significant impact on the survival of several species of special concern in New York State. The level of human use of the area should be carefully managed to balance access and recreation with protection of habitat values.

Periodic opening and closing of the pond should be permitted to occur naturally. However, a sustained breach of the pond to Block Island Sound could drastically alter its salinity. A contingency plan should be developed to close an extended term breach (see also **Flooding & Erosion Policies** #11-17).

(i) Montauk Point Locally Significant Coastal Fish and Wildlife Habitat

Location and Description of Habitat:

Montauk Point is the eastern end of the South Fork of Long Island. The fish and wildlife habitat includes approximately 970 acres extending along the shoreline from Shagwong Point extending around Montauk Point along the south shore to the western edge of the bluff east of the Montauk business district. It includes the beach and bluff areas as well as the waters approximately 1,000 feet offshore. The upland areas are owned by the State of New York (Montauk Point State Park), the U.S. Government, Montauk Historical Society (Montauk Lighthouse), the Town of East Hampton and private land owners.

Fish and Wildlife Values:

The waters off Montauk Point are known throughout Long Island for the number and variety of overwintering ducks and seabirds (see Table III-4). Large rafts of scoters and mergansers are a familiar winter sight. A few of the more northern or pelagic species, including harlequin ducks and alcids, are also spotted every year. The waters also support a variety of whales and the largest population of wintering harbor seals on the east end of Long Island. The rocky shoreline provides an important haul-out area for the seals.

The dramatic bluffs along the southern shore of Montauk Point are the southernmost ocean-fronting bluffs on the Atlantic coast. These bluffs are among the few areas of Long Island that provide nesting habitat for bank swallows. The beach below them boasts the most extensive rocky inter-tidal zone on Long Island. A well developed kelp forest flourishes in this zone.

The waters off Montauk Point provide bird watching opportunities and are used intensively for surfcasting. The rocky intertidal zone along the south shore is frequented by scuba divers, and winter hikers traverse the north shore beach to view harbor seals.

Impact Assessment:

Any activity that would degrade water quality, increase turbidity, change water depths, etc. would have a significant impact on fish and wildlife resources. Wintering birds and mammals would be especially affected by water pollution, such as oil spills, chemical contamination (including food chain effects), pesticides, excessive turbidity, waste disposal, etc. Human alteration of the beach or rocky inter-tidal zone or human disturbance from pedestrian or ORV traffic at these sites would adversely affect the harbor seals, shorebirds, sea ducks and overwintering waterfowl. A plan should be devised to reduce human disturbance of shorebirds and overwintering harbor seals. Construction of erosion control structures or human disturbance of the ocean-fronting bluffs would degrade bank swallow habitat, and could lead to alteration of rocky intertidal zones.

This area should be considered for designation as a SCFWH by New York State during any review of designated SCFWHs.

(iv) Reach 10

(a) Napeague Beach SCFWH

Location and description of habitat:

Napeague Beach is located southeast of Napeague Bay, on the south shore of Long Island, in the Town of East Hampton, Suffolk County (7.5' Quadrangle: Napeague Beach, NY). The fish and wildlife habitat consists of an approximately 2 mile segment within Napeague State Park and a 1.5 mile segment of ocean beach extending east to the boundary of Hither Hills State Park. The approximately 490 acre area within the park consists of open sandy beach, a broad, undeveloped, interdune zone situated between the primary dune and Montauk Highway, and a back dune area north of the LIRR tracks, including an excellent example of the maritime pitch pine dune woodland community. Along the ocean beach, the primary dune system reaches elevations of 20 to 30 feet. There is no permanent standing water, but there are numerous low areas flooded with freshwater from the high water table, and an excellent example of the maritime freshwater interdunal swales community is found here. The 1.5 mile segment between Napeague State Park and Hither Hills State Park consists of sandy beach and primary dune. The ocean beach receives moderate recreational use (*e.g.*, bathing, off-road vehicles) during the summer months and the segment outside of the State Park has moderate residential development and a number of condominium resorts.

Fish and wildlife values:

Napeague Beach is one of the largest remaining areas of undeveloped barrier beach and back dune ecosystem on Long Island, representing a rare ecosystem type in New York State. The New York Natural Heritage Program has identified excellent examples of maritime freshwater interdunal swales and pitch pine dune woodlands at this site. Portions of the habitat have been designated as part of the national Coastal Barrier Resources System, one of 67 such areas on Long Island. This outstanding natural area is important to many coastal wildlife species, and provides valuable opportunities for ecological research. Napeague Beach was investigated by the U.S. Fish and Wildlife Service in 1982 as one of four primary sites for baseline studies of coastal wildlife habitats on Long Island's south shore. These studies documented the presence of at least 33 species of breeding birds and 8 species of mammals.

Rare species inhabiting the Napeague Beach habitat area include horned lark (SC), spotted turtle (SC), eastern hognose snake (SC), and eastern spadefoot toad (SC). This is one of the few locations in New York State where eastern spadefoot toads are found in abundance. Other amphibians and reptiles include eastern newt, spotted salamander, four-toed salamander, red-backed salamander, Fowler's toad, green frog, bullfrog, pickerel frog, spring peeper, grey tree frog, northern black racer, eastern milk snake, eastern garter snake, eastern ribbon snake, painted turtle, box turtle, and snapping turtle.

Napeague Beach was also found to have relatively high densities of white-footed mouse, which provides a significant prey base for raptors migrating through the area. Peregrine falcon (E) migrate through the dunes during summer months.

Napeague Beach is a valuable nesting area for least tern (T) and piping plover (E, T-Fed) with both species present continuously from 1983 through 1997. There have been two active nesting sites throughout this period: One located on the beach in Napeague State Park and one two miles east near the boundary of Hither Hills State Park. At these sites, piping plover averaged 3 nesting pairs per year for the 1987-1996 period; a peak number of 5 pairs occurred in 1995. Town of East Hampton plover monitoring documented an average of 4 nesting pairs between 1995 and 1999, producing an average of 8 fledges annually.

Least tern had a ten-year (1987-1996) average of 44 nesting pairs annually; number of pairs of this species was variable from year to year, ranging from 0 to 126 pairs, with peak numbers in 1990 (126 pairs) and 1995 (90 pairs). However, no young fledged in this area between 1994 and 1999. In general, it appears that this relatively undisturbed stretch of ocean beach and primary dunes is a critical area of tern and plover nesting habitat within which colony sites are chosen by the birds each year.

Both the front and back slopes of the primary dunes and large areas of the interdune zone are colonized by associations of beachgrass (*Ammophila breviligulata*) and seaside goldenrod (*Solidago sempervirens*). In addition, associations of beach heather (*Hudsonia tomentosa*), bearberry (*Arctostaphylos uva-ursi*), beach plum (*Prunus maritima*), bayberry (*Myrica pensylvanica*), and pitch

pine (*Pinus rigida*) dot the area. Also present are several low-lying saturated soil areas that are colonized by stands of cranberry and various rushes. North of the interdune zone, the upland transition zone supports mixed communities of trees and shrubs, containing pitch pine, highbush blueberry (*Vaccinium corymbosum*), bayberry, bear oaks (*Quercus illicifolia*), black raspberry (*Rubus allegheniensis*), and poison ivy (*Toxicodendron radicans*). A pine-oak woodland occupies most of the northern part of this site between the upland transition zone and the Montauk Highway, and encompasses an excellent example of the maritime pitch pine dune woodland community. The back dune area has more diverse vegetation including pinweed (*Lechea* spp.), slender wormwood, beach plum (*Prunus maritima*), jointweed (*Polygonella articulata*), wild rose (*Rosa virginiana*), salt spray rose (*Rosa rugosa*), yellow thistle (*Cirsium horridulum*), bearberry, beach heather, seaside and slender fragrant goldenrods (*Solidago* spp.), golden aster (*Chrysopsis falcata*), bayberry (*Myrica pensylvanica*) and reindeer lichens (*Cladonia* or *Cladina* spp.). Several New York Natural Heritage Program rare plants are found at this site, including slender blue flag (*Iris prismatica*), pine barren sandwort (*Minuartia caroliniana*), curly grass (*Schizaea pusilla*, E), and southern arrowwood (*Viburnum dentatum* var *venosum*).

Napeague Beach is an important access area for commercial haul seining and mobile sport-fishing. There are no significant recreational uses specifically associated with the wildlife resources at Napeague Beach. There is a recreational berry harvest in this area of local significance.

Impact assessment:

The Napeague Beach habitat is potentially vulnerable to any land disturbance or increased human activity in the area. Habitat alterations, such as dredged material disposal, vegetation clearing, excavation, or ditching, would have significant adverse impacts on several unusual species inhabiting the area. Uncontrolled human use of the area, including collection of native flora and fauna (such as amphibians and reptiles), and trampling of vegetation in sensitive upper beach and dune areas, would be highly detrimental to the wildlife resources at Napeague Beach.

Nesting shorebirds inhabiting the barrier beach and dunes at Napeague Beach are highly vulnerable to disturbance by humans, especially during the nesting and fledging period (March 15 through August 15). Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site as a breeding area and should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) may also occur. Specific bird nesting areas should continue to be fenced to restrict human disturbance, and signs should be posted in the area for educational purposes. Vehicle traffic should always avoid the upper beach, and driving after dark should be discouraged. Although nesting sites may change from year to year, human disturbance of the upper beach and dunes (above the spring high tide line) must be avoided in order to preserve these sites' value as a nesting habitat.

Traditional uses on the lower beach such as pedestrian traffic, commercial haul seining and mobile sportfishing (often associated with the use of recreational or off-road vehicles) are generally compatible with the use of the upper beach and primary dune area by nesting shorebirds.

However, nesting shorebird species inhabiting the barrier beach and dunes at Napeague Beach are highly vulnerable to disturbance by humans from April through August. Recreational use in the bird nesting areas should be minimized during this period. Specific bird nesting areas should be fenced annually at these sites to restrict human disturbance. Although nesting sites may change from year to year, human disturbance of the upper beach and dunes (above the spring high tide line) must be avoided in order to preserve these sites' value as a nesting habitat. It is recommended that the beach be closed to all vehicles except commercial fisherman and emergency vehicles, and dogs be prohibited between April 1st and August 15th. Vehicular traffic should avoid the upper beach. Educational signs should be erected to inform pedestrians about the vulnerable wildlife. Note: The Town Trustees do not presently agree with these recommendations and, unanimously (1999), wish to see reasonable measures taken to protect nesting shorebirds while at the same time protecting the public's right to use and enjoy our beaches.

(b) Atlantic Double Dunes SCFWH

Location and description of habitat:

Atlantic Double Dunes is located along the south shore of Long Island, in the Town of East Hampton, Suffolk County (7.5' Quadrangle: East Hampton, NY). The fish and wildlife habitat extends approximately two and one-half miles along the coast, from Old Beach Lane in the Village of East Hampton to Beach Avenue in Amagansett, and includes the Amagansett National Wildlife Refuge. This approximate 280 acre area consists of open sandy beach (the Maidstone Club Beach and Amagansett Beach) and a relatively undisturbed interdune area situated between the primary dune and residential development along the south side of Further Lane and Bluff Road. The primary dune zone is dominated by a simple plant community spreading inland for 200 to 300 feet. Extending north from the rear slope of the primary dune, large portions of the back beach interdune zone have support sporadic clusters of shrubs, as well as rare maritime freshwater interdunal swales. The inland portion of the interdune zone is more open and is dominated by grasses and sporadic clusters of shrubs. A succession of tree and shrub dominated communities occupy the most inland portions of the interdune zone and the upland transition zone of this site, forming dense stands of semi-woodland habitat. Atlantic Double Dunes encompasses The Nature Conservancy's Atlantic Double Dunes Preserve, which is comprised of over a dozen parcels totaling approximately 70 acres. The remainder of the area is privately owned. The open beach receives substantial recreational use by local residents, with pedestrian and vehicle access available from two municipal beach areas, at Atlantic Avenue and Indian Wells Highway, and from private boardwalks crossing through the habitat.

Fish and wildlife values:

Atlantic Double Dunes is one of the largest remaining areas of undeveloped barrier beach and back dune ecosystem on Long Island, representing a rare ecosystem type in New York State. This outstanding natural area provides valuable opportunities for research on coastal wildlife species. The Atlantic Double Dunes area was investigated by the U.S. Fish and Wildlife Service in 1982 as one of four primary sites for baseline studies of natural coastal wildlife habitats on Long Island's south shore. These studies documented the presence of at least 21 species of breeding birds, 6 species of mammals, and 4 species of amphibians and reptiles in the area.

Atlantic Double Dunes has a substantial population of white-footed mouse and jumping mouse, which serve as an important prey base for raptors migrating through the area (falcons and accipiters, primarily). Northern harrier (T) hunt in the area during the fall and winter.

Atlantic Double Dunes provides valuable habitat for eastern hognose snake (SC) and eastern spadefoot toad (SC), two species which are uncommon on Long Island. This area supports large breeding populations of Fowler's toads and black racers. In the spring and fall the dunes are important for song bird migration, and for butterfly and dragonfly migration in the fall.

Least tern (T) nested in the area in the early 1980s in a sparsely vegetated portion of the foredune between Old Beach Lane and Two Mile Hollow Road (the Maidstone Club Beach). An estimated 10-40 pairs of least terns were observed in the area each year. Since the mid-1980s, colonies of up to 25 pairs of least tern have been established on the beach in this habitat area, but most have been unsuccessful for breeding. This lack of success is attributed to extreme tides from tropical storm events as well as documented mortality from recreational vehicle traffic. Sporadically during the 1990s several breeding pairs of piping plover have occurred in conjunction with the Atlantic Double Dune tern colonies. In 1995 a tern chick about to fledge was run over by a beach vehicle. The tern was found in a vehicle rut and the Town Trustees questioned whether its death could have been caused by other means. In 1996 no least tern young survived the passage of tropical storm Bertha. In 1996 for the first time the entire beach in front of Maidstone Club was closed to vehicle traffic to protect the tern and plover nesting area over the 4th of July weekend.

There are no significant recreational uses specifically associated with the wildlife of the Atlantic Double Dunes area. Portions of Amagansett Beach provide important access for mobile sports fishermen who use off-road vehicles to reach the valuable surf fishery at this site.

Many important plant species and communities are found in this habitat area. The primary dune zone is dominated by a simple plant community of American beachgrass (*Ammophila breviligulata*) and seaside goldenrod (*Solidago sempervirens* var. *sempervirens*) that spreads inland for 200 to 300 feet. The back beach interdune zone has a dominant ground cover of beach heather (*Hudsonia tomentosa*) and bearberry (*Arctostaphylos uva-ursi*), with sporadic clusters of shrubs such as beach plum (*Prunus maritima*) and bayberry (*Myrica pensylvanica*). Interdunal freshwater swales support stands of rushes, cranberry, highbush blueberry (*Vaccinum corymbosum*), and wild rose (*Rosa virginiana*). The inland portion of the interdune area supports bearberry, beachgrass, domestic grasses, and sporadic clusters of red cedar (*Juniperus virginiana*), bayberry, beach plum (*Prunus maritima*), and pitch pine (*Pinus rigida*). The upland transition zone supports bayberry, shadbush (*Amelanchier canadensis*), arrowwood (*Viburnum* spp.), bear oak (*Quercus ilicifolia*), and pitch pine. Rare plants documented by the New York Natural Heritage Program in this habitat include: round-leaf boneset (*Eupatorium rotundifolium* var *rotundifolium*), southern arrowwood (*Viburnum dentatum* var *venosum*), and the largest population of pine-barren sandwort (*Minuartia caroliniana*) in New York.

Impact assessment:

The Atlantic Double Dunes habitat is potentially vulnerable to any land disturbance or increased human activity in the area. Habitat alterations, such as dredged material disposal, vegetation clearing, excavation, or ditching, would have significant adverse impacts on several unusual species inhabiting the area. Uncontrolled recreational vehicle use of the beach area can contribute to erosion and may result in loss of dune areas.

Encroachment by additional residential development, expansion of beach parking areas, and installation of trails or boardwalks would be likely to reduce the value of the habitat to wildlife. Uncontrolled human use of the area, including collection of amphibians and reptiles, would also be highly detrimental to the wildlife resources at Atlantic Double Dunes.

Nesting shorebirds inhabiting the Atlantic Double Dunes are highly vulnerable to disturbance by humans, especially during the nesting and fledgling period (March 15 through August 15). Significant pedestrian traffic or recreational vehicle use of the beach could easily eliminate the use of this site as a breeding area and should be minimized during this period. Recreational activities (*e.g.*, boat and personal watercraft landing, off-road vehicle use, picnicking) in the vicinity of bird nesting areas should be minimized during this period. Predation of chicks and destruction of eggs or nests by unleashed pets (*e.g.*, dogs, cats) and natural predators may also occur, and predator control should be implemented where feasible. Fencing and/or continued annual posting of shorebird nesting areas should be provided to help protect these species. Control of vegetative succession, though beneficial use of dredged material or other means may improve the availability of nesting habitat in this area.

Although nesting sites may change from year to year, human disturbance of the upper beach and dunes (above the spring high tide line) in general must be avoided in order to preserve the habitat value of these sites. Traditional uses of the lower beach such as pedestrian traffic or mobile sportfishing are generally compatible with the use of the upper beach and dune area by nesting shorebirds and other wildlife. The LWRP recommends that specific bird nesting areas be fenced and posted annually at these sites to restrict human disturbance. Fencing and/or annual posting of additional highly sensitive portions of this habitat area should be provided as needed to help protect other important wildlife species. Note: The Town Trustees, unanimously (1999), wish to see reasonable measures taken to protect nesting shorebirds while at the same time protecting the public's right to use and enjoy our beaches.

(v) Reach 11

(a) Georgica Pond Locally Significant Coastal Fish and Wildlife Habitat

Location and Description of Habitat:

Georgica Pond is a coastal pond on the south shore near the western boundary of East Hampton Town. The fish and wildlife habitat of approximately 290 acres includes the pond, its shoreline and the beach between the pond and the Atlantic Ocean. The boundary between the Town and the Village of East Hampton parallels the eastern shore of Georgica Pond from north to south. Most of the shoreline is privately owned, but the pond bottomland is owned by the East Hampton Town Trustees.

Fish and Wildlife Values:

Georgica Pond is a large coastal lagoon that drains an extensive upland watershed, including a piped drainage system emanating from East Hampton Village that empties into Georgica Cove. Undisturbed, the pond level would naturally rise and flood the surrounding land, intermittently opening itself across the ocean beach when the water level in the pond rises sufficiently above the ocean level. However, the pond has traditionally been opened regularly by the East Hampton Town Trustees for management purposes. The barrier beach which separates the pond from the ocean is also periodically breached by storms.

The opening and closing of the barrier beach allows Georgica Pond to function as a marine estuary which provides a spawning ground and nursery area for anadromous fish such as alewives, and maintains salinity for blue claw crab, the most important fishery in the pond. It provides an essential step in the food chain and is thus important to local fish populations. White perch as well as many bait fish, such as silversides, spawn in the pond. The coordination of beach opening with spawning times determines the effectiveness of this system. The pond also provides feeding areas for osprey (T), winter waterfowl, common terns (T), roseate terns (E, E-FED), least terns (E) and several species of herons and migrating shorebirds. The barrier beach supports a colony of least terns and several pairs of piping plovers (E, T-FED). Since 1984 at least one pair of piping plovers has bred at the mouth of Georgica Pond annually, with as many as six pairs breeding in 1988. In 1995 and 1996 one pair bred successfully. In most years least terns also gather to breed at the mouth of Georgica. As many as 120 pairs assembled there in 1989. However, in the past five years numbers have declined to 10-20 pairs. In 1996 no least terns successfully fledged young at Georgica Pond, a loss attributed primarily to washovers from storms.

Breeding birds also include blue-winged teal, common gallinule and black duck. Recreational uses associated with the wildlife resources at Georgica Pond include crabbing, hunting and birding. Commercial activities include the taking of perch, bait, crabs and eels. This is facilitated by the periodic opening of the barrier beach.

Impact Assessment:

Synchronizing the opening of the pond to the ocean with spawning times affects local populations of white perch, blue crab and several species of baitfish. It may, however, also open at random in response to coastal storms or high rainfall. In addition, any activity that degrades water quality, increases turbidity, changes water depths, etc. would have a significant impact on fish and wildlife resources. Water pollution from chemical contamination (including food chain effects), pesticides, fertilizers, oil spills, excessive turbidity, waste disposal, septic infiltration, stormwater runoff, etc. would also have an adverse effect. Human alterations or structures such as bulkheads, fences, etc. along the pond shoreline or on the barrier beach would also degrade habitat. The introduction of exotic species should be prohibited.

Disturbance of nesting shorebirds by humans and their pets can affect populations along the shoreline and on the barrier beach. Annual fencing to the debris line and posting of bird colonies should be continued. The beach should be closed to all vehicles except commercial fishermen, people actively engaged in crabbing, and emergency vehicles between April 1 and August 15. Dogs should also be prohibited from the beach during this time. The beach should continue to be closed to all traffic for the July 4th weekend. Educational signs should be erected to provide information about the area's vulnerable wildlife. At other times vehicular access to Georgia Gut should be permitted along one lane below the debris line. Note: Unanimously (1999), the Town Trustees do not agree with the recommendations to close the beach to vehicles and dogs, and wish to see reasonable measures taken to protect nesting shorebirds while at the same time protecting the public's right to use and enjoy our beaches.

Methods of reducing the flow of pollutants into the pond should be studied and implemented. Wetland areas surrounding the pond should be protected and/or restored to improve water quality and wildlife habitat (see *Drainage Mitigation, Georgica Cove; Harbor Protection Overlay District, Homeowner Education; Stormwater Abatement*; and *Septic Waste Remediation* in **Projects**). This area should be considered for designation as a SCFWH by New York State during any review of designated SCFWH's.

(b) Wainscott Pond Locally Significant Coastal Fish and Wildlife Habitat

Location and Description of Habitat:

Wainscott Pond is located on the south shore near the Town's western boundary. The fish and wildlife habitat is approximately 50 acres including the pond, the wetland areas surrounding it and the Atlantic Ocean beach. Although Wainscott Pond is completely surrounded by private land, the pond bottom is owned by the East Hampton Town Trustees.

Fish and Wildlife Values:

Wainscott Pond provides valuable wildlife habitat for waterfowl and aquatic species. Overwintering ducks include shovelers, blue-winged teal and green-winged teal. The pond is a stopover for migrating shorebirds and snow geese and a resting area for Canada geese. Its wetland fringes also support a variety of wildlife. Breeding birds include black ducks and occasionally ruddy ducks. The pond also supports populations of painted and snapping turtles. Although use of the pond by the public is limited by the lack of public access, it is a popular duck hunting spot.

Impact Assessment:

Unfortunately the pond's condition is less than pristine. Many of its fringing wetland areas have been mowed and water conditions are poor. The following report was made to the NYS DEC by the Town's Assistant Environmental Protection Director in 1990:

Primary pollutant is agricultural runoff into Wainscott Pond. High organic content associated with this runoff causes high BOD which stresses fish, reptiles, amphibians and waterfowl. Fish kills from low oxygen levels occur periodically. Anaerobic conditions exist in lower portions of the water column during the summer months. Wildlife populations that exist within the pond itself are high density and low diversity which are indicative of poor water conditions. The primary fish populations within the pond are stunted yellow perch, brown bullhead and American eel. There is a lack of predator species (i.e. warm water competitive species, e.g. largemouth bass, chain pickerel) which require higher oxygen levels. The perch and bullhead populations are commercially and recreationally useless because of their stunted size. Problems could be reduced with hedgerow, wetland buffers, and allowing for proper drainage structures.

Any activities that would further degrade water quality, increase turbidity, alter water depths etc. would have a significant impact on fish and wildlife species inhabiting Wainscott Pond. All species of fish and wildlife may be affected by pollution from chemical contamination (including food chain effects), oil spills, excessive turbidity, waste disposal, agricultural and stormwater runoff, etc. Currently, water quality within the pond is poor. Pollution from agricultural and road runoff is augmented by a culvert system leading from Montauk Highway to the north that drains parts of East Hampton and Southampton Towns. Methods of reducing runoff and improving water quality should be studied and implemented through cooperative arrangements in both Towns (see *East Hampton/Southampton Cooperative Run-off Mitigation* in **Projects**). Invasive species such as Phragmites and purple loosestrife are evident around the pond fringe. Wetland areas surrounding the pond should be restored to improve both water quality and wildlife habitat. Public access to the pond should be obtained.

(vi) Reach 12

(a) Gardiner's Island SCFWH

Location and description of habitat:

Gardiner's Island is an approximate 3,300 acre island situated in Gardiners Bay off the Town's north shore (7.5' Quadrangles: Gardiner's Island East, NY and Gardiner's Island West, NY). Gardiner's Island is a large, nearly undeveloped, marine island with tidal and freshwater wetlands, beaches, dunes, bluffs, woodlands, pine barrens, brushland, and meadows. Cartwright Island and Cartwright Shoals at the southern end of Gardiners Island are included in this habitat. The eelgrass beds fringing the shores of Gardiners Island on the eastern and southeastern sides are included in this habitat. The island is privately owned, and there is no road access; however, a small private airport exists. The Gardiner's Island SCFWH corresponds with the Gardiner's Island and Point Complex.

Significance/uniqueness of area:

Gardiner's Island is an extremely rare ecosystem because of its nearly pristine condition. The diversity of habitats present makes Gardiner's Island especially valuable as a coastal wildlife refuge. Species found on the island include many that are on New York State's Endangered (E), Threatened (T), or Special Concern (SC) lists. The island is particularly valuable to ground nesting birds because there are no mammalian predators present.

Fish and wildlife values:

Gardiner's Island is especially valuable as an undisturbed breeding ground for thousands of colonial birds, many of them rare and of regional significance. This is the only current breeding area for roseate terns (E, E-FED) and common terns (T) in East Hampton Town. Roseate terns (E, E-Fed) have been observed nesting intermittently at this site during the 1987-1996 period, with a peak number of 119 pairs observed in 1987. After a several year absence, about 50 pairs of roseate tern produced young in 1995. Several hundred nesting pairs of common tern (T) have also been observed annually after an absence during the late 1980's and early 1990's. Around 95 pairs of this species were observed at the island in 1994-1995. The most important site for common terns breeding on Gardiner's Island is Cartwright shoals at the southern tip, while the major site for roseate tern at this location in the mid-1990's, after being absent since the 1980's. Several hundred least tern adults were observed in 1994-1995. In 1994 and 1995 during the breeding season 360 and 158 adults were counted there respectively. Despite the existence of appropriate habitat, piping plover (E, T-Fed) have not been observed nesting at Gardiners Island since the early 1980's

Tern populations on Cartwright Shoals may be receiving significant nest site competition from gulls, which are primary roseate tern competitors. Gulls (great black-backed gull) were observed at an annual average population of 2,544 pairs during the 1987-1996 period; the peak number reached 4,171 pairs in 1991.

Gardiners Island contains the largest concentration of nesting osprey (SC) in New York State and possibly the largest on the East coast of the United States. Historically, over 300 pairs of osprey nested on Gardiners Island, primarily occupying ground nests (due to the unavailability of suitable trees for nesting and the paucity of mammalian predators). Northern harrier (T) and red-tailed hawk also nest regularly on the island; winter populations of raptors on Gardiners Island are large and diverse, including rough-legged hawk, snowy owl, Cooper's hawk, northern goshawk (SC), peregrine falcon (E), merlin, and American kestrel. Bald eagle (T, T-Fed) also use the island during winter. A spruce plantation on the island supported nesting long-eared owls in the past; barn owls, screech owls, and great-horned owls are year-round residents.

Gardiner's Island also supports a variety of nesting colonial wading birds, including glossy ibis, black-crowned night-heron, snowy egret, great egret, and little blue heron. Gulls, terns, American oystercatchers, double-crested cormorants, and black skimmers occur in impressive concentrations. Gardiners Island has been one of the largest double-crested cormorant colonies in New York State. The annual average population of double-crested cormorant during the 1987-1996 period was 685 pairs, increasing from around 400 pairs in the late 1980's to over 1,000 pairs in the early and mid-1990's. The cormorant colony occurs at Home Pond on the island's western shore. The island also supports one of the largest colonies of great black-backed gulls in the state, numbering 3447 pairs in 1995, including Cartwright Shoals. Northern harrier (T) and seaside sparrow are regular nesters. Canada geese, yellow-breasted chats, bank swallows, gadwalls, red-tailed hawks, turkeys, and sharp-tailed and seaside sparrows also nest here. A pine plantation on the Island contains at least one pair of nesting long-eared owls. The island and its adjacent waters provide excellent waterfowl

wintering areas, with annual average concentrations for the 1987-1996 period exceeding 1,500 individuals. Practically every overwintering waterfowl species found on Long Island can be seen on Gardiner's Island. Wintering species that occur by the hundreds include American black duck, brant, greater and lesser scaup, old squaw, common goldeneye, bufflehead, red-breasted merganser, ruddy duck, and white-winged scoter. The island is regularly used by bald eagles (E, T-FED) during the winter.

Harbor and gray seals have winter haulout sites on the east side of the island and northern diamondback terrapins (SC) reside in the marshes along the shores. The moist woods contain four-toed and spotted salamanders (SC). Diamondback terrapin occur in the coastal ponds of Gardiners Island. The offshore waters support commercially important American oyster beds. The waters of Gardiners Bay provide an abundance of prey fish for the many nesting species of birds on the island and also are important spawning areas for weakfish and winter flounder.

Because Gardiner's Island is privately owned and access is limited, comprehensive inventories of its flora and fauna are lacking. The New York Natural Heritage Program has documented a variety of listed and rare plant species on Gardiners Island, including: northern gamma grass, seabeach knotweed, Small's knotweed, woodland agrimony, and bushy rockrose (*Helianthemum dumosum*, T). This areas also supports the best location of featherfoil (*Hottonia inflata*, T), and one of only two populations of sea purslane (*Sesuvium maritimum*, E), in New York State. Bostwick Forest on the northwest side of Gardiners Island is among the oldest and largest on Long Island, and supports white oak, black oak, scarlet oak, yellow birch, sweet birch, sassafras, tupelo, red maple, and one of only a few populations on Long Island of fruiting persimmons. Other Federally listed plants have been reported historically. The island's relatively pristine condition suggests that it may provide habitat for other globally rare plant and animal species. There are reports that the maritime forests of the island are in excellent condition, and may represent the largest and least disturbed old-growth forests of the eastern Long Island coastal plain.

There are commercial oyster beds in the vicinity of Gardiner's Island. Local residents harvest oysters and fish from waters surrounding the island for commercial and recreational uses. These waters have never been closed to shellfishing as a result of contamination. The eelgrass meadows fringing the island contribute to the nearshore habitat value of the island for juvenile fish and shellfish species. Because the island is privately owned, public recreational uses are not allowed.

Impact assessment:

Increased human use and development of Gardiners Island would have a major impact on the nesting habits of many bird species using the area. Introduction of mammalian predators (such as domestic pets) would be highly detrimental to important populations of nesting birds and other wildlife. The introduction of species exotic to the island should be prohibited. Of particular concern is disturbance to the shoreline and wetland habitats containing many endangered, threatened, and special concern species during the breeding period (April through August). Critical areas of the island to preserve for nesting shorebird species include the Fort Tyler ruins off the northern tip for common terns and roseate terns, and Cartwright Shoals off the southern tip for common terns and least

terns. Terns are vulnerable to disturbance during the May 1 through August 15 breeding season. Control of the expanding great black-backed gull populations at Cartwright Shoals may enhance production of the protected tern species.

The island is unique because of its nearly pristine condition. Any disturbance to the upland, shoreline, wetland, or nearshore habitats that contain many endangered, threatened, and special concern species would be highly detrimental. This is especially critical during the breeding period (generally April 1 through August 30). Degradation of water quality near Gardiners Island, from chemical contamination (including food chain effects resulting from bioaccumulation), oil spills, excessive turbidity, and waste disposal (including vessel wastes), would adversely affect all fish and wildlife, especially important eelgrass meadows and nearshore shellfish populations. The potential for oil spills from the sea lanes 10 miles offshore represents a significant threat to Gardiners Island. The double-crested cormorant colony is a source of excess nutrients. Hickories and tupelos used by cormorants for nesting are experiencing a decline. Limiting the expansion of this colony may be beneficial for maintaining ecosystem health.

The maritime forests of Gardiners Island are exemplary with respect to their age, size and low level of disturbance, especially Bostwick Forest at the island's northwest end; preservation of such areas should be considered a high priority. Disturbance or fragmentation of these habitats or the introduction of exotic or nuisance species would substantially alter the fish and wildlife values of the island.

Docks may be detrimental to nearshore eelgrass beds because of shading, and review of any proposed new docks in the area should be conducted with potential impacts to eelgrass beds fully considered. Restoration opportunities for eelgrass may exist if water quality parameters are appropriate. A 1996 Peconic Estuary Program study recommends the area surrounding Cartwright Point for eelgrass restoration, one of four such sites identified throughout the estuary.

Any change from the island's present status or use should be carefully studied before being approved. Because of the island's unique circumstances and because restricted access has resulted in a dearth of data, a detailed natural resources inventory should be completed in cooperation with the owners and a management plan drafted.

The island is privately owned by a single family, held in a trust for Robert David Lion Gardiner and his niece, Mrs. Alexandra Creel Goelet. If, upon their deaths, the property comes out of trust, and if the island were to be developed, it would have a major impact on the nesting habitats of many bird species using the island and on the regionally significant communities of coastal vegetation.

Conservation considerations:

The diversity of habitats makes Gardiner's Island a regionally significant coastal wildlife refuge. One family has protected this island for over 350 years. Should this ownership pattern ever change, acquisition should be considered by the Federal and/or State governments. In the meantime, efforts should be made to develop cooperative agreements with the owners to intensively survey and assist

in the management of the many significant fish, wildlife and plant resources of this outstanding habitat area, particularly for U.S. Endangered and Threatened species. It is possible that certain rare insects, for example, American burying beetle and northeastern beach tiger beetle, each known from only a single island in the Northeast, may also occur on Gardiner's Island, and surveys for these species should be given high priority by the U.S. Fish and Wildlife Service, the State, and the Town.

D. DESCRIPTION AND DISTRIBUTION OF NATIVE SPECIES

1. Flora

(i) Protected Native Plants

East Hampton supports many plant communities which are relatively undisturbed. As a result, quite a large number of rare species can be found within the Town. Table 1 summarizes the species identified in East Hampton which appear on the New York State Protected Native Plant List and the Federal List of Endangered and Threatened Plants.

(ii) Reach distribution of listed NYS Heritage Program Flora

Many nonregulated and unprotected, yet valuable, ecological communities are located in upland portions of the Town's coastal area. Among the most important are ecological communities that have been identified by the NYS Natural Heritage Program. The program classifies these communities according to their rarity in New York State. The reach distribution of listed NYS Heritage Program Flora is summarized in Table III-2.

Table III-1: Protected Native Plants

Endangered (E):

Plants that are in danger of extinction throughout all or a significant portion of their ranges within the state and requiring remedial action to prevent such extinction.

Species	Common Name
Agalinis acuta *	Sandplain gerardia
Amelanchier x nantucketensis	Nantucket juneberry
Carex mitchelliana	Mitchell sedge
Eupatorium leucolepis	White boneset
Hydrocotyle verticillata	Water-pennywort
Ligusticum scothicum	Scotch lovage
Pycnanthemum torrei	Torrey's mountain-mint
Sabatia campanulata	Slender marsh-pink
Schizaea pusilla	Curlygrass
Sesuvium maritimum	Sea purslane

* Federally listed (E-FED)

Threatened (T): Plants that are likely to become endangered within the foreseeable future throughout all or a significant portion of their ranges in the state.

Species	Common Name
Asclepias purpurascens	Purple milkweed
Asclepias variegata	White milkweed
Fimbristylis castanea	Marsh fimbry
Hedyotis uniflora	Clustered bluets
Helianthemum dumosum	Bushy rockrose, Frostweed
Hottonia inflata	Featherfoil
Linum intercursum	Sandplain wild flax
Lysimachia hybrida	Lance-leaved loosestrife
Platanthera ciliaris	Orange fringed orchis
Platanthera cristata	Crested fringed orchis
Pycnanthemum verticillatum	
var. verticillatum	Whorled mountain-mint
Rumex hastatulus	Heart sorrel

Exploitably Vulnerable:

Native plants likely to become threatened in the near future throughout all or a significant portion of their ranges within the state if causal factors continue unchecked.

Species	Common Name
Asclepias tuberosa	Butterfly weed (Chiggerflower, Orange milkweed;
	Pleurisyroot)
Chimaphila spp.	Pipsissewa (Pine's pine; Waxflower), Spotted
	evergreen (spotted wintergreen)
Cornus florida	Flowering Dogwood
Drosera spp.	Sundew (Dailydew; Dewthread)
Epigaea repens	Trailing Arbutus (Ground laurel; Mayflower)
Ferns:	All native ferns excluding Bracken, Hay-scented and
Adiantaceae	Sensitive
Aspleniaceae	
Azollaceae	
Hymenophyllaceae	
Osmundaceae	
Polypodiaceae	
Schizaeaceae	
Vittariaceae	
Ilex spp. (Native)	Holly (Hulver)

Inkberry (Bitter gallberry) Winterberry (Black alder)

Kalmia spp.	Laurel											
	Spoon wood (Calico-bush)											
	Wicky (Lambkill)											
Lilium spp. (Native)	Lily											
	Turk's-cap											
Lycopodium spp.	All Clubmosses											
Myrica pensylvanica	Bayberry (Candleberry)											
Opuntia humifusa	Prickly pear (Wild cactus; Indian fig)											
Orchidaceae	All native orchids											
Rhododendron spp. (Native)	Azalea											
	Great laurel (White laurel)											
	Honeysuckle											
	Pinkster (Election-pink; Pinkster-bloom)											
	Rhododendron (Rosebay)											
	Rhodora											
Sabatia spp.	Bitterbloom (Marsh-pink, Rose pink; Sabatia;											
Silene caroliniana	Sea-pink)											
Viola pedata	Wild pink											
	Bird's-foot violet											

Rare: Plants that have from 20 to 35 extant sites or 3,000 to 5,000 individuals statewide.

Species	Common Name
Agalinis virgata	Pine-barren gerardia
Arethusa bulbosa	Swamp pink
Carex emmonsii	Emmons sedge
Carex hormathodes	Sedge
Cuscuta pentagona	Field-dodder
Cyperus polystachyos var. texensis	Cyperus
Eleocharis fallax	Creeping spikegrass
Eleocharis halophila	Salt-marsh spikerush
Hemicarpha micrantha	Dwarf bullrush
Liatris scabiosa var.	New England blazing star
novae-angliae	Southern twayblade
Listera australis	Pine-barren sandwort
Minuartia caroliniana	Silverweed
Potentilla anserina ssp. pacifica	Long-beaked bald-rush
Psilocarya scirpoides	Reticulated nutrush
Scleria reticularis var. reticularis	Coastal goldenrod
Solidago elliottii	Spring ladies'-tresses
Spiranthes vernalis	Two-flowered bladderwort
Ûtricularia biflora	Fibrous bladderwort
Utricularia fibrosa	

Table III-2: Reach Distribution of Listed NYS Natural Heritage Program Flora

ABBREVIATIONS

GLOBAL RANK A reflection of global rarity designated by the NYS Natural Heritage Program.

- G1 Critically imperiled globally because of extreme rarity (5 or fewer occurrences, or very few remaining individuals, acres, or miles of stream) or especially vulnerable to extinction because of some factor of its biology.
- G2 Imperiled globally because of rarity (6-20 occurrences, or few remaining acres, or miles of stream) or very vulnerable to extinction throughout its range because of other factors.
- G3 Either very rare and local throughout its range (21 to 100 occurrences), or found locally (even abundantly at some of its locations) in a restricted range (e.g., a physiographic region), or vulnerable to extinction throughout its range because of other factors.
- G4 Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- G5 Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- GH Historically known, with the expectation that it might be rediscovered.
- GX Species believed extinct.
- GU Status unknown.

STATE RANK A reflection of rarity within New York State as designated by the New York Natural Heritage Program.

- S1 Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or some factor of its biology making it especially vulnerable in New York State.
- S2 Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream, or factors demonstrably making it very vulnerable in New York State.
- S3 Typically 21 to 100 occurrences, limited acreage, or miles of stream New York State.
- S4 Apparently secure in New York State.
- S5 Demonstrably secure in New York State.
- SH Historically known from N.Y. State, but not seen in the past 15 years.
- SX Apparently extirpated from New York State.
- SE Exotic, not native to New York State.
- SR State Report only, no verified specimens known from New York State.
- SU Status in New York State is unknown.

TABLE III-2: REACH DISTRIBUTION OF LISTED NYS NATURALHERITAGE PROGRAM FLORA						REACH DISTRIBUTION											
Species	Common Name	Global Rank	NYS Rank	1	2	3	4	5	6	7	8	9	1 0	1 1	1 2		
Agalinis acuta	Sandplain gerardia	G1	S 1					\checkmark	\checkmark	\checkmark		\checkmark					
Agalinis virgata	Pine-barren gerardia	G3G4	S2									\checkmark					
Amaranthus pumilus	Seabeach amaranth	G2	SH				\checkmark										
Amelanchier x nantucketensis	Nantucket juneberry	G2	S 1				\checkmark	\checkmark									
Arethusa bulbosa	Swamp pink	G4	S2							\checkmark	\checkmark	\checkmark					
Asclepias purpurascens	Purple milkweed	G4G5	S2												\checkmark		
Asclepias variegata	White milkweed	G3G5	S 1	\checkmark	\checkmark												
Aster radula	Swamp aster	G5	SH	\checkmark													
Aster vimineus	Small white aster	G5	SH												\checkmark		
Baptisia tinctoria var. projecta	Yellow wild indigo	G5T3Q	SH										\checkmark				
Betula pumila	Swamp birch	G5	S2		\checkmark												
Carex debilis var. debilis	Sedge	G5T5	S2								\checkmark	\checkmark			\checkmark		
Carex emmonsii	Emmons sedge	G5	S 1								\checkmark	\checkmark					
Carex hormathodes	Sedge	G4G5	S 1	\checkmark			\checkmark	\checkmark		\checkmark					\checkmark		
Carex mitchelliana	Mitchell sedge	G3G4	S 1							\checkmark							
Carex muhlenbergii var. enervis	Sedge	G5T5	SH												\checkmark		

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TABLE III-2: REACH DISTRIBUTION OF LISTED NYS NATURALHERITAGE PROGRAM FLORA						REACH DISTRIBUTION										
Species	Common Name	Global Rank	NYS Rank	1	2	3	4	5	6	7	8	9	1 0	1 1	1 2	
Carex retroflexa	Reflexed sedge	G3G5	SH												\checkmark	
Carex seorsa	Stellate sedge	G4	SH									\checkmark				
Carex straminea	Straw sedge	G5	SH	\checkmark	\checkmark											
Chasmanthium laxum	Slender spikegrass	G5	SH					\checkmark								
Chenopodium rubrum	Red pigweed	G5	S4							\checkmark						
Cirsium altissimum	Tall thistle	G5	SH												\checkmark	
Cuscuta pentagona	Field-dodder	G5	S 1						\checkmark							
Cuscuta polygonorum	Smartweed dodder	G5	S 1										\checkmark			
Desmodium ciliare	Tick-trefoil	G5	S2					\checkmark								
Digitaria filiformis	Slender crabgrass	G5	S1S2					\checkmark								
Eleocharis fallax	Creeping spikerush	G4G5	S 1			\checkmark										
Eleocharis halophila	Saltmarsh spikerush	G4	S1S2					\checkmark	\checkmark	\checkmark						
Eleocharis obtusa var. ovata	Blunt spikerush	G5T4Q	S1S3		\checkmark										\checkmark	
Eleocharis tricostata	Three-ribbed spikerush	G3G4	S 1	\checkmark												

TABLE III-2: REACH DISTRIBUTION OF LISTED NYS NATURALHERITAGE PROGRAM FLORA						REACH DISTRIBUTION											
Species	Common Name	Global Rank	NYS Rank	1	2	3	4	5	6	7	8	9	1 0	1 1	1 2		
Eleocharis tuberculosa	Long-tubercled spikerush	G5	S 2	\checkmark		\checkmark			\checkmark								
Eupatorium leucolepis	White boneset	G5	S1	\checkmark													
Fimbristylis caroliniana	Carolina fimbry	G4	SH	\checkmark													
Fimbristylis castanea	Marsh fimbry	G5	S 1	\checkmark	\checkmark		\checkmark										
Gnaphalium purpureum	Purple everlasting	G5	S 1	\checkmark													
Hedyotis uniflora	Clustered bluets	G5	S2	\checkmark					\checkmark								
Helianthemum dumosum	Bushy rockrose, frostweed	G3	S 2	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark			\checkmark					
Hemicarpha micrantha	Dwarf bullrush	G4	S 1						\checkmark								
Hottonia inflata	Featherfoil	G3G4	S 1						\checkmark						\checkmark		
Hydrocotyle verticillata	Water-pennywort	G5	S1						\checkmark			\checkmark					
Hypericum adpressum	Creeping St. John's-wort	G4	S 1	\checkmark													
Liatris scabiosa var. novae- angliae	New England blazing-star	G5?TU	S2S3				\checkmark	\checkmark				\checkmark	\checkmark				
Ligusticum scothicum	Scotch lovage	G5	S 1					\checkmark									
Linum intercursum	Sandplain wild flax	G4G5	S2				\checkmark		\checkmark			\checkmark	\checkmark				
Linum medium var. texanum	Southern yellow flax	G5T5	S 1									\checkmark		\checkmark			
Listera australis	Southern twayblade	G4	S2	\checkmark													

TABLE III-2: REACH DISTRIBUTION OF LISTED NYS NATURALHERITAGE PROGRAM FLORA					REACH DISTRIBUTION											
Species	Common Name	Global Rank	NYS Rank	1	2	3	4	5	6	7	8	9	1 0	1 1	1 2	
Luzula campestris var. bulbosa	Hairy woodrush	G5	S 3				\checkmark	\checkmark	\checkmark			\checkmark	\checkmark			
Lysimachia hybrida	Lance-leaved loosestrife	?	?						\checkmark							
Lythrum linaere	Saltmarsh loosestrife	G5	S1										\checkmark			
Minuartia caroliniana	Pine-barren sandwort	G5	S 3	\checkmark			\checkmark		\checkmark				\checkmark			
Onosmodium virginianum	Virginia false gromwell	G4	S1	\checkmark			\checkmark									
Platanthera ciliaris	Orange fringed orchis	G5	S1			\checkmark			\checkmark				\checkmark			
Platanthera cristata	Crested fringed orchis	G5	S1	\checkmark			\checkmark			\checkmark						
Polygonum glaucum	Seabeach knotweed	G3	S 3		\checkmark	\checkmark	\checkmark			\checkmark					\checkmark	
Potentilla anserina ssp.pacifica	Silverweed	G5TU	S2	\checkmark	\checkmark	\checkmark									\checkmark	
Psilocarya nitens	Short-beaked bald-rush	G3	S2	\checkmark												
Psilocarya scirpoides	Long-beaked bald-rush	G4	S1	\checkmark												

TABLE III-2: REACH DISTRIBUTION OF LISTED NYS NATURALHERITAGE PROGRAM FLORA						REACH DISTRIBUTION											
Species	Common Name	Global Rank	NYS Rank	1	2	3	4	5	6	7	8	9	1 0	1 1	1 2		
Pycnanthemum torrei	Torrey's mountain-mint	G2Q	S 1							\checkmark							
Pycnanthemum verticillatum var. verticillatum	Whorled mountain-mint	G5T?	S 1									\checkmark					
Rhynchospora inundata	Drowned horned rush	G3G4	S 1	\checkmark													
Rudbeckia hirta var. hirta	Black-eyed susan	G5TU	SH												\checkmark		
Rumex hastatulus	Heart sorrel	G5	S 1				\checkmark										
Rumex maritimus var. fueginus	Golden dock	G5T5	S 1	\checkmark					\checkmark	\checkmark				\checkmark	\checkmark		
Sabatia campanulata	Slender marsh- pink	G5	S 1	\checkmark													
Schizaea pusilla	Curlygrass fern	G3	S 1				\checkmark										
Sesuvium maritimum	Sea purslane	G5	S 1							\checkmark					\checkmark		
Silene caroliniana var. pensylvanica	Wild pink	G5TU	S 3	\checkmark													
Solidago elliottii	Coastal goldenrod	G5	S1S2	\checkmark													
Spiranthes vernalis	Spring lady's- tresses	G5	S 1						\checkmark			\checkmark					

TABLE III-2:REACH DISTHERITAGE PROGRAM FLO	REACH DISTRIBUTION														
Species	Common Name	1	2	3	4	5	6	7	8	9	1 0	1 1	1 2		
Utricularia biflora	Two-flowered bladderwort	G5	S 3	\checkmark											
Utricularia fibrosaFibrous bladderwortG4G5S3															

2. Fauna

(a) Reptiles and Amphibians

East Hampton supports a good diversity of native reptiles and amphibians (Table III-3). Among the many factors which contribute to these populations are the following:

- · large areas of contiguous open space
- undisturbed coastal plain habitat supporting numerous kettleholes and vernal ponds
- the absence of curbs along roads and highways.

The Town's marine waters also host several turtles that are registered on the State and Federal lists of endangered, threatened and special concern species. Recent studies have shown that they may be critical feeding areas for young Atlantic Ridley and other sea turtles (Moreales, 1990).

TABLE III-3: REPTILES AND AMPHIBIANS FOUND IN EAST HAMPTON.

Species	Common Name	Species	Common Name
Ambystoma	Blue spotted	Caretta caretta (T, T-	Loggerhead sea turtle
laterale (SC)	salamander	FED)	
Ambystoma	Spotted	Chelonia mydas (T, T-	Green sea turtle
maculatum (SC)	salamander	FED)	
Ambystoma	Marbled	Chelydra serpentina	Snapping turtle
орасит	salamander	Chrysemys picta picta	Eastern painted turtle
Bufo fowleri	Fowlers toad	Clemmys guttata (SC)	Spotted turtle
Diemicttylus viridescens	Eastern newt	Coluber constrictor constrictor	Northern black racer
Hemidactylium scutatum	Four-toed salamander	Dermochelys coriciacea (E, E-FED)	Leatherback sea turtle
Hyla crucifer Hyla versicolor	Spring peeper	Diadophis punctatus edwardsi	Northern ringneck snake
Plethodon cinereus	Gray treefrog Red-backed salamander	<i>Eretmochelys imbricata</i> (E, E-FED)	Hawksbill sea turtle
Rana clamaitans melanota	Green frog	(E, E-IED) Heterodon platyrhinos (SC)	Eastern hognose snake
Rana catesbeiana Rana palustris	Bullfrog Pickerel frog	Lampropeltis doliata triangulum	Eastern milk snake
Rana sphenocephala	Southern leopard	Lepidochelys kempi (E, E-FED)	Atlantic ridley sea turtle
(SC)	0	Malaclemys terrapin	Northern diamondback
Rana sylvatica	Wood frog	terrapin (SC) Natwir singdon san	terrapin
Scaphiopus holbrooki	Eastern spadefoot	Natrix sipedon ssp. Sternothaerus odoratus	Northern water snake
ποιστοσκι			Stinkpot turtle
		Terrapene carolina carolina	Box turtle
		Thamnophis sauritus sauritus	Eastern ribbon snake

Thamnophis sirtalis sirtalis

Eastern garter snake

(b) Birds

Bird populations are diverse. In addition to the numerous ducks and other seabirds that winter on the Town's waters (see Table III-4), East Hampton supports healthy numbers of the species that are typical of Long Island's wooded, rural and suburban areas. A large number of coastal species also breed here during the summer (see Tables III-5 through III-9). Those coastal birds that nest on the open beaches must compete with the increasing human population for use of the beaches. Several of these birds are designated as endangered or threatened by the State and Federal governments.

New York State, East Hampton Town and The Nature Conservancy have attempted to protect colonies of beach nesting species such as least terns (E) and piping plovers (E, T-FED) by erecting snow fencing and soliciting people to work as tern and plover "stewards", most on a volunteer basis. Breeding beaches are managed and protected by various entities. County and State beaches are managed by County and State Parks personnel with the assistance of The Nature Conservancy. Town-owned beaches are managed by the Town Natural Resources Department under the aegis of the Town Trustees.

TABLE III-4: WINTER WATERBIRDS

The following species are typically seen at the Montauk Christmas Bird Counts:

Common Name

Red-throated loon Common loon Pied-billed grebe

Horned grebe Red-necked grebe

Northern gannet Great cormorant

Double-crested cormorant Great blue heron Black-crowned night heron American bittern

Mute swan Tundra swan Canada goose Brant Snow goose

Wood duck Green-winged teal Mallard

Northern pintail Blue-winged teal Northern shoveler Gadwall Eurasian wigeon American wigeon Canvasback Redhead Ring-necked duck Greater scaup Lesser scaup Common eider

Species Gavia stellata *Gavia immer (SC)* **Podilymbus** podiceps Podiceps auritus **Podiceps** grisegena Morus bassanus *Phalacrocorax* carbo **Phalacrocorax** auritus Ardea herodias Nycticorax nycticorax **Botaurus** lentiginosus Cygnus olor *Olor columbianus* Branta canadensis Branta bernicla Chen caerulescens Aix sponsa Anas rubripes Anas platyrhynchos

Anas acuta Anas discors Anas clypeata Anas strepera Anas penelope Anas americana Aythya valisineria Aythya valisineria Aythya collaris Aythya marila Aythya affinis Somateria mollissima

Common Name White-winger scoter Barrow's goldeneye Bufflehead Hooded merganser Common merganser **Red-breasted** merganser Ruddy duck Bald eagle Virginia rail Clapper rail American ovstercatcher Black-bellied plover Greater vellowlegs Willet Ruddy turnstone Red Knot Sanderling Purple sandpiper Dunlin Least sandpiper Common snipe American woodcock Parasitic jaeger Laughing gull Little gull Bonaparte's gull Ring-billed gull Herring gull Icelandic gull

Species Melanitta deglandi Bucephala islandica Bucephala albeola Lophodytes cucullatus Mergus merganser Mergus serrator Oxyura jamaicensis Haliaeetus leucocephalus (E, T-FED)Rallus limicola Rallus longirostris Haematopus palliatus Pluvialis squatarola Tringa melanoleuca *Catoptrophorus* semipalmatus Arenaria interpres *Calidris canutus* Calidris alba Calidris maritima Calidris alpina Calidris minutilla Capella gallinago Philohela minor Stercorarius parasiticus Larus atricilla Larus minutus Larus philadelphia Larus delawarensis Larus argentatus

Larus glaucoides

King eider	Somateria spectabilis	Lesser black- backed gull	Larus fuscus
Harlequin duck	Histrionicus	Glaucous gull	Larus hyperboreus
	histrionicus	Great black-	Larus marinus
Old squaw	Clangula	backed gull	
	hyemalis	Black-legged	Rissa tridactyla
Black scoter	Melanitta nigra	kittiwake	
Surf scoter	Melanitta	Razorbill	Alca torda
	perspicillata	Dovekie	Alle alle
		Belted kingfisher	Megaceryle alcyon

It should be noted that tern colony locations are not permanent. Although a colony will usually return year after year to the same breeding site, part or all of the colony will move to another location if various environmental factors inspire them to move. This is an important characteristic for a creature that breeds on something as changeable as a shoreline. Piping plovers also nest directly on the beach. Although these birds are not colonial, they are often found in the vicinity of least tern colonies, probably because least terns prefer the same habitat as plovers.

Probably the best known coastal nesting bird in East Hampton is the osprey (T). Historic records indicate that it was common on the East End with over 300 nests reported on Gardiner's Island alone in 1932 (Andrle and Caroll, 1988). The species received much media attention when its population fell drastically during the 1950's and 1960's as a result of eggshell thinning caused by the pesticide DDT. The pesticide was banned in 1972, and in 1977 the NYS DEC began to monitor nest sites. Management efforts were made including nest site protection and the erection of nest platforms.

The species has since made a great comeback, especially on eastern Long Island, and its status was changed from endangered to threatened in 1983. However, its numbers have not returned to their pre-World War II abundance and new threats have replaced DDT. A 1986 Study showed that osprey productivity in Adirondack nests was positively correlated with the pH of their foraging sites (Clum, 1986). Other water quality problems, such as brown tide, may influence them as well.

Another well known coastal bird is the mute swan. Mute swans were released on Long Island and in the lower Hudson Valley during the late 1800's and in early 1900's. The species is well established in East Hampton today (Andrle and Carroll, 1988). Although the birds are popular and highly visible, they can cause extensive disturbance to aquatic vegetation and bottom substrates by uprooting and consuming up to 70 pounds of vegetation/bird per week. They are aggressive toward other waterfowl and sometimes kill individuals that enter their nesting territories. They are also suspected of raising total coliform levels in various bays, inlets and creeks (NYS DEC Division of Fish and Wildlife, Bureau of Wildlife, 1989).

Several of the upland portions of the coastal area contain large tracts of contiguous forests, many of which have been protected through acquisition. These areas not only provide watershed protection but also support species such as the hermit thrush, ruffed grouse and whip-poor-will which do not usually survive in urban or suburban areas. The habitat integrity of these forests is essential for the survival of such species in East Hampton.

Bird populations are monitored by a number of ongoing censuses, including the Montauk and Orient Audubon Christmas Bird Counts, Breeding Bird Censuses conducted by the Town Natural Resources Department for 1993-95, and Natural Resources Department Winter Waterfowl Counts for the embayments and open waters of the Town, conducted since 1975. The long history of bird watching on the East End is exemplified by the Montauk Christmas Bird Count, a volunteer avian census that is now in its 67th year.

In addition to breeding and wintering populations, the East Hampton waterfront supports large numbers of migrating birds. Upland areas provide feeding, resting and staging areas for flocks of passerines. Raptors are often seen hunting along the dune lines and offshore areas support large flocks of migrating waterfowl. Perhaps the most vulnerable avian migrants are the shorebirds. Many of these species travel very long distances between breeding and wintering grounds. They forage on beaches and mudflats to build up fat for their long journeys. Human disturbance of these areas is one factor contributing to their declining numbers. Birdwatching is highly dependent on season and species for location. Some examples of which species can be seen where and in what season follow.

<u>Winter</u>: Overwintering seabirds can usually be seen on the outer bays all along the Town's north shore, including common and red-throated loons, and sea ducks such as bufflehead, old squaw, surf and white-winged scoters, golden eye and red-breasted mergansers. Montauk Point is one of the best winter birding sites for seabirds, with gannets, eider ducks, brant, murres, razorbills, dovekies, harlequin ducks, kittiwakes, red-necked grebes, Iceland gulls and glaucous gulls some of the rarer species to be seen. Other good sites for seabirds are the north shore from Culloden to Montauk Point, around the Montauk Harbor jetties, and in the major coastal ponds, Oyster Pond, Fort Pond, and Georgica Pond. Many northern birds overwinter in East Hampton in open water, and can be seen almost anywhere that is not frozen over. On the ponds one can see canvasbacks, redheads, ruddy ducks, ubiquitous mallards and black ducks. Farm fields and open areas fill with Canada geese, with an occasional rare species such as a lapwing (sighted in 1995), and raptors such as red-tailed hawks, harrier hawks, and short-eared or snowy owls. Common resident woodland species include chickadees, bluejays, cardinals, nuthatches and the downy woodpecker.

<u>Spring</u>: Migratory songbirds stop over in the large forested tracts of Northwest woods and Montauk, including Barcelona Neck, the Grace Estate, Cedar Point Park, Hither Hills and Montauk Point State Parks. A few rare species can sometimes be found breeding, such as the black-throated green warbler recently documented in Northwest Woods. Whippoorwills and hermit thrushes can still be heard in the springtime woods, and spring also celebrates the return of nesting shorebirds such as the endangered piping plover. Woodcock can be observed in courtship flights over wetlands and dune swales. The first day of spring is traditionally marked as "Fishhawk Day" for the returning ospreys. The marshes of the South Fork have been pivotal in supporting a local osprey population that has been steadily rebounding from the dark days of DDT to nest on platforms erected by local environmental groups, and on Gardiner's Island, which boasts fifty nesting pairs of osprey. Because of its large areas of intact open space East Hampton was chosen by NYS DEC as one of two sites on Long Island for reintroduction of native wild turkeys, which are reportedly surviving in Hither Woods in Montauk.

<u>Summer</u>: Along the shore summer signals the arrival of wading birds returning to feast in productive saltmarsh around the inner harbors. Colonial shorebirds such as federally endangered roseate terns, piping plovers, and common and least terns breed locally, sharing the beach with human summer visitors, and members of the heron family feed along harbor shores and wetland fringe. Colonies of shorebirds inhabit beaches at Cedar Point, Sammy's Beach, Gerard Drive, Hicks Island and Goff Point in Napeague Harbor, the ocean beach in Napeague, and the spit at Georgica Pond.

<u>Fall</u>: Fall is again a season of migration and East Hampton is an important staging area and stopover on the Atlantic flyway. Clouds of tree swallows can be seen massing in the beach swales and dune areas, migrating songbirds are again encountered in the forest areas, and raptors such as endangered peregrine falcons, merlins and the American kestrel hunt prey over the expanses of Napeague meadows. Peaking in mid-August migrating shorebirds such as ruddy turnstones, dowitchers, blackbellied plovers, dunlins, and a variety of sandpipers populate the quieter north shore beaches.

Several local environmental groups, The Nature Conservancy, Group for the South Fork, South Fork Natural History Society, and East Hampton Trails Preservation Society, offer walks timed to observing birds and other wildlife throughout the seasons.

TABLE III-5: NESTING COASTAL BIRDS

The following species nest within the Town of East Hampton (Andrle and Carroll, 1988):

Common Name	Species	Breeding Status
Pied-billed grebe	Podilymbus podiceps	possible
Double-crested cormorant	Phalacrocrax auritus	confirmed
Least bittern	Ixobrychus exilis (SC)	probable
Great egret	Casmerodius albus	confirmed
Snow egret	Egretta thula	confirmed
Little blue heron	Florida caerulea	confirmed
Cattle egret	Bubulcus ibis	confirmed
Green-backed heron	Butorides striatus	confirmed
Black-crowned night-heron	Nycticorax nycticorax	confirmed
Glossy ibis	Plegadis falcinellus	confirmed
Mute swan	Cygnus olor	confirmed
Canada goose	Branta canadensis	confirmed
Wood duck	Aix sponsa	confirmed
Green-winged teal	Anas crecca	confirmed
American black duck	Anas rubripes	confirmed
Mallard	Anas platyrhynchos	confirmed
Mallard X American Black duck	Anas platyrhynchos x rubripes	probable
Blue-winged teal	Anas discors	probable
Gadwall	Anas strepera	confirmed
Red-breasted merganser	Mergus serrator	possible
Ruddy duck	Oxyura jamaicensis	possible
Osprey	Pandion haliaetus (T)	confirmed
Northern harrier	Circus cyaneus (T)	confirmed
Clapper rail	Rallus longirostris	possible
Virginia rail	Rallus limicola	probable
Common moorhen	Gallinula chloropus	probable
Piping plover	Charadrius melodus (E, T-	confirmed
American oystercatcher	FED)	confirmed
Willet	Haematopus palliatus	confirmed
Spotted sandpiper	Catoptrophorus semipalmatus	confirmed
Herring gull	Actitis macularia	confirmed
Great black-backed gull	Larus argentatus	confirmed
Roseate tern	Larus marinus	confirmed
Common tern	Sterna dougallii (E, E-FED)	confirmed
Least tern	Sterna hirundo (T)	confirmed
Black skimmer	Sterna antillarum (E)	confirmed
Belted kingfisher	Rynchops niger	confirmed
Horned lark	Megaceryle alcyon	confirmed
Tree swallow	Eremophila alpestris	confirmed
Northern rough-winged swallow	Iridoprocne bicolor	confirmed

Bank swallow	Stelgidopteryx ruficollis	confirmed
Fish crow	Riparia ripania	confirmed
Marsh wren	Corvus ossifragus	probable
Savannah sparrow	Cistothorus palustris	confirmed
Sharp-tailed sparrow	Passerculus sandwichensis	confirmed
Seaside sparrow	Ammodramus caudacuta	probable
Red-winged blackbird	Ammodramus maritima	confirmed
	Agelaius phoeniceus	

TABLE III-6: SU	MMAK	RY OF	PIPIN	G PLO	VER	BREE	DING	SITE	S, 198	3 - 199)5*		
						Nun	nber o	f Adu	lts		•	-	_
Location	198 3	198 4	198 5	198 6	19 87	198 8	198 9	19 90	19 91	199 2	199 3	1994 ***	1995* **
Cedar Point County Park	2	1	0	0	1	4	1**	9	-	0	8	6	14
Northwest Harbor	0	0	0	0	0	1	0	0	0	0	0	0	0
Three Mile Harbor	2	1	0	0	0	0	0	0	0	2	2	10	6
Lion Head Beach	2	2	1	2	0	0	0	0	1	2	2	2	2
Gerard Park	0	0	4	0	2	2	2	6	8	2	4	2	2
Gerard Drive	0	0	4	2	0	1	0	2	2	6	2	6	6
Accabonac Harbor	0	2	0	0	0	0	0	-	0	0	2	2	2
Hicks Island	2	2	1	0	3	2	4	6	4	4	2	2	6
Goff Point	0	0	0	0	0	0	0	2	2	2	2	4	6
Napeague Beach East	0	2	6	5	4	1	2	3	-	1	4	6	6
Napeague Beach	2	0	4	1	2	0	0	2	4	2	2	2	4
Maidstone Beach	-	-	0	2	1	0	2	1	0	0	2	2	0
Georgica Pond	0	2	4	4	4	13	7	5	7	5	4	4	4
Plimptons Beach													
 * Data taken from Long Island Colonial Waterbird and Piping Plover Study 1983-94. ** Site discovered after survey period. *** Town of East Hampton Natural Resources Department Data. 													

IE.

TABLE III-7: SUMMARY OF COMMON TERN COLONIES, 1984 - 1995*													
					Num	ber of	Adult	S	-	-	-		
Location	198 4	198 5	198 6	19 87	1988	198 9	19 90	19 91	199 2	199 3	199 4	1995 **	
Three Mile Harbor	52	88	28	75	39	50	0	26	18	30	0	28	
Gardiner's Island	40	285	250	73 8	Not surveyed	0	-	0	0	0	190	392	
Hicks Island	600	0	0	18	360	476	12 5	85	71	42	10	-	
Goff Point	0	0	0	0	3	0	0	0	0	0	0	-	
Oyster Pond	80	0	0	0	0	0	-	0	0	0	-	0	
 * Data taken from Long Island Colonial Waterbird and Piping Plover Study 1984-94. ** Town of East Hampton Natural Resources Department Data. 													

TABLE III-8: SUMMARY OF ROSEATE TERN COLONIES, 1984 - 1995*													
					Num	ber of	Adul	ts					
Location	198 4	198 5	198 6	19 87	1988	198 9	19 90	19 91	199 2	199 3	199 4	1995 ***	
Three Mile Harbor	0	0	0	2	0	0	0	0	0	0	0	0	
Gardiner's Island	0	60	5	13 3	Not surveyed	0**	0	0	0	9	28	200	
Hicks Island	80	0	0	0	40	40	4	5	8	0	0	0	
Goff Point	0	0	0	2	0	0	0	0	0	0	0	0	
 * Data taken from Long Island Colonial Waterbird and Piping Plover Study1984-94. ** Colony surveyed outside survey period. *** Town of East Hampton Natural Resources Department Data. 													

TABLE III-9: SUM	MARY	OF L	EAST	TERN	COLO	ONIES	5, 1982	- 1995	*					
						I	Numbe	er of A	dults					
Location	198 2	198 3	198 4	198 5	19 86	19 87	198 8	198 9	19 90	19 91	199 2	199 3	1994 ***	1995* **
Cedar Point County Park	0	85	29	0	0	0	0	0	0	0	0	14	40	56
Northwest Harbor	0	0	0	0	0	6	0	20	13	0	0	0	0	0
Three Mile Harbor	200	175	60	3	31	20	18	5	0	0	11	0	0	0
Lion Head Beach	0	28	16	0	0	0	0	0	24	0	61	0	0	0
Gerard Park	0	0	0	4	0	0	0	0	0	0	0	0	150	0
Gerard Drive	0	0	24	171 **	63	0	3	21	33	17	38	53	0	36
Accabonac Harbor	40	0	10	0	0	17	0	0	0	0	0	0	0	0
Hicks Island	0	45	46	0	0	27	0	47	0	60	59	0	0	200
Goff Point	0	0	75	45	0	18	19	25	32	11	50	0	0	-
Oyster Pond	0	0	80	0	0	0	0	0	0	0	0	0	0	0
Napeague Beach East	0	0	26	37	29	9	0	9	14 0	-	0	11	300	84
Napeague Beach	0	18	12	22	23	27	0	0	0	10 2	22	28	0	250
Maidstone Beach				0	26	52	40	30	2	19	31	32	6	10

Georgica Pond	0	0	4	18* *	0	14	69	245	97	85	0	13	10	18
Plimptons Beach	20	3	0	0	0	0	0	0	0	0	0	0	0	0
Gardiners Isl (Cartwright)													360	316
 * Data taken from I ** Adult count deriv *** Town of East 	ed from	n doub	ling th	e nest c	ount c	of the c	colony.		ıdy 19	84-94.		-		

(c) Mammals

The mammals found in East Hampton are typical of those found throughout Suffolk County, including significant numbers of white-tailed deer (*Odocoileus virginianus*). Although a hunting season (bow and shotgun) is held each year in several of the town's large open space areas, the population is large and in several areas has exceeded the "cultural" carrying capacity. However, the population has not reached the "ecological" carrying capacity (Cavanagh 1989, Lowery 1991, Penny 1991).

Also common throughout the town are the raccoon (*Procyon lotor*), opossum (*Didelphis marsupialis*), eastern cottontail (*Sylvilagus floridanus*), red fox (*Vulpes fulva*), long-tailed weasel (*Mustela frenata*) and the grey squirrel (*Scirus carolinensis*). The wetland areas frequently support muskrat (*Ondatra zibethicus*) populations and mink (*Mustela vison*) have also been seen.

Common small mammals usually include white-footed mouse (*Peromyscus leucopus*), eastern mole (*Scalopus aquaticus*), eastern chipmunk (*Tamias striatus*), meadow vole (*Microtus icus*), pine mouse (*Pitymys pinetorum*), masked shrew (*Sorex cinereus*), short-tailed shrew (*Blarina brevicauda*) meadow jumping mouse (*Zapus hudsonius*), Norway rat (*Rattus norvegicus*) and house mouse (*Mus musculus*). The big brown bat (*Eptesicus fuscus*) is the only year-round resident bat found in the town (Planning and Natural Resources Departments, 1988).

The following marine mammals are commonly seen in the waters off East Hampton: finback whale (*Balaenoptera physalus*) (E, E-FED), saddleback dolphin (*Delphinus delphis*), harbor seal (*Phoca vitulina*), minke whale (*Balaenoptera acutorostrata*) and Atlantic pilot whale (*Globiceahala melaena*).

(d) Threatened and endangered fauna

While few of the extant land mammal species are considered threatened or endangered, a number of the bird species mentioned above, some reptiles and amphibians, as well as marine turtles and mammals are listed as such by the State and Federal governments. Threatened and endangered fauna and their distribution throughout the Town's coastal zone are summarized on Table III-10.

TABLE III-10: TH ENDANGERED F	HREATENED AND AUNA					REA	CH DI	STRIE	UTIO	N ANI	D USE			
Species	Common Name	Status	1	2	3	4	5	6	7	8	9	10	11	12
Caretta caretta	Loggerhead sea turtle	T, T- FED	М	М	М	М	М	М	М	М	М	М	М	М
Chelonia mydas	Green sea turtle	T, T- FED	М	М	М	М	М	М	М	М	М	М	М	М
Dermochelys coriacea	Leatherback sea turtle	E, E- FED	М	М	М	М	М	М	М	М	М	М	М	М
Eretmochelys imbricata	Hawksbill sea turtle	E, E- FED	М	М	М	М	М	М	М	М	М	М	М	М
Lepidochelys kempii	Atlantic Ridley sea turtle	E, E- FED	FM	FM	FM	FM	FM	FM	FM	FM	FM	FM	FM	FM
Buteo lineatus	Red-shouldered hawk	Т	М				В							
Charadrius melodus	Piping plover	E, T- FED	BF M	BF	BF M	BF M					BF M	BF M	BF M	BF M
Circus cyaneus	Northern harrier	Т	FB	F			BF M	FM		FM	FM	BF M		
Falco peregrinus	Peregrine falcon	E, E- FED					FM					FM		
Haliaeetus leucocephalus	Bald eagle	E, T- FED					FM							FM
Pandion haliaetus	Osprey	Т	BF M	F	BF M	BF M	FM	FM	FM			FM	BF M	BF M
Sterna antillarum	Least tern	E	BF M	BF M	BF M	BF M	FM	FM	FM			BF M	FM	BF M

Sterna dougallii	Roseate tern	E, E- FED	FM	BF M	F	BF M	FM	FM	FM				FM	BF M
Sterna hirundo	Common tern	Т	BF M	BF M		BF M	FM	FM	BF M			FM	FM	BF M
Balaenoptera borealis	Sei whale	E, E- FED							BF M	?	?	?	?	
Balaenoptera musculus	Blue whale	E, E- FED							BF M	?	?	?	?	
Balaenoptera physalus	Finback whale	E, E- FED							BF M	BF M	?	?	?	
Eubalaena glacialis	Right whale	E, E- FED							BF M	?	?	?	?	
Megaptera novaeangliae	Humpback whale	E, E- FED							BF M	?	?	?	?	
Physeter catodon	Sperm Whale	E, E- FED							BF M	?	?	?	?	

Abbreviations:STATUS:T = Listed as Threatened by NYS; E = Listed as Endangered by NYS; T-FED = Listed by Federal
Government as Threatened; E-FED = Listed by the Federal Government as Endangered.

USE: B = Breeding; F = Feeding; M = Migratory

E. FISH AND WILDLIFE POLICIES

POLICY 7 SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS, AS IDENTIFIED ON THE COASTAL AREA MAP, SHALL BE PROTECTED, PRESERVED, AND, WHERE PRACTICABLE, RESTORED SO AS TO MAINTAIN THEIR VIABILITY AS HABITATS.

POLICY 7A LOCALLY SIGNIFICANT COASTAL FISH AND WILDLIFE HABITATS, AS IDENTIFIED ON THE COASTAL AREA MAP, SHALL BE PROTECTED, PRESERVED, AND WHERE PRACTICABLE, RESTORED SO AS TO MAINTAIN THEIR VIABILITY AS HABITATS.

Explanation of Policies:

Habitat protection is recognized as fundamental to assuring the survival of fish and wildlife populations. Certain habitats are particularly critical to the maintenance of a given population and therefore merit special protection. Such habitats exhibit one or more of the following characteristics:

- 1. Are essential to the survival of a large portion of a particular fish or wildlife population e.g., feeding ground, nursery areas,
- 2. Support populations of rare and endangered species,
- 3. Are found at a very low frequency within a coastal region,
- 4. Support fish and wildlife populations that have significant commercial and/or recreational value, and
- 5. Would be difficult or impossible to replace.

Significant Coastal Fish and Wildlife habitats are evaluated, designated and mapped pursuant to the Waterfront Revitalization and Coastal Resources Act (Executive Law of New York, Article 42). The New York State Department of Environmental Conservation (NYS DEC) evaluates the significance of coastal fish and wildlife habitats and following a recommendation from the NYS DEC, the Department of State (NYS DOS) designates and maps specific areas.

In the Town of East Hampton, sixteen habitats have been designated by the NYS DOS as Significant Coastal Fish and Wildlife Habitats and five habitats have been designated by the Town of East Hampton as Locally Significant Coastal Fish and Wildlife Habitats. These designations are the basis for the habitats described in the Inventory and Analysis section of this report.

The specific areas designated as significant coastal fish and wildlife habitats in the Town of East Hampton are as follows.

Reach 1:	Alewife and Scoy Pond Wetlands
	Cedar Point Peninsula
	Northwest Creek
	Sag Harbor and Northwest Harbor
Reach 2:	Three Mile Harbor
	Three Mile Harbor (locally designated)
Reach 3:	Accabonac Harbor
	Bell Estate-Fresh Pond Wetlands (locally designated)

Reach 4:	Napeague Harbor
	Culloden Point
	Fort Pond
	Hither Hills Upland
Reach 6:	Big and Little Reed Ponds
	Lake Montauk
Reach 7:	Oyster Pond
	Montauk Point (in part locally designated)
Reach 8:	Montauk Point (in part locally designated)
Reach 10:	Atlantic Double Dunes
	Napeague Beach
Reach 11:	Georgica Pond (locally designated)
	Wainscott Pond (locally designated)
Reach 12:	Gardiner's Island

A habitat impairment test must be met for any activity that is subject to consistency review under federal and state laws, or under applicable local laws contained in an approved local waterfront revitalization program. If that proposed action is subject to consistency review, then the habitat protection policy applies, whether the proposed action is to occur within or outside the designated area.

The specific habitat impairment test that must be met is as follows:

In order to protect and preserve a significant habitat, land and water uses or development shall not be undertaken if such actions, the cumulative effect of such actions or the cumulative effects of several potential similar actions would:

- · destroy the habitat; or,
- significantly impair the viability of a habitat.

Habitat destruction is defined as the loss of fish or wildlife use through direct physical alteration, disturbance, or pollution of a designated area, or through the indirect effects of these actions an a designated area. Habitat destruction may be indicated by changes in vegetation, substrate, or hydrology, or increases in runoff, erosion, sedimentation, or pollutants.

Significant impairment is defined as reduction in vital resources, e.g., food, shelter, living space, or change in environmental conditions, e.g., temperature, substrate, salinity, beyond the tolerance range of an organism. Indicators of a significantly impaired habitat focus on ecological alterations and may include, but are not limited to, reduced carrying capacity, changes in community structure (food chain relationships, species diversity), reduced productivity and/or increased incidence of disease and mortality.

The tolerance range of an organism is not defined as the physiological range of conditions beyond which a species will not survive at all, but as the ecological range of conditions that supports the

species' population or has the potential to support a restored population, where practical. Either the loss of individuals through an increase in emigration or an increase in death rate indicates that the tolerance range of an organism has been exceeded. An abrupt increase in death rate may occur as an environmental factor falls beyond a tolerance limit (a range has both upper and lower limits). Many environmental factors, however, do not have a sharply defined tolerance limit, but produce increasing emigration or death rates with increasing departure from conditions that are optimal for the species.

In determining whether an action is likely to impair a habitat, the effect of the action on the parameters which define the tolerance range of the species must be evaluated. In addition, specific examples of the types of changes that are associated with generic activities are provided to illustrate likely sources of habitat impairment. Finally, specific impact assessments for each designated habitat are provided in the Inventory and Analysis section of this document. Each of these sources of information is provided to assist in the evaluation of the habitat impairment test.

The range of parameters which should be considered in applying the habitat impairment test include but are not limited to the following:

- 1. Physical parameters, such as living space circulation, flushing rates, tidal amplitude, turbidity, water temperature, depth (including loss of littoral zone), morphology, substrate type, vegetation, structure, erosion and sedimentation rates;
- 2. Biological parameters, such as community structure, food chain relationships, species diversity, predator/prey relationships, population size, mortality rates, reproductive rates, meristic features, behavioral patterns and migratory patterns; and
- 3. Chemical parameters, such as dissolved oxygen, carbon dioxide, acidity, dissolved solids, nutrients, organics, salinity, and pollutants (heavy metals, toxics and hazardous materials).

The range of generic activities and the resultant impacts that would most likely affect the habitats includes but is not limited to the following.

- 1. Draining wetlands, ponds: cause changes in vegetation, or changes in groundwater and surface water hydrology.
- 2. Filling wetlands, shallow areas of streams, lakes, bays, estuaries: may change physical character of substrate (e.g., sandy to muddy, or smother vegetation, alter surface water hydrology).
- 3. Grading land: removes vegetation, increased surface runoff, or increased soil erosion and downstream sedimentation.
- 4. Vegetation removal: increases amount and rate of surface runoff, increases stream bed scouring, soil erosion, sediment deposition, habitat loss.

- 5. Dredging or excavation: changes substrate composition, possible release of contaminants sequestered in sediments, removal of aquatic vegetation, changes circulation patterns and sediment transport, disruption of shellfish beds.
- 6. Dredge material disposal: may induce shoaling of littoral areas, change circulation patterns, smother vegetation and alter bird nesting habitat.
- 7. Physical alteration of shore areas through channelization or construction of shore structure[s]: changes volume and rate of sediment flow, may increase scouring, sedimentation, or accelerate erosion of adjacent land.
- 8. Introduction, storage, disposal or leaching of pollutants such as chemicals, petrochemicals, solid wastes, nuclear wastes, toxic materials, pesticides, herbicides, fertilizers, chlorine and swimming pool biocides, wood preservatives, sewage effluent, urban and rural runoff: increased mortality or sublethal effects on organisms, alter reproductive capabilities, reduced value as food organisms.
- 9. Introduction of exotic flora or fauna: out compete and replace native species.
- 10. Disturbance of species and/or habitats: causes functional loss of habitat by trampling vegetation, removal or collection of flora or fauna, disrupts nesting, attracts predators through littering, increases predation and disturbance by pets, causes abandonment of young due to excess noise, pedestrian and vehicular traffic.
- 11. Fragmentation of intact habitat: functional loss of wildlife species for those species requiring larger undisturbed tracts.
- 12. Increased density and scale of development within and adjacent to a significant habitat: likely to result in habitat loss due to one or more of the above described activities and resulting impacts.

In addition to the preceding generic treatments of parameters and activities, impact assessments are included in the Inventory and Analysis which describe activities and impacts which could destroy or significantly impair a designated habitat. The specific impact assessments, generic list of activities and list of parameters are intended to assist in applying the habitat impairment test. Actions which would result in destruction or significant impairment of the designated habitat shall either be prohibited or modified so that the resulting impacts will not result in significant impairment of the habitat. Prohibition or modification of activities shall include those arising from land use or development adjacent to designated habitats. Furthermore, the following should also be considered on a case by case basis:

1. In evaluating proposed actions, including those for public utilities and/or semi-public authorities, agencies should actively explore and consider suitable alternative locations

sufficiently removed from the designated habitat area to minimize the potential for adverse effects on the designated habitat.

- 2. Natural habitats should be restored wherever they have been lost or degraded.
- 3. Disturbance of existing natural communities should be minimized by techniques including but not limited to clearing limitations, building envelopes, creation of reserved areas, management plans, scenic and conservation easements and the use of natural and biological pest controls.
- 4. Total preservation through acquisition, donation of land, easement, purchase of development rights, etc. should be considered for all areas including significant habitats and contributing adjacent areas.

Applicants and agencies are encouraged to use the narratives within the Inventory and Analysis in evaluating the effect of a proposal on the habitat. This information is, however, based on data available at the time of the habitat designation (NYS SCFWHs were designated in 1987, Local Habitats in 1991). Evaluation of any proposed action should include current data. Major habitat alterations intended for habitat management purposes should also be evaluated against potential impacts and should be thoroughly reviewed in an environmental impact statement or resource management planning process.

POLICY 7B PROTECT TO THE MAXIMUM EXTENT PRACTICABLE THE VULNERABLE PLANT AND ANIMAL SPECIES AND NATURAL COMMUNITIES THAT HAVE BEEN IDENTIFIED BY THE NEW YORK HERITAGE PROGRAM, THE NEW YORK STATE DEC PROTECTED NATIVE PLANT LIST (NYCRR 193.3), THE NEW YORK STATE DEC LIST OF ENDANGERED, THREATENED AND SPECIAL CONCERN SPECIES AND THE FEDERAL LIST OF ENDANGERED AND THREATENED WILDLIFE AND PLANTS (50 CFR 17)

Explanation of Policy:

The Town of East Hampton contains a rich variety of native flora and fauna. Of this variety, only those species or communities which are critical to the maintenance of a given fish or wildlife population are protected by Policies #7 & #7A. The goal of Policy #7B is to preserve the existing diversity. This is accomplished by protecting those species or communities which are the most vulnerable. These have been identified on the State and Federal levels by the New York Heritage Program, the New York State DEC Protected Native Plant List, the NYS DEC List of Endangered, Threatened and Special Concern Species and the Federal List of Endangered and Threatened Wildlife and Plants.

Due to the sensitive nature of the data, the precise locations of the significant vegetation have not been published. However, the plant species found to date within each reach, that appear on these

lists have been included in the Inventory and Analysis. A study of the Town's wildlife populations should be undertaken to identify locally vulnerable species.

In order to determine consistency with this policy, on all actions which require government approval, the project site shall first be inspected for the presence of any individual species or natural communities that appear on current versions of the above lists or are identified by the recommended local study. The proposed action must maximize protection of the listed species and natural communities. Methods of protection can include but are not limited to the following:

- 1. Relocation of proposed structures to avoid disturbance of listed species or communities;
- 2. Drainage plan design that avoids disturbance of listed species or communities;
- 3. Creation of reserved areas, management plans, scenic easements or conservation easements;
- 4. Subdivision layout which protects listed species or communities;
- 5. Transfer of land ownership to a bona fide conservation organization, and
- 6. Building envelopes and clearing restrictions.

POLICY 8 PROTECT FISH AND WILDLIFE RESOURCES IN THE COASTAL AREA FROM THE INTRODUCTION OF HAZARDOUS WASTES AND OTHER POLLUTANTS WHICH BIO-ACCUMULATE IN THE FOOD CHAIN OR WHICH CAUSE SIGNIFICANT SUBLETHAL OR LETHAL EFFECT ON THOSE RESOURCES.

Explanation of policy:

Hazardous wastes are unwanted by-products of manufacturing processes and are generally characterized as being flammable, corrosive, reactive, or toxic. More specifically, hazardous waste is defined in Environmental Conservation Law [§ 27-0901(3)] as "waste or combination of wastes which because of its quantity, concentration, or physical, chemical or infectious characteristics may: (1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed or otherwise managed." A list of hazardous wastes has been adopted by NYS DEC (6 NYCRR Part 371).

The handling (storage, transport, treatment and disposal) of the materials included on this list is being strictly regulated in New York State to prevent their entry or introduction into the environment, particularly into the State's air, land and waters. Such controls should effectively minimize possible contamination of and bio-accumulation in the State's coastal fish and wildlife resources at levels that cause mortality or create physiological and behavioral disorders. Other pollutants are those conventional wastes, generated from point and non-point sources, and not identified as hazardous wastes but controlled through other State laws. Remediation of sources of point and non-point conventional wastes are addressed primarily in **Section XII**, **Water and Air Resources Policies #30-44**.

Pollution sources and ongoing abatement efforts for coliform bacteria, stormwater runoff, pollution emanating from upland development, and hazardous materials are addressed in the inventory section. Specific point and non-point sources are further pinpointed in the individual reach inventories and analysis. Each of the twelve **Water Resources Policies** addresses different aspects of pollution problems, as summarized below:

Policy 30: Municipal, industrial and commercial discharge of pollutants

Lists sources of pollutants, both point and non-point.

Policy 31: Water quality classifications

Lists state classification of surface waters, saline and fresh.

Policy 32: Use of alternative sanitary waste systems

Provides guidelines and incentives for alternative septic systems and upgrades.

Policy 33, 33A: Best management practices to control stormwater runoff

Gives guidelines for prevention and remediation of runoff.

Policy 34, 34A: Discharge of vessel wastes

Increases number of pumpout stations and their use; limits overnight mooring; encourages boater education; 34A directs the Town to seek EPA No Discharge Zone designation for enclosed bays and harbors.

Policy 35: Dredging and dredge spoil disposal

Limits dredging and its impacts on habitat and fauna.

Policy 36: Shipment and storage of petroleum and other hazardous wastes

Guidelines to limit petroleum discharges including boat fueling procedures.

Policy 37: Best management practices to minimize non-point discharges

Proposes Surface Water Protection Overlay District where BMP for non-point will be implemented, including for septic systems, agriculture, drainage, landscaping, construction materials, and fuel tanks.

Policy 38, 38A: Groundwater protection

Guidelines for development to minimize groundwater pollution, including siting of septic systems.

Policy 39: Solid waste transport, treatment and disposal

Promotes recycling under the Town's Solid Waste Management Plan, and gives guidelines for small generators of hazardous waste.

Policy 40: Industrial discharges

Does not apply in the non-industrial East Hampton waterfront.

Policy 44: Tidal and freshwater wetlands

Provides standards for development near tidal and freshwater wetlands, including setbacks, to protect them.

The Town also has devised and implemented a *Harbor Protection Overlay District (HPOD)* to protect coastal fish and wildlife resources and to prevent pollution of surface waters. For the text of the *HPOD* local law see Appendix C.

F. IMPLEMENTATION/CONCLUSION

Implementation of the policies and recommendations described in this section are largely accomplished by existing programs and local laws. Examples of local programs include tern and plover monitoring and shorebird habitat enhancement by the Natural Resources Department, habitat protection and land acquisition by private organizations such as The Nature Conservancy and Peconic Land Trust, and land acquisition by various levels of government. The Town actively pursues habitat protection using a variety of planning and regulatory measures, including acquisition under a recently approved Open Space Plan, bond issues to purchase open space, permitting procedures such as Natural Resource Special Permits, and overlay districts such as the Water Recharge and Harbor Protection Overlay Districts. The Town Natural Resources Department continues to undertake further ecosystem studies, flora and fauna inventories, habitat management plans, wetland restoration plans, etc. Expansion of some existing programs and a number of new habitat-related initiatives are included in **Section XIV, Proposed Projects**.

The goals and objectives of **Significant Habitat Policies #7,7A and 7B** substantially coincide with other LWRP policies, for example those pertaining to public access, recreation and commercial fishing, and will be realized by many of the same research efforts, local laws, and projects. Specific plans for implementation are addressed in the those other LWRP policy sections, as are related LWRP **Projects**.

SECTION IV

COMMERCIAL FISHING POLICY #10/10A

A. INTRODUCTION

Commercial fishing is part of the lifeblood of the East Hampton community, providing an important food source and a significant component of the Town and New York State economies. The fishing industry is not just an economic input. It is also an essential part of the Town's cultural history and contributes to its attraction for tourism and to its resort economy. Commercial fishing adds to the picturesque waterfront, and to the appeal of the many restaurants and retail stores that promote and serve fresh local seafood.

Tourism and fishing both depend directly on the Town's environmental resources. Therefore, any development activities in the Town, including efforts to expand commercial fisheries, must also protect the coastal and marine habitats on which the fish depend for spawning and for nursery areas.

East Hampton and Long Island have a unique and fortuitous geography relative to fisheries. Long Island is near the southern end of the range of traditionally northern species (cod, whiting, winter flounder, yellowtail flounder, etc.), and at the same time near the northern end of the range of more southern mid-Atlantic species (scup, fluke, squid, weakfish, bluefish, etc.). Long Island fishermen can pursue fish species from both geographical ranges, providing them with more opportunities than fishermen to the north or to the south, and the advantage of reducing effort on depleted species and instead pursuing more abundant species with levels suitable for harvest.

This mixed trawl fishery, where fishermen can switch target species, has in many respects saved local offshore fishermen from the extreme economic duress experienced by single-species or groundfish dependent fishermen of New England, where the governor of Massachusetts recently sought to declare the state's fishing industry a natural disaster (New York Times 3/22/95, p. A14). However, the stock depletions and resulting closures of prime fishing grounds, such as Georges Banks, are reportedly forcing boats from those areas into the waters surrounding Long Island, putting increased pressure on local stocks.

The commercial fishing industry is one of the few year-round industries in the Town providing permanent employment opportunities at a level sufficient to support a family in an area with a relatively high cost of living. Additionally, the dollars generated by the commercial fishing industry are 100% return, i.e. few of the dollars are exported out of Town for the "cost" of the fishery resources, and most are spent locally.

The traditional fishing methods used in East Hampton represent a unique way of life, a cultural as well as an economic resource. Ocean haul-seining, for instance, is no longer practiced anywhere else except on the Outer Banks of North Carolina. Exhibits in the Town Marine Museum on Bluff Road in Amagansett trace the evolution of local fisheries from aboriginal weirs and colonial whaling (the first documented in the United States) to the skilled baymen and high-tech fish harvesters of today. Both inshore and offshore fishing are part of East Hampton's cultural heritage, with generations of local families working the water since colonial times.

The Town's inshore fisheries also have a significant economic role, and provide a great variety of species for local market. Inshore fishing and shellfishing in the harbors and bays, coastal ponds, and along the ocean beaches, are primarily carried out by small trawlers and by baymen using small boats and traditional fishing methods such as pound traps, seines, handlines, fykes, gill nets, pots, dredges, spears, tongs, and rakes. Many of the baymen moor their boats in and work out of the Town's sheltered inner harbors, especially Three Mile Harbor, Accabonac Creek and Napeague Harbor.

B. REACH INVENTORY

The following is an inventory of existing commercial fishing facilities and resources in the various reaches of the Town. Locations of these facilities and resources are denoted on maps for other policy sections of this report, therefore a separate map was not prepared for this section. Information on these maps includes: access points in Maps VII-1A/-1B in Public Access and Recreation Policies #9 & #19-22, shellfish closure areas on Map XII-2A/-2B in Water and Air Resources Policies #30-44, and Waterfront (WF) zones including shoreside fishing facilities on Existing Land Use, Maps II-1A/-1B in Development Policies #1-6.

1. Reach 1, Northwest Harbor

The launch ramp in Northwest Creek is used frequently by baymen, who also moor sharpies and other small craft in the boat basin. The baymen also launch off the beach from the spit opposite the ramp. The County dock adjoining the ramp is used occasionally for offloading quantities of fish such as herring, which may be caught by the ton during their fall run. Northwest Creek is a fyke fishery for eels, also for potting blue crabs, and in the past has been a good source of bay scallops and clams. It is presently closed year round to shellfishing because of coliform pollution, but the north end is opened conditionally in winter on a rainfall related basis.

Northwest Harbor is considered one of the prime scallop nurseries in the northeast, and has been a focal point for seeding programs aimed at reviving the bay scallop fishery decimated by the Brown Tide algal bloom. Several pound traps are installed every year along the Northwest Harbor shore.

Alewife Pond, as its name implies, is a habitat for this small anadromous fish species, and also home to blue crab, eels, perch, and a nursery area for other species. It is, however, closed year round to shellfishing.

2. Reach 2, Three Mile Harbor/Hog Creek

The Town's Commercial Dock at the end of Gann Road on Three Mile Harbor serves 5-6 bay trawlers (draggers), 3-5 lobster boats, and three or more trap fishermen, who may also work at runaround gill netting. The dock is a key offloading site for fish caught in the bay, and the launch ramp is heavily used by baymen. The several launch ramps around the Three Mile Harbor perimeter, including the one at Gann Road between the Town commercial dock and a marina, one near the Town Dock at the end of Boat Yard Road with marinas on either side, and one at Hands Creek, provide primary access to the prolific shellfish beds in the harbor. An additional number of smaller semi-public access points also provide access to baymen working the harbor shores, at Dominy

Point, Springy Banks, the north side of Hands Creek, Sammy's Beach, Marina Lane, Will Curl Highway, Breezy Hill, Shagwong, Squaw Road, Folkstone Drive, and Twillingate Road (near the former fishing station). Some of these access points in private ownership are threatened by development, closure by property owners associations or individuals, or environmental factors such as erosion, even though in some cases they may be traditional public access points, or owned by the Town Trustees. At some of these points the Town may wish to seek easements or acquire land to maintain public access. See recommendations in **Public Access and Recreation Policies #9 & 19-22**.

Several recreational marinas in Three Mile Harbor also supply haul-out and maintenance services to the commercial fishing fleet, generally to the smaller trawlers and other boats under about forty-five feet. Harbor Marina, East Hampton Point and Three Mile Harbor Boatyard are among those providing services.

A number of areas in Three Mile Harbor are closed seasonally to shellfishing because of the presence of coliform bacteria, or because of National Shellfish Sanitation Program (NSSP) standards for potential discharges from marina activity, as around the Folkstone area. Hands Creek, the south end of the harbor, and the east side including the mooring areas are all closed seasonally. New York State Department of Environmental Conservation (NYS DEC) may also close down the entire harbor for brief periods following extraordinary rainfall or popular events, such as the influx of overnight boaters at the annual Boys Harbor fireworks display, which may bring upward of a thousand pleasure boats into the harbor for a single evening. See Water Resources Maps XII-2A/-2B.

Hog Creek is an important nursery area and is included in the seeding program carried out by the Town's shellfish hatchery. The northeast portion of the creek in the area of the Clearwater Association marina is closed seasonally to shellfishing and the rest is open year round. Hog Creek is also a source for eels, bay scallops, whitebait and perch. It could become a more productive resource but is hampered by lack of access, particularly in summer, and the shallow draft in the southern portion.

3. Reach 3, Accabonac

The anchorage and public launch ramp at Louse Point in Accabonac Harbor is another primary staging area for baymen working a variety of fisheries, including trap fishing, gill netting, lobstering, conch fishing, etc. The mooring area requires a permit from the Town Trustees, and is managed by the Town Harbormaster. 8-10 fishing boats moor there on a more or less permanent basis and many others launch from trailers or use the harbor occasionally. Other launching ramps at Landing Lane and Marina Lane are in use less frequently but are still consistently used. The harbor itself is a source for hard and soft clams and scallops, and crabbing and eeling go on year round. East Harbor is closed year round to shellfishing because of coliform contamination, although the south end of East Harbor is open on a conditional basis from mid-December to the end of April. Baitfishing for sand eels and spearing is active in Accabonac as well as the other small harbors. Horseshoe crabs are also harvested, primarily during their spring mating and migration time, and used for baiting conch (scungilli) and eel pots.

Several pound traps are generally set at intervals along the Reach 3 shoreline to catch the spring and fall migrations of squid and finfish along the bay shores.

Fresh Pond at the south end of Reach 3 is a source for blue crabs, whitebait and some soft clams from the flat outside the gut, but the pond itself is closed to shellfishing year round because of coliform pollution.

4. Reach 4, Napeague North

The private Multi-Aquaculture facility next to the old fish factory site at Promised Land is also a fish wholesaler and has a small retail fish market. They buy and ship fish and lobster, and have pioneered a live-shipping business in cooperation with a number of local fishermen to land and transport live fish directly into Chinatown and other ethnic markets in New York City.

The launch ramp and mooring area at Lazy Point in Napeague Harbor are heavily used, with eight or more commercial boats generally moored in the Trustee mooring area, including trap fishermen, gillnetters, and lobstermen. The launch ramp was reconstructed by the Town following extensive damage and undermining from Hurricane Bob in August 1991. The Town Trustees have sought to have the launching ramp revised to afford a more manageable access and to reduce erosion to the west of the ramp constructed in 1991. Napeague Harbor is utilized year round for shellfishing, both hard and soft clams, and occasional forays after small bluefish and snappers. Hard clamming is done primarily on the east side, at Strong's Point south of Lazy Point, and in Eel Pond (Pond O' Pines). Water quality is excellent and it is the only one of the Town's inner harbors which presently has no waters closed to shellfish harvesting. The Town Shellfish Hatchery, located in Reach 5, has extensive grow-out arrays in Napeague Harbor because of the excellent water quality and sheltered conditions, which form an important component of the hatchery's growing cycle.

Other access points for Napeague Harbor are at Pond O' Pines, Beamons Creek, the Art Barge, Napeague Harbor Road, and a sand road that leads to Goff Point, sometimes used for clamming.

Seasonal pound traps dot the shore along Water Fence east of Napeague Harbor.

5. Reach 5, Hither Woods/Fort Pond Bay

Fort Pond Bay is an important gillnetting, trapping and trawling fishery. School bluefish, striped bass and other species can be found there in seasonal abundance. Access points along Old Navy Road and through a Town-owned parcel next to the Port Royal Motel provide launching, although most fishing in Fort Pond Bay is by boats emanating from Lake Montauk or Napeague Harbor.

Duryea's lobster business on Tuthill Road along Fort Pond Bay is a long-established wholesaler and shipper of lobster, also dealing in Maine lobster. It has an approximately 250' pier extending into the bay, with storage pounds, fishpacking and shipping facilities.

The Town's municipal shellfish hatchery is situated on the southwest shore of Fort Pond Bay. It shares a building with the Blue Lobster Project, a survivor of the NY Ocean Science Laboratory which formerly occupied the site. The hatchery supplies juvenile hard clams, oysters and scallops

for seeding in Town and State waters, to maintain and enhance stocks for commercial and recreational shellfishing. Scallop seed from the hatchery has been used in trials to reintroduce bay scallops to sections of the Peconic Estuary where Brown Tide has eliminated them.

The waters of Fort Pond Bay generally lend themselves well to these water-dependent uses, located at the cusp where waters of the Peconic Bay system and the ocean mingle, an ideal condition for lobsters. The more estuarine-oriented shellfish culture activities of the hatchery also use grow-out sites in the harbors to counter the strong oceanic influence.

6. Reach 6, Montauk North Side, Culloden Point to Shagwong

Montauk, according to the National Marine Fisheries Service (NMFS) in 1989, was "the largest commercial fishing port in New York State in terms of landed value and numbers of vessels." The total ex-vessel value of finfish and shellfish to the Town in 1988 was approximately 14 million pounds of seafood valued at \$15.5 million. NMFS figures for 1990, 1991 and 1992 remain consistent at 14.2, 14.2, and 14.1 million pounds, valued at \$15.4, \$15.0, and \$14.9 million respectively (Source: Fisheries of the United States, 1992, US Dept. of Commerce). 1993 figures for the Port of Montauk (which also includes available data for other landings in East Hampton) were 15.7 million pounds valued at \$15.2 million. Landings declined over the next few years: in 1994 landings of 10.9 million pounds were valued at \$14.7 million; in 1995 landings of 10.4 million pounds were valued at \$14.8 million; and 1996 landings decreased to 8.9 million pounds valued at \$10.1 million (Source: NMFS local office). Target species include striped bass, bluefish, weakfish, porgies (scup), cod, squid, whiting, tilefish, blowfish, winter flounder, seabass, fluke (summer flounder), blackfish, butterfish, [bigeye, yellowfin and giant bluefin] tuna, swordfish, shark, hard clams, soft clams, bay scallops, conch and lobster. Other economic activities related to the fishing industry are considered to multiply this amount by three to four times, for a total input to the Town's economy of approximately \$45-60 million (Source: Cornell Cooperative Extension Marine Agent Emerson Hasbrouck, 1989 study, and personal communication).

Not only are the landed values and numbers of vessels in Montauk the highest in the state, Montauk also represents the greatest variety of offshore fisheries, including trawlers, longliners, lobster, charter and party boats, not to mention the large number of private recreational boats. Montauk is home to almost all the Town's offshore fishing fleet which includes trawler, longline and lobster boats, as well as charter boats for offshore sport fishing. The larger vessels are equipped with highly sophisticated electronic gear for locating and harvesting fish. As many as 30 transient long-liners from Florida and the Carolinas use Montauk annually. The boats generally remain in New York from mid-July through early November, seeking swordfish and bigeye and yellowfin tuna (Source: Development of a Commercial Fisheries Industry Strategy for the State of New York, prepared by A.T. Kearney for the NYS DOS Division of Coastal Resources and Waterfront Revitalization, December 1989).

The 1989 Kearney study, conducted at the peak of fleet expansion in the 1980's, lists the fishing fleet in Montauk as comprised of 44 ground fish trawlers, 12 inshore and 7 offshore lobster boats, and 53 pelagic longliners. The report states, "The labor pool for trawlers is generally considered to be inadequate, so many captains are forced to use foreign or temporary crews. Boats in the 80 foot

range generally operate with a crew of three including the captain. These larger boats are highly sophisticated operations and require crew members with years of experience."

Commercial dock space is available at two municipal and four private docks on Star Island and on West Lake Drive, at the commercial fishpacking docks of Inlet Seafood and Deep Water Seafood on the east side of the inlet, and at Duryea's and Gosman's on the west side. Retail seafood markets include Gosman's, Captain Keller's and Darenberg's, and a number of docks or marinas which occasionally sell fish as landed.

Basic services for the fleet include four ice suppliers, one with a capacity of more than 40 tons daily and the rest smaller, and two commercial diesel fuel sellers. Commercial boats also may purchase diesel fuel direct from trucks at the dock. Others travel to Rhode Island to purchase fuel, because of a price differential due to fuel taxes of approximately .50 a gallon, even though buying locally saves probably a day a month in travel. Recently, NY State has begun to rebate the fuel sales tax, though on a monthly basis rather than at the dock as Rhode Island presently does. This fuel tax cost differential was the subject of a recommendation from the East End Task Force report (1994). Maintenance services noted in the Kearney report include limited facilities for electronics, diesel, and gear repairs, while for most major repairs and hull maintenance work most boats travel to Connecticut or Rhode Island.

The inshore fisheries of Lake Montauk are also of considerable economic importance, although significant portions of the Lake are closed to shellfishing on either a seasonal or year round basis because of coliform contamination or National Shellfish Sanitation Program requirements surrounding marinas. In past years it has been one of the primary bay scallop and hard clam sources for local baymen, and hosts a variety of commercial fishing activities year round from scalloping and baiting to traditional fyking for winter flounder. Lake Montauk is unique in the Town in that a portion of its underwater lands are privately owned, and shellfishing could potentially be restricted by the owners of these parcels.

The Lake and its adjoining wetland and pond systems (Stepping Stones Pond on the southwest, and Big and Little Reed Ponds on the east side) are important nursery areas for many finfish and shellfish species. Access to the Lake is via public launch ramps at East and West Lake Drives (the East Lake ramp is in the process of being relocated), opposite Stepping Stones Pond for clamming, through Town property at the south end of East Lake Drive, and over private property at the southwest end of Star Island causeway.

7. Reach 7, Oyster Pond/North Montauk Point

Oyster Pond, though closed year round to shellfishing, has long been a source of shellfish, mainly oysters, for transfer to other Town and State waters. Perch and bait are also caught in the pond according to season and conditions.

8. Reaches 8, 9, 10; Montauk Bluffs, Hamlet of Montauk/Hither Hills, Napeague South/Amagansett

The south shore ocean reaches of the Town are a staging area for a number of traditional fisheries, including haul-seining, ocean gillnetting, and trawling or dragging. For the two former techniques, which involve launching boats and landing fish from nets on the beach, public access is essential. The various road-ends leading to the ocean beach between the Village of East Hampton and Napeague State Park to the east are all used at times for these commercial fishing activities, especially haul-seining which may occur anywhere along the beach where fish schools venture in close enough to shore. Currently New York State limits beaches adjoining state parklands to recreational fishing, and does not permit commercial haul-seining for bass anywhere on the south shore. For public access points and accompanying recommendations for these reaches see **Public Access and Recreation Policies #9 and #19-22**.

Ocean haul-seining, formerly a way of life for many local fishermen, declined precipitously following restrictions on the striped bass harvest and the haul-seine fishery. The fishermen and their families have been movingly recorded in a book, "**Mens Lives**", by the naturalist Peter Matthiessen. Striped bass limitations have removed most of the incentive from haul-seining. However, a rebound of the bass population and change in NYS DEC regulations may eventually revive this traditional fishery.

Stuart's Fishmarket on Oak Lane in Amagansett, though outside the coastal zone boundary, is an important shipping, wholesale and retail fish market for the commercial fishermen, especially baymen.

9. Reach 11, Wainscott

On the south shore, besides the Atlantic, Georgica Pond is the primary commercial fishing resource in Reach 11. The pond is used year round for blue claw crabbing, as well as fishing for eels, perch and baitfish. Access is primarily from the launch point on Montauk Highway near the intersection with Wainscott Stone Road, or via the beach extending from Beach Lane to the gut where the pond periodically empties or is opened to the ocean. One or two other access points are also used occasionally by baymen, however, these are over private property and by permission only.

The Seafood Shoppe on Montauk Highway in Wainscott, also outside of the boundary of the coastal zone, is an important shipping and retail sales point for the baymen.

10. Reach 12, Gardiner's Island

Because the island is private and isolated from the mainland, access is by boat only and limited to the beach below mean high tide. The creeks and ponds on the island are important nursery areas and marine habitat, some with prolific shellfish stocks, though lacking public access. Great Pond is the only one with a relatively permanent opening gut, whereas the others open and close depending on tide and storm conditions. The entire island remains private and cannot be considered a commercial resource; however, many traditional fisheries such as trapping, lobstering and gillnetting, take place along its shores.

C. ANALYSIS

Management decisions for commercial deepwater fisheries, their productivity and economics, are made primarily by state and federal agencies. However, nearly all commercially and recreationally important species are estuarine dependent during some phase of their life cycle. Land use and water quality in and around the coastal zone are vital to the health of these estuaries and thus the fisheries, and fall within the purview of the Town. Creeks and harbors are directly affected by development in the Town, and the actions of its citizens and business community. Marine habitat, saltmarshes and fish spawning grounds must be preserved to have viable fisheries. With that aim the Town should use the full range of tools at its disposal, including planning and zoning controls for waterfront land use, as well as measures to maintain and improve surface water quality.

Government agencies, developers and private businesses often do not adequately take into account the economic, cultural and biological impacts of development or management decisions on traditional fisheries. Pristine surface water quality and preservation of the wetland, harbor and coastal pond environments that are spawning grounds and nurseries for finfish and shellfish should be high priorities for all federal, state and local agencies with jurisdiction in the coastal zone. The Town has undertaken a number of initiatives in this area including road runoff remediation, a Harbor Protection Overlay District, and a proposed No-Discharge Zone designed to limit pollution of the inner harbors. For details see **Development Policies #1-6, Significant Habitats Policy #7, and Water and Air Resources Policies #30-44**. The Town is also an active participant in the Peconic Estuary Program, a multi-year federal research and management program to improve water quality throughout the Peconic Bay system.

Although the most significant offshore fishing port for the Town and New York State, Montauk's shoreside support infrastructure is adequate at best. There are a limited number of these support facilities in the Town, most of them in Montauk, which according to local commercial fishermen are sufficient for the present needs of the fishery. However, future needs for shoreside infrastructure are uncertain, and may be affected by changes in fishing activity, land use, expiration of leases, and changes in ownership, management or equipment at existing facilities.

The commercial fishing fleet is dependent on the availability of maintenance and fueling facilities, gear suppliers, boat yards, commercial dock space, and fish-packing, ice, shipping, and retail and wholesale marketing operations.

Additional freezing and/or processing facilities would help distribution of the local catch. In Montauk two public and four private docks provide dockage for commercial fishing boats, and can presently accommodate between 50 and 60 boats. The only other dockage for commercial fishing vessels is in Three Mile Harbor at the Town's Commercial Dock, with space for only 4-5 smaller boats to tie up alongside. For major repairs most of the larger boats put in to Stonington or New London in Connecticut, Point Judith in Rhode Island or New Bedford in Massachusetts. Limited repair services are available in Montauk, and some gear is available from Gear Works in Riverhead.

While the level of facilities in Montauk supports current fishing activity, the 1989 Kearney survey identified a number of problems and concerns for the commercial fishing industry, most of which affect the industry throughout Long Island. These include: generally high operating and maintenance costs in New York which are uncompetitive with neighboring states, inadequate market information, lack of opportunity to harvest locally, declining catch in nearby waters, and competition from recreational boaters and tourism for land, facilities, and services. Other potential concerns are deteriorating packing-out facilities, management problems, unavailability of dock space at packing out facilities for smaller boats, and changes to resort-oriented uses through non-renewals of existing leases. The East End Task Force (1994) report contains additional recommendations for improving infrastructure. Future need for additional facilities and use of existing resources should be evaluated periodically by the Town in conjunction with the local commercial fishermen, with the common goal of maintaining this vital segment of the Town's economy.

Land use issues related to fisheries are primarily addressed under Water-dependent Uses in **Development Policies #1-6**. Waterfront real estate remains at a premium in the parts of the harbors most easily accessible for fishery support uses, and dock space for commercial vessels must compete with recreational and other water-dependent and water-enhanced uses. Therefore, it remains important for the Town to preserve commercial fishing uses and prevent their displacement by other recreational or tourism related uses. Although existing commercial fishing facilities appear adequate for the present, the Town should identify potential sites at Montauk and Three Mile Harbors where land may be acquired or otherwise reserved for future fish packing, dockage, or other commercial fishing uses.

While the present Waterfront (WF) zone, as delineated in **§153-4-39B**, **§153-3-45D** and **§153-5-50** [Fish Processing accessory use] of the Town Code, gives priority to "water related" uses, it may not distinguish adequately between water-dependent and water-enhanced uses (e.g. a commercial fishing dock or fish packing operation from a restaurant or retail shop), and may not sufficiently protect shoreside commercial fishing support facilities against changes to non-water-dependent uses. **Harbor Management Plans (Section XIV)** for each harbor will examine existing facilities and pressures on Waterfront (WF) zone uses, and may consider a sub-zone for fish packing, docking or other commercial fishing uses. Provisions might include fewer requirements for the land-related uses, e.g. parking, coupled with specific land use constraints and/or incentives to maintain the commercial fishing uses. The Town may also consider a local law parallel to a Right to Fish Law enacted by Suffolk County in 1988, although such activities are also covered in Article 42 of State law. Other issues related to the future health of the Town's commercial fishing are also discussed in **Section II, Development Policies #1-6**.

Access to markets for the Montauk catch is primarily via fish transfer facilities where the commercial boats pay an "over the dock" fee to unload and ship fish to dealers at Fulton Fish Market in New York or elsewhere, who pay the fishermen directly after consignment sale. There are also fish buyers who may purchase fish at the dock for direct export or air-freight to other parts of the country and overseas. Gosman's is the only facility that purchases and currently processes fish in Montauk, about

a third of which is sold through the family owned restaurant or gourmet fish market, and the remaining two thirds to local wholesalers. Other operations in the Town do a minimal amount of processing for local restaurant and wholesale markets.

Marketing and distribution of seafood is a regional issue, and a number of innovative schemes have been tried, including direct export (e.g. of giant tuna), sale to foreign factory ships of underutilized species, a marketing cooperative at Shinnecock, and the live shipping scheme from Multi-Aquaculture described in Reach 5 above. However, the bulk of the commercial catch not sold through local retail outlets or export agents continues to be sold as landed through the Fulton Fish Market in New York City, where wholesaling practices and supply and demand limit financial returns to the fisherman. Despite repeated attempts at reform the Fulton Fish Market retains a reputation for corruption and inefficiency (New York Times, 2/1/95, p. A1, and 3/28/95, p. B3). Geography is one of the major limiting factors in getting access to other markets from the east end by truck.

The Town should work with fishermen and other agencies to encourage formation of a more equitable regional distribution system (see Local Fishery Assistance in **Projects**). Onsite local fish processing or freezing facilities could improve prospects for export sales and distribution alternatives to the Fulton Fish Market, and incidentally also encourage harvest and marketing of presently underutilized species. If government should become involved in financing or operating any new facilities, care should be taken not to compete with or displace existing commercial fishing enterprises, but to focus on expanding overall marketing opportunities.

Prospects for further development of the offshore commercial fishing industry in East Hampton are limited by regional stock depletions and intense competition among highly efficient harvesters for too few resources. Commercial captains also complain of unfair competition from sports fishermen who sell their catch illegally, especially high value fish such as tuna and swordfish. Conservation measures such as the recent closures of Georges Banks, catch limits, federal buyouts of boats or permits to limit numbers, and diversifying the catch to include presently underutilized species, are probably the best hopes for maintaining a viable offshore industry.

The Town's inshore fisheries have been under intense pressure in recent years. Starting in the mid-1980's the local baymen suffered a double blow to two species of traditional economic importance, bay scallops and striped bass. The advent of the Brown Tide algal bloom in the bays virtually wiped out the bay scallop harvest, and a NYS DEC ban on commercial harvest of striped bass, originally instituted because of PCB contamination, removed a high value species from the fishery. The local East Hampton Baymen's Association went from approximately 150 active and about 120 full-time baymen in 1980 to about 40 full-time baymen at present. The ocean haul-seine crews went from 40 men working eight months out of the year, to a single crew of five men performing occasional sampling hauls for NYS DEC (Source: East Hampton Baymen's Association Secretary Arnold Leo, personal communication, 2/1/95).

A small scallop harvest in the Town in 1994, and partial easing of the striped bass restrictions in recent years has helped the remaining baymen to a modest resurgence. Because of more abundant

stocks the Atlantic States Marine Fisheries Commission recently proposed increasing the 1995 commercial bass quota for New York from 180,000 to 681,745 pounds per year. Although NYS DEC has considered the option of restoring the commercial haul-seine fishery, which formerly accounted for the bulk of the inshore commercial bass harvest in East Hampton, as of the present date (12/97) it has not done so.

Scallops and bass notwithstanding, baymen are leaving the water for a number of reasons including the high cost of living in East Hampton, declining catches for other valuable species, increased regulation and conflicts with other users such as sport fishermen, boaters and waterfront homeowners (Source: 1994 grant proposal by Cornell Cooperative Extension of Suffolk County).

Inshore commercial fishing and shellfishing within the Town, particularly in the enclosed harbors and ponds and from the beaches, is directly dependent on adequate public access. In some areas improved access is desirable and would enhance commercial fishing; in others access for commercial fishing may be incompatible with other uses or with existing development. In Montauk, the Town should consider acquiring the private underwater lands in Lake Montauk for shellfishing, as well as the now private access on the southwest end of the Star Island causeway (see **Public Access/Recreation Policies #9 & #19-22**). Access points to the water used by commercial fishermen in the Town include the road-ends offering access to beaches and harbors, launch ramps, docks, mooring areas and marinas, and traditional paths and trails leading to the harbors and bays. Access to the water has become more problematic as development has increased and traditional access points have been lost, especially around the inner harbors. Please refer to **Public Access/Recreation Policies #9 & #19-22** for a comprehensive list of available access points with accompanying recommendations.

Inshore fishermen and baymen use a variety of time honored techniques and gear, now adapted for modern netting materials, outboard motors, and power equipment. For both cultural and economic reasons the Town should help to preserve the practice and techniques of these traditional fisheries, which represent an important legacy of skill and know-how passed on through generations of local fishing families. While conducted on a small scale individually, in the aggregate these fisheries represent an important year-round input, which since colonial times has been a foundation of East Hampton's economy. Today these traditional inshore fisheries still represent a viable alternative to the resort/service economy for a significant segment of the Town's year-round population. Fishing allows local people to maintain an independent way of life by cultivating an intimate relationship with the Town's extraordinary marine environment. With the advent of modern materials and transportation, these baymen have managed to preserve a rich cultural history and to survive, sometimes sparsely, in today's cash economy. The Town advocates management decisions and regulations that encourage their continuation as, for instance, in a recent Town Board resolution (No. 432, 4/21/95) supporting restoration of haul-seining.

Otter trawls Lobster pots Haul seines Gill nets Power seines Runaround gill nets **Bait seines** Handlines Pound nets Set lines Fyke nets Spears Conch pots Dredges Crab pots Tongs Eel pots Rakes Fish pots Eel combs Crab trawls

Some of the gear types that continue to be used inshore and in the bays include:

Source: Economic Value of the Commercial Fisheries in East Hampton Town, Emerson Hasbrouck, Cornell Cooperative Extension, 1989

Town officials receive occasional complaints about the impacts of commercial bay and inshore fishing methods, for instance, the effects of scallop dredging on eelgrass beds, or of jet pumps used to drive fish trap stakes into the sandy bay bottom. By and large these are minimal disturbances to the environment that are an acceptable cost of maintaining traditional fishing. Eelgrass, for example, is a subaquatic perennial plant that dies back and regenerates annually from its roots, so the damage from the fall scallop harvest is inconsequential to the subsequent year's growth. Concerns that scallop dredges pull up the eelgrass roots are generally unfounded since a dug-in dredge would virtually bring the scallop boat to a stop. Similarly, the low-horsepower jet pumps used to drive trap stakes in the bay have minimal impact since the stakes are placed at relatively wide intervals, and at 4-6" diameter have proportionately less effect than driving a dock piling 12" or more across.

The Town issues permits for shellfishing in its waters under § 125-1 through -22 of the Town Code, through a cooperative arrangement between the Town Board and the Town Trustees, whose authority over and ownership of much of the Town's bottoms derives from the colonial Dongan Patent with subsequent affirmation by the New York State legislature. The current Town statute, revised and adopted 5/20/94, specifies catch limits on blue claw crabs, bay scallops, hard clams, lobsters, oysters, and soft clams. According to the Town Clerk's office, 84 commercial permits and 1862 recreational permits were issued in 1992, 164 commercial permits and 1884 recreational permits in 1993, 170 commercial permits and 1978 recreational permits in 1994, 138 commercial and 2916 recreational permits in 1995, and 115 commercial and 2063 recreational permits in 1996. As indicated by the membership figures for the Baymen's Association above, a relatively large number of the commercial shellfishing permits issued may not represent full-time baymen.

Shellfishing is limited by closures of shellfishing grounds due to coliform bacteria pollution in the Town's enclosed harbors, which in 1991 amounted to approximately 29% of bottomlands closed either seasonally or year round. In some cases closures are due to a change in standards under the National Shellfish Sanitation Program administered by NYS DEC rather than exceeding testing

standards for coliform levels. For instance, NSSP requires routine closures around areas of marina activity or mooring areas under a formula of expected discharges. The Town has applied for *No-Discharge Zone* designations for its inner harbors to improve water quality and limit shellfish closures (see **Water and Air Resources Policies #30-44** and **Projects**).

The Town has more opportunities in its local inshore fisheries to provide recreational and commercial harvests, particularly of shellfish. Aquaculture and other initiatives to restore or enhance the productivity of local waters should preserve the public interest in the resource, on the general principle that these resources should be managed on a renewable basis and available for the benefit of all Town residents (see **Policy #10A** below). The Town Trustees have long been involved in efforts to restore and enhance the productivity of their waters and have often taken an innovative approach. In 1932, the Town Trustees adopted the first ordinance in the town regulating the taking of shellfish. Over the years, they have initiated, sponsored and conducted numerous programs for transplanting shellfish, including oysters, clams and scallops. They approved, and retain oversight of, the Shellfish Mariculture Training Program for oyster mariculture started in 1995. With the Town Natural Resources Department, the Trustees played a critical role in developing the Open Marsh Water Management program. In an effort to reduce the area of productive bottomland closed to shellfishing, they developed a mooring grid and regulations in Three Mile Harbor.

The Town operates a municipal shellfish hatchery on Fort Pond Bay initiated under an agreement with New York State. The hatchery began production in 1990 and provides seedstock for Town and State waters used to enhance both commercial and recreational shellfishing. Under the agreement approximately 10% of annual production is allocated to the State for research purposes or seeding in State waters. The hatchery currently produces seed clams and oysters and a limited quantity of bay scallops. 1996 annual production output totaled approximately 14,175,000 clams; 967,000 oysters; and 1,100,000 scallops. Shellfish seed from the hatchery are distributed annually to various locations in the Town's inner harbors, creeks and nearshore bay areas. The hatchery actively experiments with new methods to enhance production and survivability in the wild. The hatchery personnel work cooperatively with the Town Trustees, Harbormaster, and other agencies such as Cornell Cooperative Extension to designate seeding areas and aid productivity of the local shellfishery.

The Town Shellfish Hatchery is part of an active effort by the Town to preserve traditional inshore fisheries by renewing public shellfish resources. In the aftermath of the Brown Tide and elimination of the bay scallop harvest in the Peconic Estuary, the hatchery has played a meaningful role in providing a continuing seed stock for recreational and commercial harvest. Public aquaculture of this nature has been the predominant thrust of the Town's policy toward aquaculture, to enhance public stocks and gain the maximum benefit for the whole community rather than to dedicate public waters or bottomlands to large scale aquatic entrepreneurs. Large scale private aquaculture or mariculture is inconsistent with the Town's traditional fisheries orientation. Such projects have been opposed by the Town because of environmental and habitat-related concerns. However, in the future the Town may wish to consider expanding its definition of aquaculture from shellfish and finfish to include other forms of aquaculture such as raising marine plant life like seaweed or eelgrass. There

is presently a single private aquaculture facility in the Town, Multi-Aquaculture Systems in Napeague.

The East End Economic & Environmental Task Force (1994) made a series of recommendations to enhance the area's commercial fisheries. A number of the fishing recommendations have application for East Hampton, including: stormwater runoff mitigation to preserve habitat, an oyster mariculture training program, a funding program to develop fish processing facilities, at-the-pump exemptions for boat fuel sales taxes, waiving unemployment insurance for fishing crews, new fisheries management procedures to include commercial fishermen, and support of public aquaculture.

A grant of approximately \$50,000 for a Shellfish Mariculture Training Program was received from the State in 1994 for oyster mariculture on the east end due to the efforts of the Task Force. This project began in 1995 and included five participants from East Hampton in a two year program. Participants received training in shellfish farming skills, plus growout gear and 50,000 seed oysters to be cultured on two acres of public bottomlands in Napeague Harbor, and supplied their own fuel, boats and labor. The initial program was extended an extra year to allow harvest of market-sized shellfish. Ideally, the program will result in a profitable harvest and demonstrate the potential for small scale shellfish culture to augment the earnings of fishermen who might otherwise be displaced from the water by resource degradation, regulatory burdens or other factors. As the project uses otherwise unproductive bottomlands and will enhance wild seed stock, it fits the Town's overall criteria for small scale projects which also benefit the public resource (see **Aquaculture/Mariculture Policy #10A**).

Fisheries management occurs at various levels of government from local to international. Harvesting of shellfish within Town and Town Trustee waters is managed and regulated by the Town and/or the Town Trustees by local law. Locally regulations are enforced by the Town Harbormaster and Bay Constables and NYS DEC Conservation Officers. Commercial fisheries in state waters to the three mile limit are regulated by the State Legislature directly, and by delegation of authority to NYS DEC, which also enforces regulations, and develops proposed regulations and management plans with the assistance of the Marine Resources Advisory Council.

The Atlantic States Marine Fisheries Commission is an interstate body which develops management plans in cooperation with the states and the National Marine Fisheries Service. Regional Fisheries Management Councils (Mid-Atlantic and New England) also develop management plans and proposed regulations for the fisheries in U.S. waters within the Federal Fishery Conservation Zone, extending from the three mile state boundary to 200 miles offshore. The Conservation Zone is authorized by the U.S. Fishery Conservation and Management Act of 1976 (Magnuson Act). Federal regulations are approved by the U.S. National Marine Fisheries Service and and enforced by NMFS and the U.S. Coast Guard. International conventions are increasingly governing pelagic fish populations that migrate, e.g. tuna where quotas are determined by the International Commission for Conservation of Atlantic Tuna (ICCAT).

The number of overlapping governmental, regulatory and advisory bodies affecting commercial fisheries has made life increasingly complex for the fisherman. Commercial fisheries development

can only occur within an overall context of sound fisheries management, which includes continued viability of the fishery stocks, development of optimum sustainable yields for specific fish species on the basis of regional populations and population cycles, and harvest restrictions or quotas imposed by state and federal governments.

Regulators should also consider the human side of their actions, which includes a fair allocation of resources to all users. Decision making on the technological (gear) and political (user conflict) constraints on commercial fishing should also address the economic needs of fishermen. Past regulatory procedures have on occasion caused hardship and economic deprivation to local fishermen and baymen. For example, striped bass restrictions of recent years drove many local fishermen from the water through regulations considered by many to be scientifically unjustifiable. There is widespread perception on the part of commercial fishermen that the regulations unfairly favor sports fishermen.

Fishermen often complain of regulations that don't take into account practical aspects of the fishery such as bycatch or gear limitations, species quotas based on incomplete data, burdensome paperwork, and failure to involve them in formulating regulations. Local offshore fishermen report that data collection on landings has in recent years been sketchy at best, and that fluke quotas, for example, based on this "best available data" will result in unfairly low allocations to New York fishermen. Recognizing that data for fisheries management is often incomplete or imperfect, regulating agencies should insure that traditional fisheries are not suddenly or arbitrarily eliminated, and that economic mitigation is provided when necessary. As noted above, the Town should encourage regulatory measures that maintain traditional fisheries and livelihoods.

The regulatory process itself should be reformed to include more input from commercial fishermen at both the technical (scientific basis, specific conservation goals) and implementation levels (practicalities of gear and techniques) in the interests of sound resource management, better regulatory compliance, and of economic equity. With a primary goal of conservation of the resource at sustainable harvest levels, regulatory agencies should include user groups in their management decision making so that conservation becomes a more collaborative and inclusive, rather than antagonistic process. Ideally, regulation should occur at the grassroots level, with local organizations such as the East Hampton Baymen, Long Island Inshore Trawlermen's Association, and other marine trade groups voluntarily policing themselves, as the baymen currently do in allocating fish trap sites.

Input from the various components of the fishing industry should be sought in early stages of drafting regulations to forestall imposition of cumbersome or physically impractical restrictions. The role of the state's Marine Resources Advisory Council in soliciting fishermen's views should continue to be expanded to assure input from the many and various fisheries user groups. Indications from local fishermen are that fisheries regulations can be streamlined and simplified, and that this would result in improved compliance as well as efficiency for the industry. NYS DEC should review its procedures for issuing commercial permits, particularly with a view toward a unified commercial permit instead of species by species permits which may result in mortality of unpermitted by-catch species. Integration of state and federal permitting with unified issuance of permits and centralized

data recording could also provide a major reduction in redundant paperwork for fishermen, as well as improved data collection for regulating agencies.

The Town, in cooperation with other agencies, should institute short and long term monitoring programs to assist decision-making related to commercial fisheries and public mariculture. The Town should continue to act as an advocate for traditional fisheries, and as a liaison with federal and state fishery regulators for local baymen and commercial fishermen.

D. KEY ISSUES/OPTIONS FOR COMMERCIAL FISHERIES IN EAST HAMPTON

1. Harbor and channel maintenance

Maintaining adequate depths in harbor channels by dredging is an essential fisheries support function of government. In the past maintenance dredging has sometimes been attended to only on an irregular or emergency basis. Stable funding and regular maintenance, both for the federally maintained (US Army Corps of Engineers) channel in Montauk and the Suffolk County maintained channel in Three Mile Harbor, is important to insure safe access to these active harbors. Maintaining municipal docks for commercial fishing boats is another important way the Town can support the fishing industry.

2. Shoreside infrastructure

East Hampton-based commercial fishermen are dependent on shoreside fishing support facilities in Montauk and Three Mile Harbors. These water-dependent uses should be preserved and protected by the Town's planning and zoning functions, possibly including modifications to the Town's Waterfront Zone. To accommodate future needs the Town should locate and designate possible locations for future fish packing or fish processing facilities. Marketing is also a key component of the economic viability of the Town's fisheries, and the Town should assist fishermen in developing alternative marketing channels. To remain cost competitive with other nearby states, New York State should rebate its diesel fuel tax to commercial fishermen at the dock. See *Fisheries Shoreside Support Infrastructure* and *Local Fishery Assistance* in **Projects**.

3. Water quality and habitat conservation

Maintaining or enhancing surface water quality and marine habitat is critical to retaining viable commercial fisheries. While the Town has taken significant steps to control road run-off and has a Harbor Protection Overlay District and a No-Discharge Zone designed to abate pollution in inner harbors, more can be done. Significant additional steps can be taken to reduce impacts on fisheries caused by coliform and other contamination, including the following:

- Extend Open Marsh Water Management (OMWM) for saltmarsh areas to replace Suffolk County Vector Control ditch networks (pilot projects presently in place in Accabonac Harbor and Northwest Creek)
 - Permit and encourage use of alternative septic systems (e.g. composting or dry toilets) in wetland or sandy low-depth-to-groundwater areas to reduce or eliminate sewage

- Further reduce non-point source pollution through public education related to the Harbor Protection Overlay District and other best management practices
- Further reduce boat discharges by establishing designated No-Discharge Zones throughout the Peconic Estuary, with accompanying public education for boaters
- Change needlessly restrictive interpretation of NSSP standards, conduct additional local monitoring to insure actual water quality standards
- Review local zoning regulations in *Harbor Management Plans* to assure compatibility with water quality and marine habitat

4. Public access

Access to the Town's 110 miles of coast is essential to allow baymen to work along inner harbors and other shorelines. The Town through its planning, zoning, and land acquisition activities should continue to preserve, advocate and where necessary acquire public access points. The Town should also seek to acquire private underwater lands in Lake Montauk to preserve traditional access for shellfishing and to avoid future conflicts over private aquaculture using public resources (water column nutrients, discharges, etc.). By the same token, no productive public bottomlands should be leased to private interests by any level of government. See also **Public Access and Recreation Policies #9 & 19-22**.

5. Regulation

Commercial fishermen should be included in the early stages of drafting proposed regulations to minimize future conflicts and inequities. Economic and social impacts on commercial fishermen should be considered in the regulatory process. The various levels of management and regulation should be integrated and simplified to improve conservation, reduce the regulatory burden and enhance compliance. Regulators should also take into account the often unintended consequences of shifting fishing pressure from one species to another.

6. Aquaculture/mariculture

Town policy is to encourage public aquaculture that enhances stocks and to discourage large scale private aquaculture/mariculture. It maintains its own hatchery to enhance public shellfish stocks. The Town's extensive concerns on permitting private aquaculture or mariculture on a large scale, particularly finfish aquaculture, include environmental, genetic, marine habitat and economic damage to traditional fisheries. Similar concerns surround transplanting shellfish from uncertified waters outside the Town, and so-called depuration of shellfish. To protect local shellfish stocks from exotic pathogens, toxic materials and genetic mutations, there should be no importation of non-local seed stocks unless certified by Town agencies.

E. KEY LOCATIONS FOR COMMERCIAL FISHING IN EAST HAMPTON

1. Critical areas

Areas of the Town critical for maintaining the vitality of commercial fisheries in East Hampton include:

- Watersheds surrounding inner harbors that may contribute nutrients and pollutants to surface waters; wetlands, creeks and saltmarshes surrounding the inner harbors and creeks that provide breeding and nursery areas for many marine species; and New York State and Local Significant Coastal Fish and Wildlife Habitats (see Significant Habitats Policy #7 and Water and Air Resources Policies #30-44);
- Shoreside fisheries infrastructure and support facilities, such as fish packing, fueling, gear repair on the east and west sides of Coonsfoot Cove and on East Lake Drive at Montauk Harbor; in Three Mile Harbor at Commercial Dock at Gann Road and several recreational marinas; and non-waterfront fish packing locations, as at Stuart's Fishmarket in Amagansett and The Seafood Shoppe in Wainscott;
- Public access points to the water, including launch ramps, commercial docks in Montauk and Three Mile Harbor, and road-ends and other access points, a partial list of which follows (see also **Public Access and Recreation Policies #9 & #19-22**).

2. Primary commercial fishing access points

Following are some of the access points used by baymen and other commercial fishermen (see also Maps VII-1A/-1B, Public Access and Recreation, with accompanying key):

Reach 1

Northwest Landing road-end - launch ramp, dock and Northwest Creek mooring area Mile Hill Road-end Alewife Brook Road-end

Reach 2

Old House Landing Road-end Sammy's Beach Gann Road - Town commercial dock and launch ramp Will Curl Highway/Breezy Hill Road access Boatyard Lane launch ramp Hands Creek launch ramp Head of Hog Creek Hog Creek, channel

Reach 3

Gerard Drive access Gerard Park Louse Point - launch ramp and mooring area Landing Lane - launch ramp Shipyard Lane - launch ramp

Reach 4

Lazy Point - launch ramp and mooring area Napeague Harbor southwest (Art Barge) Napeague Harbor Road (east side)

Reach 5

Fort Pond Bay (Navy Road) Fort Pond (south end)

Reach 6

County Dock, Montauk Harbor West Lake Drive - launch ramp Town Dock, Star Island Stepping Stones South Lake Drive Little Reed Pond East Lake Drive - launch ramp

Reach 7 Oyster Pond

Reach 10

Navahoe Lane (sand road @ Driftwood Shores) Atlantic Drive road-end (White Sands) Marine Boulevard road-end Napeague Lane road-end Atlantic Avenue road-end Indian Wells Highway road-end

Reach 11

Georgica Pond (via Beach Lane road-end and via Montauk Highway launch)

F. COMMERCIAL FISHING POLICIES

POLICY 10 FURTHER DEVELOP COMMERCIAL FINFISH, SHELLFISH AND CRUSTACEAN RESOURCES IN THE COASTAL AREA BY: (i) ENCOURAGING THE CONSTRUCTION OF NEW, OR IMPROVEMENT OF EXISTING ON-SHORE COMMERCIAL FISHING FACILITIES; (ii) INCREASING MARKETING OF THE STATE'S SEAFOOD PRODUCTS; AND (iii) MAINTAINING ADEQUATE STOCKS AND EXPANDING

AQUACULTURE FACILITIES. SUCH EFFORTS SHALL BE IN A MANNER WHICH ENSURES THE PROTECTION OF SUCH RENEWABLE FISH RESOURCES AND CONSIDERS OTHER ACTIVITIES DEPENDENT ON THEM.

Explanation of policy:

From the first human habitation in East Hampton, fishing and shellfishing have been a means of subsistence and a traditional livelihood. Through the centuries Town waters have provided a sustainable and renewable food resource, which it is the Town's responsibility to pass on intact to future generations. Measures to develop commercial fisheries should be considered in light of this local heritage.

Maintaining fisheries requires preservation of spawning and nursery areas in a pristine state, and use of appropriate gear and techniques to prevent over fishing. Keeping waters free of pollution is integral to productivity and a priority for keeping shellfishing grounds open to harvest. Any efforts to further develop commercial fishing must also protect these resources. Maintaining productivity in fisheries also dictates limiting over-harvesting and use of gear or techniques that are wasteful or destructive of the resource.

The potential for expansion or new development of commercial finfish, shellfish or crustacean resources in East Hampton Town is limited by already intensive harvesting of existing resources, scarcely adequate existing facilities for packing and shipping, and a lack of suitable sites for new shoreside facilities. Fishery support facilities and dock space for commercial vessels must compete with recreational and other water-dependent or water-enhanced uses. Support facilities for commercial fishing are permitted uses and should be encouraged to remain within the Town's Waterfront Zone (see **Development Policies #1-6**), as delineated in § **153-4-39B**, § **153-3-45D** and § **153-5-50** [Fish Processing accessory use] of the Town Code. Primary fishery support facilities in the Town are presently located at:

- Coonsfoot Cove at the northwest side of Montauk Harbor
- East Lake Drive at the northeast side of Montauk Harbor
- Commercial Dock at Gann Road on Three Mile Harbor
- Fish packing operations at Stuart's Fish Market in Amagansett (not within the coastal zone)
- The Seafood Shoppe in Wainscott (not within coastal zone)

Public access to the water, including launch ramps and mooring areas, preservation of shore and marine habitat, and maintenance of surface water quality are also critical to maintaining local fisheries. Please refer to Significant Habitats Policy #7, Recreation and Public Access Policies #9 & #19-22, and Water and Air Resources Policies #30-44 for guidelines.

The following guidelines should be considered by government agencies to determine the consistency of a proposed action with the policy above:

- (1) Commercial fishing development efforts should be made in a manner which ensures the maintenance and protection of the renewable fishery resources.
- (2) Maintenance of surface water quality and protection of marine habitat, wetlands, saltmarshes, creeks, harbors, and coastal ponds that are the primary spawning and breeding grounds for fin and shellfish populations, must be a high priority for all state and local agencies with jurisdiction in the coastal area.
- (3) A public agency's commercial fishing development initiative should not pre-empt or displace private sector initiatives, but should be directed toward unmet development needs. An action should not impede existing utilization, or future development of the state's commercial fishing resources.
- (4) New or expansion of existing on-shore commercial fishing facilities should include evaluation of alternative marketing and distribution for local seafood.
- (5) As inshore fisheries or shellfishing are frequently dependent on public access, private sector waterfront development should help meet the documented needs of commercial fishing, or at least not detract from those needs by restricting traditional public access or otherwise impeding commercial fishing or shellfishing. Encouragement of commercial fishing activity is a priority in Town planning considerations, and is reflected in the Town's Waterfront Zones. A partial list of locations critical for commercial fishing in the Town appears in the Analysis above. See also Public Access and Recreation Policies #9 & #19-22, and Maps VII-1A/-1B, Public Access and Recreation.
- (6) It is the policy of East Hampton Town to preserve and enhance traditional fisheries and use of traditional fishing techniques, such as:

Otter trawls	Lobster pots		
Haul seines	Gill nets		
Power seines	Runaround gill nets		
Bait seines	Handlines		
Pound nets	Set lines		
Fyke nets	Spears		
Conch pots	Dredges		
Crab pots	Tongs		
Eel pots	Rakes		
Fish pots	Eel combs		
	Crab trawls		

Traditional fishing techniques should be permitted on public trust lands and in waters adjacent to parklands owned by New York State, Suffolk County, East Hampton Town, and private properties. Public agencies should evaluate economic, cultural and biological impacts of development and management decisions on traditional fisheries.

- (7) Fisheries should be managed to restore species abundance through a regional approach encompassing scientifically sound, socially and economically viable management measures that impact all user groups equitably. Management decisions should not eliminate any traditional commercial fishery without extensive local consultation and economic mitigation. In the past such unilateral decisions have caused considerable hardship to local fishermen.
- (8) Where fishery conservation and management plans require actions that would result in resource allocation impacts, insure equitable distribution of impacts among user groups, giving priority to existing commercial fisheries in the State.
- (9) Representatives of the commercial fishing industry should be included in the process of regulation and management decision making in early draft stages before regulations are finalized, in order to avoid conflicts and impracticalities. Representatives may be designated by local Baymen's, Offshore Trawlers', and other associations, and should include the variety of users and gear types being regulated.
- (10) Wherever possible, State and Town permits and record keeping for commercial fishing and shellfishing should be unified and/or consolidated and, if possible, permits should be issued locally.
- (11) Fishing and fish-processing activities, if consistent with sound fishing practices and established prior to surrounding non-fishing activities, shall be deemed to be reasonable and shall not constitute a public nuisance unless the activity has a substantially adverse effect on the public health and safety. Residents of East Hampton Town have a traditional right, stemming from the colonial patents, to harvest fin and shellfish and make a living from such activities in Town waters, including waters now adjacent to State and County parks, and those rights shall not be abridged.

POLICY 10A ENCOURAGE AQUACULTURE AND MARICULTURE WHICH BENEFITS OVERALL PUBLIC STOCKS OF LIVING MARINE RESOURCES, BUT DISCOURAGE AQUACULTURE OR MARICULTURE INCONSISTENT WITH MAINTAINING HEALTHY STOCKS AND HABITATS

Explanation of policy:

The nutrient budget of the water column in inshore waters is limited, therefore these waters and associated bottomlands are and should be treated as a public resource. To maintain the public nature of the resource, productive bottomlands under Town, State and County jurisdiction should not be sold or leased to private concerns or individuals. Aquaculture or mariculture should not occupy otherwise useful or productive finfish or shellfishing areas. However, unproductive bottomlands may appropriately be utilized for aquaculture or mariculture provided they do not degrade the resource as a whole. Aquaculture or mariculture enterprises within East Hampton Town should be on a small scale in keeping with the Town's tradition of independent baymen and fishermen.

Efforts to enhance the public stocks of living marine resources through hatchery, seeding, and growout facilities should be encouraged, and if necessary undertaken by the Town, County, or State governments. Aquaculture or mariculture efforts, public or private, which act to enhance these public stocks while providing a livelihood for individuals should be permitted and encouraged.

Wherever possible local stocks should be used as sources for replenishment and breeding stocks to avoid the possibility of importing harmful pollutants, diseases or mutagens from other areas. Any importation of seed stocks is subject to certification by the Town Natural Resources Director in consultation with the Town Shellfish Hatchery, and subject to the approval of the Town Trustees. A pollution and pathological history of the source location and analysis of bottom sediments may be required by the Director as part of the certification process.

Aquaculture or mariculture which does not benefit the overall public stock or the resource as a whole, monopolizes public resources, endangers the health of public stocks, or otherwise degrades the marine habitat, is inimical to the public interest and should not be permitted or encouraged.

For example, the Town is opposed to controlled purification or depuration of shellfish in ultra-violet treatment plants or to shellfish transplants from waters outside East Hampton Town because of the risk of pathogens infecting local stocks. Present standards for shellfish depuration do not test shellfish meats for heavy metals, toxins or pathogens present in the waters or sediments from which shellfish may originate, and such shellfish are often transported with accompanying sediments. However, the Town does sanction relays or transplants of shellfish from uncertified local waters, such as Oyster Pond in Montauk, where the sources of contaminants are known and they are likely to be relatively benign and short-lived. The Town is committed to environmental protection and water quality improvement as the best methods to ensure public health and to maintain traditional fisheries and stocks, and believes that this policy reflects the goals of the National Shellfish Sanitation Program (NSSP) to provide shellfish for market from clean waters.

The Town also has serious concerns about saltwater finfish aquaculture and is generally opposed to such efforts within its borders unless these can be adequately addressed. Concerns include: contamination of the water column and bottom by feed and fish discharges, diseases of confined populations that may spread to wild stock, use of antibiotics and hormones, exotic species or hybrids that may cause mutations or interbreed with wild stock, and displacement of traditional local fisheries.

The Town has actively demonstrated a commitment to maintaining its marine resources through the Town Shellfish Hatchery seeding program and participation in various demonstration projects such as wild spat collection for bay scallops, the oyster mariculture pilot project, and the Peconic Estuary Program. The annual seeding program is designed to renew and enhance both commercial and recreational shellfish resources, the harvest of which is enjoyed by a broad spectrum of year-round residents and summer visitors. Commercial shellfishing is integral to the traditional livelihood of local baymen, whose hard work puts fresh local seafood on tables and restaurant menus. East Hampton Town will continue to support development of its commercial fisheries through

aquaculture and mariculture, with caveats that such efforts benefit the resource, promote the public interest, and be compatible with traditional fisheries.

Following is a summary of guidelines for government agencies to determine the consistency of an action with the above policy:

- (1) No new leases of productive bottomlands under Town, County or State jurisdiction should be granted to private entities. Existing leases should not be renewed.
- (2) Aquaculture or mariculture should not occupy otherwise useful or productive finfish or shellfishing areas. As bottomlands productivity will vary with conditions and use, determination of "productive" bottomlands should be made on a case by case basis by the Town Natural Resource Director in consultation with the Town Trustees, Town Shellfish Hatchery Director, and Harbormaster. The Town Trustees, however, have sole authority over the leasing of bottomlands for aquaculture that are within their ownership and/or control.
- (3) Aquaculture or mariculture efforts, public or private, which act to enhance public stocks of living marine resources using unproductive areas, while providing a livelihood for individuals, should be permitted and encouraged. As above, refer determination of "unproductive area" to the Town Natural Resources Director.
- (4) Any importation of seed stocks is subject to certification by the Town Natural Resources Director, in consultation with representatives of the Town Trustees, and Town Shellfish Hatchery. A pollution and pathological history of the source location and analysis of bottom sediments may be required by the Director as part of the certification process.
- (5) Controlled purification or depuration of shellfish in ultra-violet treatment plants or transplants from waters outside East Hampton Town are not permitted because of the risk of pathogens infecting local stocks.
- (6) Saltwater finfish aquaculture within the borders the Town is not permitted unless the following concerns are adequately addressed: potential contamination of the water column and bottom by feed and fish discharges; infectious diseases of confined fish populations that may spread to wild stock; use of antibiotics and hormones which may favor resistant strains of pathogens; exotic species or genetic hybrids that may cause mutations of or interbreed with wild stock; and displacement of traditional local fisheries.

SECTION V

FLOODING AND EROSION POLICIES #11-17

A. INTRODUCTION

1. Flooding and Erosion Issues and their Evolution in East Hampton

As an island promontory surrounded by water, East Hampton is singularly exposed to forces of the sea and weather. The Town's 110 miles of shoreline are protected by fragile beaches, dunes and bluffs, and while these are the same scenic and recreational attributes that lure tourists and second homeowners to a resort community, they are also vulnerable to winter nor'easters and catastrophic hurricanes. The awesome natural forces of storm events can quickly transform scenic views and real estate assets into disaster areas and insurance liabilities.

Coastal flooding and erosion planning and policy in East Hampton have largely evolved in response to storms and other impacts of natural forces on development. Historically there has been less concern about episodic flooding and erosion in undeveloped areas where private property or public infrastructure were not at risk. This emphasis on protecting developed areas has masked the importance of maintaining unspoiled natural coastal features, both to sustain the Town's resort economy and because of their vital protective role in buffering the coast from flooding and erosion.

A consideration of flooding and erosion and the coastal processes that determine them depends, as does any problem, on the point of view from which it is seen. In *The Beaches are Moving*, a popular classic of coastal management, authors Wallace Kaufman and Orrin Pilkey portray the conceptual dilemma thus: "The nature of sand is to move. That is how it came to the beaches, how it blows from the beaches into the dunes, and how it washes from the dunes into the bays to form new salt marsh and forest. ...Those who live near the shore choose to say that a shoreline moving with the water toward their house is 'eroding.' ... Most geologists speak of beaches *retreating*. Barrier islands are said to *migrate*. Beach erosion, geologically speaking, is not usually a permanent loss, but a strategic retreat. ... The barrier islands which protect most of the Gulf and East coasts have existed continuously for thousands of years, but they have retreated many miles. ... Beaches are not stable, but they are in *dynamic equilibrium*. ...Dynamic equilibrium is not stability ... but a net balance among many changes." (Kaufman and Pilkey, 1979)

Anne Simon, author of *The Thin Edge, Coast and Man in Crisis*, published in 1978, puts it more poetically, "Sand meets water's force with its natural tendency to move; its soft answer turns away the sea's wrath. Waves energized by the sun, moon and wind crash on the wide expanse as they have done every day and night since the island was formed. The use of sand to receive and repel this merciless attack is a triumph of natural engineering. The smallest grain of sand is almost indestructible, especially when wet, keeping a film of water about itself by capillary action. Because of this liquid cushion, there is little further attrition. Even a heavy surf cannot cause one sand grain to rub against another."

"... For us, shifting sands is a convenient cliché but an inconvenient reality. We do not accept it. We call it erosion and engage the United States Army Corps of Engineers to fight it." (Simon, 1978)

The view of flooding and erosion as part of natural processes of dune, beach and bluff formation, as phenomena which should be adapted to, rather than fought against, arises from a long-term perspective of coastal processes. Again, Pilkey and Kaufman, "There are no catastrophes or disasters in nature. The powerful events that seem so unusual to us are disasters only because our lives are

short and our bodies fragile. ...Great storms, floods, landslides, and quakes are, in the grand scale of time, normal events recurring again and again, more or less regularly. ...'Disasters' are part of the dynamic equilibrium of the beaches."

"Storms, landslides, and tsunamis, despite their destruction, offer a valuable frame for human activity on the beaches. First, they provide a measure of the ultimate forces we will encounter. Second, because they can move the beaches in a matter of hours, they often tell us just how transient that landscape is. Like a painting in a good frame, human activity in the context of natural disasters appears with new clarity." (Kaufman and Pilkey, 1979)

In early times, neither the colonial settlers nor the native Montauketts built permanent habitations along the shore. Only within recent decades has land use changed to produce intense development pressure on the immediate coast, from a combination of a booming resort economy, population growth, modern construction techniques, and improved regional transportation and communication.

Siting of contemporary development has often failed to take into account coastal storms and the potential for damage from flooding and erosion. Following major storms, homeowners recognizing their precarious predicament have built structures designed to protect their property. However, attempts at erosion protection using groins, bulkheads and other hard structures have had detrimental effects on neighboring beaches or property and have often aggravated the erosion problems they were designed to prevent. Their legacy is seen in the disappearance of the sandy beaches adjoining erosion protection structures, a poignant loss for East Hampton, whose way of life and fishing and resort activities have always depended on unrestricted access to unspoiled beaches.

East Hampton has a rich tradition dating back to its origins as a colonial entity of maintaining coastal resources for all its citizens. The beaches in East Hampton are for the most part publicly owned and remain in fee title of the Town Trustees under the colonial Dongan Patent for the "Freeholders and Commonalty" of the Town.

East Hampton's north and south shores have greatly differing geography and geology with different weather exposures. Ocean swells breaking on the south ocean shore may travel from West Africa or Iceland, whereas the northern bay shores are primarily exposed to nor'easters with a more limited fetch. The Town's south shore ocean beaches are generally more dynamic because of the higher wave energies and greater quantities of sediment being transported. According to a 1988 study by the Marine Science Research Center of SUNY Stony Brook concluding ten years of ocean beach monitoring in East Hampton Village, beach width there can vary as much as 270 feet in a given year. (MSRC, 1988)

The Town's bay beaches, while more protected, are narrower and more fragile and may take longer to recover from storms. They are mostly fed by sediment from bluffs and headlands. In areas where residents have attempted to stabilize bluffs with hard structures, these sand sources have been restricted, and the resulting deficit in the local sediment budget has lead to further narrowing or elimination of the beaches.

Flooding and erosion in East Hampton's coastal zone are caused primarily by storms, and secondarily by other meteorological and coastal processes including wind and rain, tidal, littoral, and other hydrographic forces, sea-level rise, and the interactions of coastal geomorphology with development. Other causes of flooding and erosion include effects of development, and other human activities that interfere with coastal processes and sediment transport, such as inlet stabilization, and construction of erosion protection structures, particularly those perpendicular to the shore such as groins and jetties.

Flooding and erosion policy issues that have arisen in the LWRP process generally can be reduced to either 1) use conflicts, such as protection of private property versus preservation of public beaches and coastal resources; or 2) policy responses to natural forces, coastal and littoral processes, and effects of storm events and rising sea level.

Recognition of the realities of long-term coastal processes has come slowly to communities like East Hampton, along with a gradual conceptual shift toward adapting coastal planning to the inexorable forces of nature rather than, like King Canute, attempting to oppose them. Zoning, a primary tool for regulating land use in the coastal zone, was introduced in East Hampton in 1957, and was followed in the 1960's by local adoption of National Flood Insurance Program standards (as the Flood Hazard Overlay District), and coastal and wetland setback requirements. Some development that occurred before the advent of zoning and setbacks was, in hindsight, poorly conceived and hazardously sited. Pre-zoning setbacks were more often dictated by the excellence of a water view than potential flooding or erosion, and setbacks themselves were only gradually implemented and increased through progressive revisions of the zoning code. Under earlier laissez faire policy, coastal owners were allowed a free hand in protecting upland property, often at the expense of neighbors and of public recreational resources. To protect these resources the Town in 1984 instituted a system of Natural Resource Special Permits for coastal construction. Formulating coastal policy for the Town remains an ongoing process, of which this Local Waterfront Revitalization Program (LWRP) is the most recent addition.

On a national level perceptions and policies relating to flooding and erosion have also evolved, as noted in this excerpt from the *NYS Coastal Erosion Task Force Report*:

[Federal] Policy trends

"Prior to this century, there were no pertinent federal programs, which meant individuals occupied coastal locations at their own risk. After a series of severe storms in the first half of this century, hard shoreline protections projects by the Corps of Engineers became the general response to erosion. Increasing cost of construction, a poor success rate for hard structures, and a burgeoning shoreline population during the 50's and 60's began shifting the policy from coastal "hardening" to "soft" solutions to coastal hazards such as beach nourishment. This shift was facilitated by a growing body of scientific information on coastal processes and the response of coastal morphology. As scientific evidence of how man had altered natural processes along the coast grew, environmental groups began to push for legislative changes to protect the shoreline. This trend continued, as evidenced by implementation of the NFIP and CBRA. Recent proposed amendments to the NFIP suggest

that this policy approach of non-structural solutions will continue. Only recently has the federal government recognized erosion as a hazard in its own right. Erosion is no longer viewed as a short-term hazard resulting from storms but a chronic problem. This recognition has drawn attention away from trying to control erosion and focused it on altering design and location of coastal development to accommodate erosion. The advantage of this focus is that over the long run it will result in a cost savings to governments and taxpayers." (NYS DOS, 1994, Vol. II, p. 63)

2. Policy Goals

Overall policy goals for these **Flooding and Erosion Policies** are to maintain the public interest in coastal resources and protect the health and safety of Town residents. The Town's primary policy objective is to maintain or enhance the protective capacity of its natural coastal features, with due regard for the needs of individual property owners. The overriding concern is to preserve and protect this unique and unusually exposed bit of earth's surface at its critical interface of land and sea.

In producing this report, the Town of East Hampton has attempted to learn from mistakes of the past, assess current mainstream thinking on flooding and erosion solutions, and consider a planning horizon of several decades to preserve coastal resources. The wisdom of the policies will ultimately be judged by the hindsight of posterity. Great care and effort have been taken to analyze and understand the dynamics of the Town's coast with the resources presently available.

In the face of recurrent storm damage and shoreline recession, when future sea-level rise may accelerate due to global warming, a priority goal is to maintain the dynamic equilibrium of natural protective features, beaches, bluffs, dunes, wetlands and native vegetation. In practice, this approach to flooding and erosion problems leads to an emphasis on non-structural and soft solutions which will not disrupt coastal processes or damage natural protective features. In some instances, in order to both maintain natural features and protect homes and other shorefront development, a strategic retreat of development from receding shorelines is the preferred approach for flooding and erosion protection.

This is the policy thrust of the New York State Coastal Program and of the *NYS Coastal Erosion Task Force Report* (NYS DOS, 1994), and increasingly of national and local policy in other coastal areas. The *NYS Coastal Erosion Task Force Report* summarizes the State policy evolution:

"The most significant trend in New York's coastal hazard programs has been the shift from reliance on purely technical and engineering solutions to accommodation of natural processes. ...there is growing recognition that resource protection policy should be moving in the direction of doing no damage to coastal processes, which means mitigating downdrift effects of engineered modifications of the shoreline. The net result of this trend would be to return coastal processes to a more natural state.

... As a result of these trends, an informal policy of moving back from the coastline in some areas and protecting other areas where the cost of protection is justified by the public benefits preserved has emerged. This approach does not accommodate the extreme options of

wholesale retreat and abandonment of hazard areas on the one hand, nor total shoreline fortification on the other. Given limited state and local budgets, it uses cost/benefit decisions to create a balanced response to coastal erosion." (NYS DOS, 1994, Vol. II, pp. 75-76)

The Inventory and Analysis section of this report is designed to provide a picture of existing flooding and erosion conditions in the Town, to highlight vulnerable areas and develop an information base for the Policies, to recommend ways to minimize future damage from flooding and erosion and to protect the natural features that are the primary defense against these forces. Future changes in storm activity, rising sea level, and patterns of development may require great flexibility on the part of residents and government alike. Saltmarsh areas where sea level rises faster than sediment can be deposited, and low lying areas around the bay will likely be the most vulnerable to submergence and flooding.

Planning and decision making for flooding and erosion in the Town's coastal zone necessarily has both short and long-term components, short-term in response to storms and long-term for littoral and geologic coastal processes. A 30-year planning horizon is useful for most structures and storm events, and is employed by the New York State Coastal Management Program. It is also important to gain a longer term perspective through practices such as historical shoreline change analysis to discern localized erosion trends, and to establish baselines for monitoring future erosion, sea level rise and effects of storms. The Town is beginning to perform this type of work (see Erosion Monitoring in **Projects**) but little information is available as yet, and remains beyond the present scope of this report.

Such studies should be utilized as they become available to amplify this inventory, revise the analysis and redefine policy on a periodic basis. As coastal systems are constantly in transformation, the LWRP should also be adaptable to dynamic conditions of the shore, and be revised as understanding of coastal processes improves. Until such data are available, East Hampton should take a conservative approach to protecting the coastal resources that are vital to the Town's economic and physical well-being.

A number of issues and resulting recommendations identified in the Inventory and Analysis are not directly addressed by policies of the LWRP. Examples include reconstruction and redevelopment in the wake of a catastrophic storm event; remediation for deteriorated natural protective features such as eroded beaches, dunes and road ends; long-term ramifications of rising sea level and consequent implications for setback requirements and habitat protection; and coastal zone insurance problems related to storm damage and flooding and erosion concerns. A number of these problems will be addressed by LWRP **Project** initiatives and several are being covered by Town projects currently underway or included in recent grants to the Town. (See **Projects**.)

3. Methodology

The Inventory examined conditions for flooding and erosion in the Town reach by reach. A matrix to identify significant flooding and erosion related features was formulated and completed for each reach. The reach boundaries are consistent with the other sections of the LWRP, which divide the Town into geographically associated areas. They are not specific to coastal processes that cause

flooding and erosion, or to a division of the coastline into littoral cells or geomorphic units. Further delineation of the coast by shoreline type, wave energy, sand transport patterns or other coastal processes that define coastal geomorphology is described within the reach narrative, but may overlap from reach to reach.

Resources used in the Inventory include 1:200 color aerial photographs, National Flood Insurance Program (NFIP) Flood Insurance Rate Maps (FIRM's), maps for the Coastal Barrier Island Resource Areas (CBRA zones), NYS Coastal Erosion Hazard Area Photo Maps, US Army Corps of Engineers (ACOE) Sea Lake and Overland Surge from Hurricanes (SLOSH) Maps, 1974 Suffolk County Five Eastern Towns Topographic Maps, and other references and anecdotal information provided by Town Planning and Natural Resource Department staff. Actual conditions in most areas were verified by field inspections. On October 17, 1994, an aerial video inventory of the Town's coastline was undertaken by helicopter in cooperation with the Air National Guard, the Peconic Estuary Program, The Nature Conservancy, and the Group for the South Fork with a grant from the Nathan Cummings Foundation.

The inventory was undertaken using available resources with the recognition that more detailed information would be helpful. Data on historical shoreline change, through photogrammetric analysis and surveying, and sediment budgets, including transport paths, is needed to help define erosion hazard zones. The Town is working to acquire this information in the Erosion Monitoring Project (see **Projects**).

Recommendations in the analysis were designed to err on the side of caution in protecting coastal resources, and to balance the public interest of access to resources with the right to protect private property. Specific recommendations are found in several sections including: Reach Analyses; Townwide Issues and Recommendations; Vulnerable Areas, Issues and Recommendations; and Policies.

To help visualize recommendations for treatment of erosion protection structures, they are represented graphically on Map V-2, Flooding and Erosion Protection. The recommendations are designed to both preserve or enhance coastal resources and natural protective features and to protect upland property. The map is based on the detailed discussions and recommendations in the Analysis sections and on general observations on the interaction of structures and coastal processes. As depicted on the map, areas of the Town's coastline were designated with one of three categories reflecting coastal conditions and resultant policy recommendations:

Condition 1:	Area predominantly contains no shore-parallel hard structures.
Recommendation 1:	Do not allow new hard structures. Existing shore parallel structures are to be replaced only under conditions of exceptional hardship. Do not replace groins and other perpendicular structures, except where
	used to protect navigational channels.

- Condition 2: Area with existing hard structures which are isolated or discontinuous and where natural protective features could furnish erosion protection, or the structure is interfering with access to public beaches, or unduly interrupting coastal processes.
 Recommendation 2: Do not issue permits automatically for rebuilding or emergency replacement of structures. Analyze erosion protection function of structure versus natural or non-structural protection. Some shore
 - structure versus natural or non-structural protection. Some shoreparallel structures should not be replaced. Do not replace groins and other perpendicular structures, except where used to protect navigational channels.
- *Condition 3:* Area with existing hard structures and minimal natural protection where structures provide the only remaining protection against flooding or erosion, provide public access, or preserve a public water dependent use.
- *Recommendation 3:* Structures may be rebuilt in-place in-kind under an emergency permit, or modified with full NRSP permit review, in order to mitigate adverse effects on neighboring property or resources. Do not permit expansion of structures into larger or more permanent types, e.g. from bulkheads to rock revetments; however, soft or non-structural solutions may be used to enhance protection or restore resources. Do not replace or permit groins and other perpendicular structures, except where used to protect navigational channels.

The analysis and recommendations apply to existing conditions, and for storm events within the 30year storm parameters that conform with State policy requirements. If a larger storm or catastrophic storm event occurs, post-storm redevelopment should be evaluated in the context of a Town *Hurricane Damage Mitigation Plan* or *Hazard Mitigation Plan* (see **Projects**).

4. Historical Storm Record

Hurricanes and severe winter storms have been recorded in the area since the earliest colonial records, with relative lulls of years or decades punctuated by periods of intense storm activity. Before East Hampton's settlement, a 1635 account by Governor William Bradford of Plymouth Colony in Massachusetts records "a mighty storme of wind & raine, as none living in these parts, either English or Indeans, ever saw". It was accompanied by a 20-foot storm surge and winds that "blew downe many hundred thouwsands of trees" (Pennybacker Collection, 1939) Although colonial records are understandably spotty, anecdotal accounts by the settlers on Long Island record storms throughout the 1700's and 1800's, including a "tremendous gale" in 1723, a hurricane in September 1782, the Christmas Storm of 1811, the Great September Gale of 1815 which was characterized as the "worst and most destructive hurricane ever known in these parts" (Pennypacker Collection, 1939), and the Great Blizzard of 1888, among others.

Hurricanes and severe storms are by no means infrequent visitors to Long Island. The National Hurricane Center (telephone conversation 5/93) records twenty-six tropical cyclones or hurricanes hitting Long Island since 1886. Fred Anders, Coastal Hazards Specialist for the NYS DOS notes that winter nor'easters have numbered at least sixty-five in the last century, with nine classed as severe and one extremely severe (3/62) (Hurricane Conference 11/92). Recent severe nor'easters include the Halloween Storm of October 1991, and the winter nor'easters of December 1992, March 1993 and December 1994. A recent article by Dolan and Davis (1994) notes that the past decade has been characterized by frequent major northeasters, and that the trend appears to be continuing.

Twentieth century records are marked by the hurricane of September 21, 1938, "The Atlantic Express", which made landfall at Westhampton and killed more than 700 people along the east coast, devastating beaches and property. East Hampton has been hit by numerous other hurricanes and storms since (an unnamed hurricane in 1944, Carol and Hazel in '54, Donna & Edna in the early '60's), but none packing nearly the force and untoward loss of life and property as the '38 Hurricane.

While understanding of hurricane dynamics and satellite tracking and warning systems have improved dramatically in recent decades, it should be noted that East Hampton has been spared storms of catastrophic magnitude since '38. Moreover, on the present Saffir/Simpson scale (see next page) the '38 Hurricane would have been a Category 2, or possibly 3, with winds of 95 m.p.h. By comparison, Hurricane Hugo, which struck the Carolinas in 1989, was a Category 4 storm, packing winds up to 135 m.p.h. The storm surge elevations recorded in '38 (excluding the wind-driven waves on top) were 11.9 feet and 14.7 feet at Westhampton Beach and Montauk respectively, whereas the ACOE SLOSH (Sea Lake and Overland Surge from Hurricanes) Model indicates that a Category 4 hurricane would, on it's eastern side, carry a surge in excess of 20 feet. While Category 4 and 5 hurricanes are relatively unlikely in the cooler waters of the north Atlantic, a fast moving Category 3 storm can produce similar effects (Coch, 1994). Given the sixty years since the '38 hurricane, the level of complacency about hurricane hazards in East Hampton is alarming. Homeowners along the low sandy beaches of East Hampton may be unaware that these areas were completely overwashed in the '38 hurricane.

Though major storm events that caused erosion, property damage and power outages, recent hurricanes have had relatively less impact on East Hampton's coastal zone. Both Hurricane Belle (1976), and Gloria (1985), with maximum winds up to 150 m.p.h., lost energy before landfall and hit at low tide, which lessened their impact. Hurricane Bob (1991), whose eye passed just east of Montauk, also arrived near low tide, and its eastward curving track spared East Hampton its full effect.

Long Island's geography and East Hampton's particular location increase vulnerability to hurricanes. Because of the Island's east-west projection into the Atlantic, hurricanes following the warm waters of the Gulf Stream north tend to meet the coastline at right angles, in a coast-normal path, rather than the glancing impact common to the north-south coasts of the Carolinas. Since a hurricane's cyclonic motion is counter-clockwise, the storm's forward motion and cyclonic wind velocity are theoretically additive on the right side, increasing storm surge and wind speed to the east, though precisely to what extent is unknown. For example, the '38 "Atlantic Express" Hurricane had wind speeds of 95 m.p.h.,

coupled with unusually high forward velocity of 60 m.p.h., theoretically adding up to a wind velocity on the East Hampton side of 155 m.p.h. and increasing the storm surge at Montauk to almost 15 feet. Dr. Nicholas Coch, a coastal geologist at Queens College, as reported in a New York Times article 8/23/94, and in the Journal of Coastal Research (1994), discusses the meteorological conditions that contribute to such high velocity storms. He also notes that because of the right angle formation of the New York Bight, wind-driven waters from a hurricane will tend to pile up here, again increasing the storm surge. "Higher damage potential exists because hurricanes at high latitudes typically move faster and they have historically approached the coast of the northeastern U.S. at a high angle; this trajectory results in maximum damage that extends far inland. In addition, the northeastern U.S. has a highly populated and developed coastline where few people are aware of the catastrophic regional damage that resulted 55 years ago from the last great storm, the 1938 Long Island-New England Hurricane." (Stevens, 1994)

Category	Central Pressure	Winds	Surge	Frequency	Damage
1	> 28.94 In	74-95 MPH	4-5 Ft	19 Yrs	Minimal
2	28.50-28.91 In	96-110 MPH	6-8 Ft	44 Yrs	Moderate
3	27.91-28.47 In	111-130 MPH	9-12 Ft	79 Yrs	Extensive
4	27.17-27.88 In	131-155 MPH	13-18 Ft	180 Yrs	Extreme
5	< 27.17 In	>155 MPH	>18 Ft	480 Yrs	Catastrophic

Table V-1: SAFFIR/SIMPSON HURRICANE SCALE

Category 1. Winds of 74 to 95 miles per hour. Damage primarily to shrubbery, trees, foliage, and unanchored mobile homes. No real wind damage to other structures. Some damage to poorly constructed signs. Low-lying coastal roads inundated, minor pier damage, some small craft in exposed anchorage torn from moorings.

Category 2. Winds of 96 to 110 miles per hour. Considerable damage to shrubbery and tree foliage; some trees blown down. Major damage to exposed mobile homes. Extensive damage to poorly constructed signs. Some damage to roofing materials of buildings; some window and door damage. No major wind damage to buildings. Considerable damage to piers. Marinas flooded. Small craft in unprotected anchorages torn from moorings. Evacuation of some shoreline residences and low-lying island areas required.

Category 3. Winds of 111 to 130 miles per hour. Foliage torn from trees; large trees blown down. Practically all poorly constructed signs blown down. Some damage to roofing materials of buildings; some window and door damage. Some structural damage to small buildings. Mobile homes destroyed. Serious flooding at coast and many smaller structures near coast destroyed; larger structures near coast damaged by battering waves and floating debris.

Category 4. Winds of 131 to 155 miles per hour. Shrubs and trees blown down; all signs down. Extensive damage to roofing materials, windows, and doors. Complete failure of roofs on many small residences. Complete destruction of mobile homes. Major damage to lower floors of structures near shore due to flooding and battering by waves and floating debris. Major erosion of beaches.

Category 5. Winds greater than 155 miles per hour. Shrubs and trees blown down; considerable damage to roofs of buildings; all signs down. Very severe and extensive damage to windows and doors. Complete failure of roofs on many residences and industrial buildings. Extensive shattering of glass in windows and doors. Some complete building failures. Small buildings overturned or blown away. Complete destruction of mobile homes.

(Sources: National Hurricane Center, New York State Hurricane Evacuation Study, 1993)

The relative lull in recent years of severe hurricane activity and accompanying flooding and erosion may not be indicative of future trends. The U.S. Weather Service predicts that during the 1990's the frequency and intensity of Atlantic hurricanes will increase. In the New York Times article above, Brian Jarvinen, a research meteorologist at the National Hurricane Center, estimates that "based on climatology you'd expect to see a hurricane in the region every 12 years" on average. Based on the Long Island Regional Planning Board's Hurricane Damage Mitigation Plan (1984), there is a 96% chance of a major tropical storm on the east end in any given ten-year period.

Severe erosion, particularly on the Town's northern bay reaches, has resulted from recent winter storms, particularly the Halloween Storm of October, 1991, and the December 11, 1992, March 1993 and December 1994 nor'easters. Damage was extended as these storms lingered for days, pushing wind-driven water into the bays without respite on successive high tides. While wind velocities are less in nor'easters than hurricanes, they are generally larger weather systems, and the extended duration of wave action increases the potential for damage. Nor'easters also occur more frequently than hurricanes, and the combined effect of two or more storms in succession on beaches that have not had time to rebuild can be as devastating or more so than a hurricane.

The NYS Coastal Erosion Task Force Report described the December 11, 1992 nor'easter:

"... Along the portions of the south shore of Long Island, the nor'easter generated wind velocities that exceeded Category 1 hurricane force (74 miles per hour). Wind speeds at Montauk Point, Tobay Beach, Orient Point and Ambrose Light were over 80 miles per hour. Strong northeasterly winds pushed ocean waters toward the State's Atlantic coasts and into Long Island Sound through 4 tide cycles. The sustained storm surge reached impressive peaks during high tides. The National Weather Service estimated 15 to 25 ft. seas on the ocean and 10 to 15 ft. seas on Long Island Sound. At Willets Point, on Long Island Sound, Queens, the tide gauge recorded a maximum water level of 11.2 ft. NGVD, a reading exceeded only by those of the 1938 Hurricane and Hurricane Carol. The tide gauge at the Battery on the southern tip of Manhattan recorded a maximum water level of 8.0 ft. NGVD, its fifth highest recording. Elevated water levels continued throughout the region for several

days following the storm. The tidal surges combined with high winds and heavy rain inflicted widespread damage." (NYS DOS, 1994, Vol. II, p. 42)

Planning for potentially increasing frequency and severity of catastrophic storms should be reexamined and consolidated in a Town *Hurricane Damage Mitigation Plan* or *Hazard Mitigation Plan* (see **Projects**). Such plans will focus not only on deployment of emergency resources and post-storm recovery, but also designate critical infrastructure, examine stormproofing in building codes, look at vulnerable areas where post-storm reconstruction may be undesirable, provide incentives for relocation, etc.

5. Storm Related Insurance Concerns

In the wake of losses estimated at \$16.5 billion from Hurricane Andrew in Florida in August, 1992, insurance companies are reassessing risk exposure to severe storms and hurricanes along the rest of the east coast, with particular implications for Eastern Long Island. As a majority of losses from Andrew were wind rather than flood related, and covered by private homeowners' policies rather than Federal Flood Insurance, companies are taking a new look at potential losses from "windstorm" damage and taking a variety of steps to reduce exposure on Long Island, including ceasing to issue new policies in the coastal zone, a practice known as "shorelining".

Results of a "*Long Island Homeowners Windstorm Underwriting Survey*" by the Independent Insurance Agents Association of Suffolk County, updated as of September 19, 1994, that lists companies controlling over 90% of the Long Island insurance market, are summarized as follows:

- "1) Companies that control 45% percent of the market (of the total market survey) are not providing a viable market for new homeowners policies on Long Island.
- 2) Companies that control 62 percent of the market (of the total market survey) are not providing a viable market for new homeowners within one mile of the water.
- 3) There is no viable market (except for Chubb on occasion), for risks less than 1000 feet from tidal water.
- 4) Between Allstate, Travelers, Continental, Excelsior, and USF&G there is a desire to terminate 8.4% of the total market, which will affect the owners of 78,000 one and two family homes." (IIAASC, 1994)

Lack, or unavailability, of homeowner coverage could severely inhibit the Town's ability to recover in the aftermath of a catastrophic storm, if home and business owners do not have resources to rebuild. A worst-case scenario is that damage from winter storms, as experienced in '92-94, would cause already skittish insurers to withdraw from the local market leaving many homeowners uncovered, and exposed to a hit by a major hurricane or winter nor'easter. This potential insurance shortfall should be examined further in the *Hurricane Damage Mitigation Plan* (see **Projects**).

While insurance unavailability is generally a problem now only when properties change ownership, the situation could rapidly become epidemic if a big storm causes widespread losses to insurance companies with extensive exposure on Long Island. It should be emphasized that this problem affects not only waterfront homes, but those within 1000 feet, and in some cases a mile, of the water,

which includes most if not all development in the Town's coastal zone. These deficiencies also have the potential to restrain real estate transactions, since most mortgages are contingent on issuance of homeowners insurance. The potential impact on the real estate industry in East Hampton, a major segment of the local economy, could be substantial.

Present state insurance regulations do not permit underwriters to discriminate through premium differentials for higher risks such as coastal properties. This policy may require reexamination if homeowners insurance becomes widely unavailable in the coastal zone. While there is some attraction to allowing market forces to underscore the risks of building on the immediate coast, government continues to have an obligation to protect the safety and well being of citizens and their property. In most disasters the taxpayers become the insurers of last resort, so from the standpoint of fiscal responsibility it also behooves government to make sure that private insurance remains available.

A 12/28/93 front page New York Times article notes, "...insurance companies are paying for a fiveyear program to evaluate local building codes across the country and the extent to which the codes are enforced." The NYS Coastal Erosion Task Force recommended developing coastal storm related improvements to the state building codes. The Town should monitor and evaluate recommendations in this area, for instance requiring hurricane straps for roof rafters, and ensure that local building codes remain in compliance with industry standards to minimize insurance costs for residents. Specific standards might appropriately be addressed in the *Hurricane Damage Mitigation Plan* (see **Projects**).

6. Climate Change and Sea Level Rise

Temperature, wind and weather, the set of climatic assumptions on which we base our present understanding of flooding and erosion phenomena, may be changing on a global scale which will ultimately have effects locally. A recent article in Science News opens with the following: "The fever is back. Two years after Mt. Pinatubo's 1991 eruption cooled it down, Earth's temperature has once again soared. According to the British Meteorological Office, which tracks land and sea surface conditions, Earth's average temperature in 1994 climbed 0.31°C above the mean for 1951 to 1980. That makes last year the third warmest since the late 1800's, as far back as global records reach. First and second place belong to 1990 and 1991, which followed on the heels of a marked rise that began in the mid-1970's. Global warming has officially returned."(Monastersky, 3/11/95)

The changing climate factors may exert an increasing influence on future flooding and erosion in East Hampton. Changes in levels of atmospheric carbon dioxide, methane, chlorofluorocarbons, and other gases released by human activities are expected to raise the earth's average surface temperature through a mechanism commonly called the greenhouse effect. Resulting thermal expansion of the oceans and melting of glaciers and polar ice sheets is expected to accelerate global sea level rise, with locally varying impacts.

The effect of sea level rise on coastal flooding and erosion depends on both the present rate of relative sea level rise and possible future rates. Assessment of sea level trends and their effect is dependent on the time span observed. For instance, research on the South Carolina coast by

Colquhoun and Brooks (1986) shows at least six major fluctuations in sea level over the past 20 million year span. The *NYS Coastal Erosion Task Force Report* states that, "Based on continued refinement of available data, the most recent estimates of relative rise (Emery and Aubrey, 1991) for this region show rates of approximately 0.14 inches/yr in New York Harbor and 0.07 inches/yr at Montauk Point." (NYS DOS, 1994) These annual increments may be evidenced in a gradual but inexorable loss of shoreline over decades. Within a 30-year planning horizon this may amount to significant shoreline retreat. By some calculations (e.g. Coch, 1990) a 3-6 inch rise in sea level could cause 25-50 feet of shoreline recession.

Kaufmann and Pilkey note that, "As sea level rises, islands and beaches do not stand still and allow water to pass over them. Like a well disciplined retreating army, they move back through a series of complex maneuvers. These include inlet formation during storms, inlet tidal deltas, inlet migration, overwash, and dune formation. Engineers who know geology estimate that for every one foot rise in sea level the beach retreats anywhere from a hundred to a thousand feet." (Kaufman, Pilkey, 1979)

The rate of global warming, the amount of future sea level rise and the degree to which they may be accelerating are the subject of extensive debate in scientific, popular press and policy arenas. A December 25, 1989 issue of Forbes Magazine pointed to deficiencies in current climate modeling, "The major weakness of the models is their assumption that the CO_2 buildup is the significant climate variable ... cloud cover is at least 100 times more powerful in affecting temperatures than greenhouse gases and is infinitely variable." (Brooks, 1989)

Emery and Aubrey (1991) note the difficulties in extracting reliable trends from existing data: "Both worldwide and regional examinations showed the trends of change in mean annual levels to be too variable for those trends to represent a simple eustatic rise of sea level caused by return of glacial meltwater or by heating of ocean water through climatic warming during post-glacial or even during the span of the industrial revolution (the greenhouse effect).

[Summary:] Our analysis shows that the signal of a possible eustatic rise of sea level is obscured by "noise" caused mainly by movement of the land beneath tide gauges; thus, study of the "noise" is a potential source of information about modern movements of the Earth's crust - especially of plate tectonics. ...At present, we cannot discover a statistically reliable rate for eustatic rise of sea level alone, but it may not matter to the sea-front property owner whether his house becomes flooded because of a rising sea or a sinking coast.

The present rate of relative sinking of land levels along coasts is less than a tenth of that during the time of fastest melt and retreat of late Pleistocene ice sheets, and more than 10 times the average for the past 50 m.y., during most of which the effects of glaciation were absent and geological agents alone were effective. In addition, many present coastal changes (erosion of beaches, collapse of sea cliffs, disappearance of salt marshes, sinking of some coastal cities, siltation of harbors, and others) are caused more by indirect and unexpected results of human activities than to changes of sea level or land level. Most coastal instability can be attributed to tectonism and documented human activities

without invoking the specter of greenhouse-warming climate or collapse of continental ice sheets." (Emery, Aubrey, 1991)

Dr. Rhodes Fairbridge, former chairman of the Geology Department of Columbia University, a local resident and long-time observer of the coastline, comments that he has discovered no discernible rise in local sea level based on Montauk tide gauge records (personal communications 5/22 and 6/14/95, public comments 6/23/95). He believes fluctuations in mean sea level (MSL) are tied to existing climate, astronomical and geological cycles such as the El Niño current, sunspot and lunar cycles and tectonic phenomena, and that although global warming is a reality, it's effects on MSL are not yet apparent and cannot be anticipated with precision. He believes they should be considered as minimal for planning purposes.

Many scientists believe climate change and sea level rise will accelerate over the next century, but disagree on the timing and magnitude of such change. Early 1980's estimates of a 2-7 foot rise in sea level over the next 50-100 years have been pared to a more conservative 1-3 foot figure as climate models have become more sophisticated. A United Nations Intergovernmental Panel on Climate Change report, written by more than 140 prominent scientists and reviewed by an additional 230, currently projects sea level rise over the next century of less than 2 feet (NYS DOS, 1994). Dr. Fairbridge believes even 0.5 m (1.5 ft) is high, and that the actual amount of sea level rise may be closer to 10 cm (4 in).

"These are substantial reductions, but the projected changes in global-mean temperature and sea level are still very large. For comparison, the warming corresponds to a rate roughly five times that observed over the past century, and the sea level rise is at a rate roughly four times that estimated for the past century." (Wigley and Raper, 1992)

Interestingly, recent data from Greenland ice cores, said to reflect the climate record for the previous inter-glacial subdivision, which began around 130,000 years ago and lasted about 10,000 years, point to larger and more rapid climatic fluctuations than at present, an indication that the more or less steady state of the earth's climate in the last 300 years since the "Little Ice Age" may be the exception rather than the rule. "At one point between the last two glacial epochs, the climate melted enough polar ice to raise sea levels some 30 feet. As noted by a member of the drilling team, Dr. David A. Peel of the British Antarctic Survey, it was so warm in England that hippopotamuses wallowed in the Thames and lions roamed its banks." (New York Times, 7/15/93). Subsequent analyses of the same Greenland ice cores have contradicted this hypothesis, however, other indicators for the previous interglacial, such as pollen in lake sediments or minerals in deep-sea sediments, provide support for violent fluctuations in the climate. This work opens the possibility that global warming due to pollutants could trigger inherent instabilities in the system with uncertain consequences (New York Times 11/1/94, Science News 7/30/94 and 10/29/94).

There remain inherent uncertainties and distortions in present climate models. Even with supercomputers, attempting to replicate complex and chaotic atmospheric, terrestrial and oceanic systems of immense variability is difficult. Despite the uncertainties, it seems clear that the primary greenhouse gas, CO_2 , will double in concentration sometime in the next century, and that without

limits on carbon emissions, the consensus is that climate will warm by roughly 1°C by 2025, and 3°C by the year 2100 (NY Times 11/1/94 and Science News 9/24/94). Even within the range of uncertainties of the models, these forecasts and their consequent implications for sea level rise represent significant long-term impacts on our coastal systems, which should be considered in public policy.

For planning purposes these uncertainties are best addressed by a periodic reexamination of data and planning options, and by pursuing policies that maintain maximum ability to adapt to potential increases in sea level within a reasonable cost framework. Evaluation of development or public works in the coastal zone should consider potential effects of sea level rise and include response options such as relocation of structures, allowing for migration of wetlands, saltwater infiltration of aquifers, etc.

In the abstract for a 1991 paper entitled "*Global coastal hazards from future sea level rise*", Vivien Gornitz of the NASA Goddard Space Flight Center Institute for Space Studies and Columbia University evaluates some of the possible (though not necessarily probable) effects of sea level rise:

Coastal inundation

"A rise of sea level between 0.3 and 0.9 meters (1-3 feet) by the end of the next century, caused by predicted greenhouse climate warming, would endanger human populations, cities, ports, and wetlands in low-lying coastal areas, through inundation, erosion and salinization. The consequences of a global sea level rise would be spatially non-uniform because of local or regional vertical crustal movements, differential resistance to erosion, varying wave climates, and changeable longshore currents. ... Sea level rise may accelerate 3-8 times over present rates, within the next century.

The permanently inundated coastal zone would extend to a depth equivalent to the vertical rise in sea level. Major river deltas, coastal wetlands and coral islands would be most affected. Episodic flooding by storm waves and surges would penetrate even farther inland. Beach and cliff erosion will be accentuated. Saltwater penetration into coastal aquifers and estuaries could contaminate urban water supplies and affect agricultural production."

Wetlands migration

The paper goes on to note that, "Coastal wetlands will be among the most severely affected ecosystems, since these form largely in the intertidal zone. The response of salt marsh to rising sea level depends on the relative rates of submergence vs. vertical accretion or sedimentation. A marsh may maintain its areal extent or even grow in the face of sea level rise, if sedimentation rates at least match submergence rates.

... Under extremely high rates of sea level rise (2.2 meters by the year 2100), 73% of all U.S. wetlands existing in 1975 would be inundated, based on a sample of 57 coastal sites ... This loss could be reduced to 56%, by the formation of new wetlands further inland. Under a

lower sea level rise scenario (1.4 meters), a 40% inundation could be reduced to 22%, by inland migration of wetlands.¹

Storm frequency

... A rise in mean sea level will result in a greater frequency of occurrence of a storm surge at a given height. For example, a 4 meter surge is calculated to occur at Hoek van Holland, on average once in around 250 years. If sea level were to rise by 1 meter, a surge of only 3 meters would be needed to reach the 4 meter level. The 3 meter surge has a frequency of occurrence of approximately once in 50 years. Possible changes in tidal range, storm frequency and storm tracks may require revision of present surge recurrence curves.

Erosion rates

... The rate and extent of coastal erosion is expected to intensify as a result of increased sea level rise.

... In some cases, projection of historical shoreline erosion with respect to local sea level changes may be the most feasible approach to predicting future trends. ... this method accounts for the inherent variability of shoreline response, based on varying coastal geomorphology, beach composition and exposure to waves and tides.

Saltwater intrusion

... Sea level rise will also promote saltwater intrusion into coastal aquifers. Along barrier coasts... a freshwater lens overlies saltwater. According to the Ghyben-Herzberg-Dupuit model, the freshwater lens is forty times thicker than the elevation of the water table above mean sea level. Thus, each increment of sea level rise will reduce the freshwater capacity by 40 times. ... Any coastal erosion would further reduce the freshwater storage, with serious consequences for the water supplies of small islands and coastal dune areas.

Affected zone

... While the elevation zone within 1 meter faces the highest probability of permanent inundation, the coastal strip within 5 meters of present sea level is also at high risk to above normal tides from severe storm surges." (Gornitz, 1991)

Based on an analysis by Gornitz, parts of Long Island are in the highest (4%) risk category for sea level rise impacts.

In a paper, "*Probable Effects of a Storm Like Hurricane Hugo on Long Island, New York*", Coch and Wolff discuss potential effects of climate change on Long Island:

¹This assumes that wetlands are free to migrate inland, which is not the case if bulkheads block their path.

"If global warming does occur, it has two important consequences for coastal areas (Titus, 1986). The immediate consequence is that the greater concentration of heat in the midlatitudes will create warmer ocean surfaces. This provides a greater heat exchange with the atmosphere -- causing a potential increase in the frequency and intensity of hurricanes. The consequences for Long Island are that stronger, and more frequent hurricanes will affect this area in the future. The long-term result of global warming is that sea level will rise as a result of increased melting of polar ice as well as the expansion of ocean water itself as it is heated. The rate of sea level rise ... is now predicted to increase to 1-4 feet during the next 100 years. Few scientists doubt that sea level will rise in the future. However, the rate of sea level rise, as well as the rate of global warming, is still a matter of dispute at present. While a rate of sea level rise of one foot per century may seem inconsequential to some, the geometric realities are not. A one foot rise in sea level along a very gently sloping coast such as Long Island's will result in a 100-foot landward displacement of the shoreline!" (Coch and Wolff, 1990)

While planning inherently deals with an uncertain future, overall these climate factors point to an increasing risk of flooding and erosion in coming years, and a need for planning procedures better adapted to receding shorelines and more frequent catastrophic storms. However, whatever risks future climate change and consequent sea level rise *may* pose, *present* storm activity and existing sea level rise already constitute great risks and problems for development in the coastal zone, and should be given more consideration in management decisions. Wherever possible, decision makers should embrace options that are adaptable to future sea level rise.

It is arguably easier to incorporate such measures into Town comprehensive planning before sea level rises to threaten existing resources and property. As James Titus, director of the Environmental Protection Agency's Sea Level Rise project, notes, "Political feasibility may be enhanced because it is easier to reach a consensus when no one is immediately threatened. Moreover, such planning reduces risk to investors: although they still face uncertainty regarding climate change and sea level rise, planning can prevent that uncertainty from being compounded by uncertainty regarding how the government will respond." (Titus, 1990)

As data accumulates and the uncertainties of climate models are reduced, the Town should reexamine flooding and erosion related planning and zoning measures, such as waterfront and wetland setbacks and larger lots to permit relocation, at regular intervals of a decade or less. Planning measures should be considered now to preserve future options for wetland and species migration, and protection of critical features such as beaches, and drinking water aquifers and major infrastructure such as transportation arteries. While it is difficult to predict how complex and poorly understood natural systems such as wetlands will react to rapid rise in sea level, the high value of these ecosystems to fisheries, habitats and the local recreational economy compel a major effort to monitor and understand them and to provide adequate natural buffers. Unfortunately our bay shorelines are often bulkheaded, preventing inland migration of beaches and wetlands.

Although research on large scale phenomena such as climate change and regional coastal processes is better done at the State and Federal level, future projects of the LWRP such as the *Town Coastal*

Erosion Monitoring Program and a *Hurricane Damage Mitigation Plan* (see **Projects**) will improve planning procedures to better address local flooding and erosion concerns on a long-term basis.

7. Coastal Topography and Geomorphology

As part of the South Fork of Long Island, East Hampton Town consists geologically of a bedrock base with layers of sediment from the Cretaceous Period and Pleistocene Epoch, the latter known as the Ice Age. Deposits from several glacial advances and retreats formed the South Fork, the last one, the Wisconsin glaciation, ending about 10,000 years ago.

At its climax, the Wisconsin glacier terminated in the Ronkonkoma moraine, reaching its southernmost limit and forming the South Fork. Later, in another advance of the Wisconsin glacier, the Harbor Hill moraine formed the North Fork. There is evidence that there may have been another incomplete glacial advance between the Harbor Hill and the Ronkonkoma advances that created the islands situated in the Peconic Bay, including Gardiner's Island.

Montauk Point represents the easternmost advance of the Ronkonkoma moraine on Long Island. As the moraine moved over an uneven base, it left deposits at various elevations, some below the present sea level. After the last Wisconsin advance and subsequent sea level rise, Long Island's easternmost tip was at Bluff Road in Amagansett. This "fossil bluff" continues along Bendigo Road in Amagansett on the bay side. Between Amagansett and Hither Hills the moraine was separated from the mainland, and Montauk and probably Promised Land existed as separate islands.

East of Stony Hill, the moraine dips below the isthmus of Napeague and reappears as the Hither Hills. Westward it slopes into the Three Mile Harbor basin and re-emerges as the high area in the western central portion of the Town before continuing into Southampton. (Town of East Hampton, 1985).

As the Ronkonkoma moraine began to recede, meltwater streams carried sand and gravel deposits in coalescing alluvial fans, forming outwash plains. Later as the Harbor Hill moraine on the North Fork began to recede, meltwater streams carried outwash that occasionally breached the Ronkonkoma moraine. The outwash deposits of these two terminal moraines are superficially indistinguishable. (Town of East Hampton, 1986)

The greater part of the moraine is made up of compound ridges that are a result of slight fluctuations in the edge of the ice margin. Slight advances and recessions in the glacial margin resulted in abnormal forms of relief. Ice blocks became detached and buried, boulders were scattered and substantial pockets of glacial till were deposited. Thus kettles, irregular basins, knobs, ridges, and kame deposits of poorly stratified sand and gravel were formed resulting in a complex topography typical of glacially produced landscapes. Large boulders known as erratics were broken off rock formations in New England and rounded as they were carried great distances by the glacier. Altitudes range from sea level to approximately 200 feet above sea level at several isolated high points. The moraine is composed largely of glacial drift, consisting of both unstratified sediments deposited directly in place by melting ice, and stratified meltwater stream or lake deposits. Such unsorted, unstratified drift, varying in character and composition from boulders to finely ground rock material, silts and clays, is known as till. The backbone of the Ronkonkoma moraine is composed of till. It's varied composition becomes evident as eroding headlands or bluffs along the shore are exposed and the contents sorted by littoral processes.

In contrast, the outwash plains are relatively flat lands consisting of sandier more stratified material deposited by meltwater streams. The finest materials, which provide the basis for the best soils, tended to be carried and deposited the farthest from the moraine, the remnants of which are now the fertile lands along the Town's southern reaches.

In the most recent Holocene epoch, two other geological processes have transformed East Hampton's coastal landscape since the glaciers. Beaches, dunes and spits have formed from the erosion of headlands, littoral drift and aeolian, or wind borne deposition. The Montauk peninsula, for example, has been altered significantly in relatively recent geologic times by these dynamic and relentless coastal processes. The Napeague isthmus formed from littoral deposition in a series of sandy spits called a tombolo complex, reconnecting the island of Montauk to the mainland. Montauk Point itself has been subject to severe headland erosion. Within the 200-year period since George Washington commissioned the Montauk lighthouse in 1796, a mere flicker in geologic time, this headland has eroded more than 300 feet.

The south shore from the Montauk hamlet to Georgica Pond is nearly a straight line due to erosion and downdrift deposition of sediments from the Montauk headlands and possibly from offshore. With no sheltering barrier beaches located offshore as along Dune Road and on Fire Island the East Hampton coast receives the full impact of ocean surf and weather. Wave force is determined by winds and storms, by the bottom configuration it travels over, and by fetch, the distance traveled. Long period swells striking the Town's south ocean shores from the southwest in the prevailing summer pattern may have a fetch of 5000 miles traveling from West Africa, or some 2000 miles from Iceland in winter nor'easters. Depending on weather and direction these ocean waves may have tremendous force and can transport great quantities of sand onshore and offshore, a lesser amount of which also moves along the shore. The net longshore movement is known as littoral drift.

While the net littoral drift along the south shore is generally east to west and carries sand to form beaches westward, there are frequently local reversals in direction over periods of time, which can result in some areas acting as microsystems or compartments of the larger littoral system. The contribution of sediments from offshore is unknown within the system, and sediment budgets overall show a net loss from East Hampton shorelines (Kana, 1995).

Waves impacting the northern bay shores, in contrast, have a fetch of, at most, a hundred miles, with consequently less size and force. The bay reaches of the Town are, in general, lower-energy tide-dominated environments not exposed to the direct forces of the ocean. However, winter nor'easters can severely affect these northerly shores because the sediments are often of coarser less sorted materials, and they have not built up the protective dune systems as on the south shore. High-angled

bluffs and narrower beaches on these normally stable shores make them more vulnerable to storm erosion.

Beaches and dunes are also subject to seasonal changes and wind patterns. Generally, beach buildup occurs during the summer when prevailing onshore winds cause accretion. Winter storms result in narrower beaches as sand is washed out to sea or to nearshore bars by strong wave action. (McCormick, et al, 1984).

A second ongoing geological process is the formation of marshes. This occurs as sediment and organic materials are entrapped in tidal waters by grasses and marsh vegetation along the fringes of tidal creeks and embayments. Extensive tidal marshes, wetlands and tidal flats have formed in the Town's enclosed harbors, and are valuable buffers and catchment areas to absorb and dissipate floodwaters, as well as providing critical habitat and nurseries for finfish and other marine life. The enclosed harbors are generally protected from the higher energy environments of Gardiners Bay or Block Island Sound by baymouth spits. The sites where these spits are formed are generally more energetic, and if the spit is lost to erosion or sea level rise the protected marsh areas could be adversely affected.

Many of these low-lying marsh areas formed by tidal processes are now designated flood zones, and have been encroached on by development that could be extensively damaged in a hurricane or catastrophic storm. Beach, dune and bluff areas along both the north and south shores also are areas with high flooding and erosion potential that, because of development, represent potentially large liabilities for storm damage.

The surface geology of East Hampton is a direct function of Pleistocene glacial processes and deposits and recent Holocene beach, dune and marsh building processes. The sweeping climatic changes that produced our present coastal landscape since the retreat of the glaciers 10,000 years ago are still in motion. Indeed, if human alteration of the biosphere is accelerating change in earth's climate as described above, the Town's coastal landscape may once again undergo a period of rapid transformation.

8. Existing Programs for Flooding and Erosion Control

(a) National Flood Insurance Program

The National Flood Insurance Program (NFIP) makes flood insurance available to property owners in flood prone areas of communities that participate in floodplain management. NFIP was initiated by Congress and is administered by the Federal Insurance Administration (FIA) of the Federal Emergency Management Agency (FEMA). NFIP identifies areas at risk for coastal flooding on Flood Insurance Rate Maps (FIRM's) and is the primary vehicle for Federal flood hazard management.

NFIP is enabled locally through the Town's Zoning Code in **Sections 153-3-40** through **-45**, **Flood Hazard Overlay District** and implemented by Planning and Building Departments and Zoning

Board of Appeals. Changes in the NFIP were enacted in the National Flood Insurance Reform Act of 1994 and were recently incorporated in revisions to the Town Code.

To date, the NFIP program has achieved somewhat the reverse of its stated objective of guiding development away from flood prone coastal areas, often encouraging development by having the government assume risks that would not be carried by private insurers. NFIP does not specifically insure against coastal erosion hazards; however, the recent reform requires FEMA to evaluate erosion hazards and to list communities with likely erosion hazard areas. NFIP in the past has assumed flooding risks will on average stay the same, which as noted in the paragraphs above on Climate Change and Sea Level Rise, may not be the case. New requirements for periodic update of the FIRM's at least every five years may improve their correspondence to actual conditions.

Provisions of the 1994 NFIP Reform Act include modest funding for relocation or removal of flood damaged properties and for development of hazard mitigation plans, and for erosion mitigation measures on both state and local levels.

There are both conceptual and procedural problems with the NFIP as presently devised, particularly as it treats erosion, some of which were outlined in the *NYS Coastal Erosion Task Force Report*:

"The NFIP treats erosion as a subset of flooding. Critics charge damages for erosion are paid to participants, but the premiums charged for a policy do not reflect actuarial rates for erosion. Estimates for the increased cost of covering erosion damage range up to 7 times present premiums. It is argued that the NFIP should specifically address erosion either through establishment of building setbacks, increase premiums to reflect actuarial rates, mandatory relocation from erosion hazard areas, or similar methods.

... Related to the problem of erosion damages in V zones is the contention that elevation practices promoted by the NFIP simply delay the inevitable destruction of a structure to some time in the future, and thus do not adequately address the problem. ...Critics suggest an amendment to the NFIP to either actively promote relocation/demolition, or remove the elevation requirement from V zone structures and replace it with requirements that would limit structure size and location to minimize financial loss when the structure is damaged.

A third issue regarding the NFIP is a perceived failure to redirect development away from hazard areas, and thus provide adequate public protection. ...A Government Services Administration report even suggested that the NFIP was a slight stimulation to increased hazard area development. Critics contend that buy-out programs and relocation/demolition programs have very low budgets and have been used reluctantly by administrators. While these programs are voluntary, little effort has been made to seek participants." (NYS DOS, 1994, Vol. II, p. 108)

Under the present program, subscription of Federal Flood Insurance is not mandatory for property owners within designated flood hazard zones, resulting in large numbers of uncovered properties that in the event of catastrophic storms, receive taxpayer funds through FEMA relief anyway. Provisions

of the Reform Act are intended to expand participation in the program, by including Flood Insurance with mortgage payments and requiring notification of the need for Flood Insurance in property transfers within flood zones.

NFIP represents a potentially substantial taxpayer liability, with roughly \$210 billion worth of insurance in force, composed of about 2.5 million individual policies. FEMA some years ago estimated the probable program cost for a bad storm year at anywhere from \$3.5 to \$4 billion in claims. From 1978 to 1986 the program operated at a \$652 million deficit, made up by federal taxpayers.

Guidelines and regulations for floodplain construction along the coast are formulated by State and Federal agencies. The U.S. Department of Housing and Urban Development, in conjunction with the ACOE, studied the history of major storms and estimated the flood stages related to the one-hundred year floodplain. The one-hundred year floodplain is described as land inundated by a flood that has a 1% chance of being equaled or exceeded during any given year (FEMA, 1987).

As part of this process, official Flood Insurance Rate Maps (FIRM's) are prepared by FEMA. Flood hazard areas are designated on the FIRMs to identify coastal areas subject to storm flooding.

The hundred year coastal floodplain is divided into three adjacent zones that define different types of flood hazard, and therefore require different floodplain management techniques:

- Areas of special flood hazard or A-zones are "those areas of land within the onehundred year floodplain (subject to a one-percent or greater chance of flooding in any given year)."
- Coastal high hazard areas or V (Velocity)-Zones are that portion of the coastal hundred year floodplain that would be subject to flooding and "high-velocity waters (wave action), including but not limited to hurricane wave wash."
- Areas of shallow flooding (1-3') "within or adjacent to the one-hundred year floodplain ... where the path of flooding is unpredictable and indeterminate and where velocity flow may occur. These areas are designated on a FIRM as Zones AH, AO and B." (East Hampton Town Code **§153-3-42**)

(b) Flood Hazard Overlay District

The East Hampton Town Code codifies the rules and regulations governing construction activities in Flood Hazard (A-Zones) and Coastal High Hazard Areas (V-Zones) designated on the FEMA Flood Insurance Rate Maps (FIRM's). These are contained in **Flood Hazard Overlay District § 153-4-40 to -45**, as revised in 1998. Town standards conform to the National Flood Insurance Program regulations and include standards for construction, elevation, and placement of utilities. They also prohibit alteration of sand dunes. New construction or substantial improvements within NFIP Flood Hazard Zones must conform to the regulations for the district. **Regulations for Flood Hazard Overlay District §153-3-45** are excerpted in **Flooding and Erosion Policy #11**.

(c) Coastal Barrier Resources Act

NFIP Flood Insurance Rate Maps also identify undeveloped coastal barriers known as CBRA zones, of which there are eleven within the Town. These zones were designated as part of the Federal Coastal Barrier Resources Act enacted in October, 1982 and revised in the Coastal Barrier Improvement Act (CBIA) signed into law on November 16, 1990. CBRA was enacted in response to concerns for the fragile ecology of undeveloped barrier lands along the coast, the result of a Department of Interior task force in 1977. Its stated purpose is:

"To minimize the loss of human life, wasteful expenditure of Federal revenues, and the damage to fish, wildlife, and other natural resources ... by restricting future Federal expenditures and financial assistance which have the effect of encouraging development of coastal barriers"

The law is administered by the U.S. Fish and Wildlife Service.

CBRA generally prohibits new federal financial assistance for development or infrastructure on these coastal barriers, including (effective 10/1/83) Federal Flood Insurance. Exceptions include maintenance of inlets and related structures, environmental research and wildlife management, and nonstructural shoreline stabilization projects. It's effect on development in the Town of East Hampton is difficult to assess, particularly since federally insured financial institutions are still permitted to make loans in CBRA zones.

CBRA zones are present in Reach 1, including Cedar Point, Northwest Harbor and Northwest Creek; in Reach 2, at Three Mile Harbor including Sammy's Beach and Maidstone Park, and at the mouth of Hog Creek; in Reach 3, at Accabonac Harbor including parts of Gerard Park and Louse Point; in Reaches 4 and 10, extending from the mouth of Napeague Harbor to the ocean; in Reach 6, Big Reed Pond; in Reach 8, Oyster Pond and the north side of Montauk Point; Reach 10, in Amagansett through the Double Dunes from near Atlantic Avenue to west of Indian Wells Highway; in Reach 11 Georgica and Wainscott Ponds extending to the ocean; and Reach 12, the spits and coastal ponds of Gardiner's Island. The CBRA zones are depicted on Flooding and Erosion Map V-1.

(d) Other Federal Programs

Other Federal programs affecting flooding and erosion conditions or policy include:

(i) Army Corps of Engineers (ACOE)

ACOE maintains the Federal channel at the inlet to Lake Montauk. The inlet jetties have affected flooding and erosion of downdrift areas. ACOE has also participated in construction of erosion protection structures at the Montauk Lighthouse, and of the groins on the ocean beach in East Hampton Village which have affected beaches to the west in Reach 11.

ACOE is engaged in a \$16 million study of erosion problems and solutions for the South Shore, the Fire Island to Montauk Point Storm Damage Reformulation Study, to be completed in 2002, which will have significant implications for flooding and erosion policy on Long Island.

(ii) Federal Emergency Management Agency (FEMA)

Besides the NFIP, if hurricanes or other catastrophic storms lead to declaration of a "major disaster", Federal Disaster Assistance would be administered by FEMA under the Stafford Disaster Relief and Emergency Assistance Act. The Stafford Act also provides for hazard mitigation including federal assistance in property acquisition and relocation.

Changes in these and other Federal programs can affect the Town's ability to respond to flooding and erosion and storm events, and the Town should keep informed through its representatives and official contacts. For instance, a recent FEMA directive states that FEMA will consider disaster assistance for beach nourishment only for "improved" beaches, i.e. "one that (i) was constructed by the placement of sand (of proper grain size) to a designed elevation, width, and slope; and, (ii) has been maintained in accordance with a maintenance program which includes the periodic renourishment of sand. ...Beaches that do not meet these conditions are ineligible for federal disaster assistance under current regulations." (FEMA, 1994) Few, if any, beaches in East Hampton meet these criteria.

(iii) National Weather Service (NWS)

The NWS provides storm and flood warnings from a regional office which recently moved to new quarters at Brookhaven National Laboratory. The Town is exploring installation of a weather monitoring and tidal gauge network that would allow direct data exchange with NWS. This will assist the Town in emergency response planning for major storms, and help to compile a database for flooding and erosion monitoring (see *Storm and Flood Monitoring Cooperative with National Weather Service* in **Projects**).

(iv) Federal lands and installations within the Town

U.S. Fish and Wildlife Service retains title to the former Coast Guard reservation in the Double Dunes between Atlantic Avenue and Indian Wells Highway in Amagansett. The area is presently managed under a cooperative agreement by The Nature Conservancy. The active Coast Guard station at Star Island in Lake Montauk is within flood hazard zones and could be inundated according to the SLOSH model in a Category 1 hurricane. Montauk Lighthouse, formerly a Coast Guard station, now contains an automated light package, and is managed by the Montauk Historical Society.

(e) New York State Coastal Erosion Hazard Act (CEHA)

The Coastal Erosion Hazard Act (CEHA) forms article 34 of the NYS Environmental Conservation Law, and is a regulatory program to identify and manage coastal erosion hazards. It may be administered either by the State or through an approved local program. The program is designed to discourage placement of structures within defined Coastal Erosion Hazard Areas.

The Coastal Erosion Hazard Areas are identified on the NYS DEC Coastal Erosion Hazard Photo Maps for the Town and are seaward of an Erosion Hazard Line drawn on the maps. They are described in this section in the inventory for each reach. Siting and construction of new structures or replacement of existing structures within these CEHA zones is governed by the Coastal Erosion Management Regulations (6 NYCRR Part 505, as amended March, 1988) and requires a CEHA permit issued by the NYS DEC. CEHA Regulations are excerpted in **Appendix E.**

The Town of East Hampton has not yet adopted a local law for CEHA, and CEHA permits remain under NYS DEC administration. Adoption of a local Coastal Erosion Hazard law and local administration of the CEHA regulations is a recommendation of the LWRP. See **Local Implementation Section XV.A.** CEHA permitting covers most types of coastal structures in CEHA zones, including erosion protection structures, and incorporates a number of features that would further the goals of the LWRP. These include maintenance provisions and requirements to minimize or mitigate adverse effects on neighboring property and natural features. Town permitting would also facilitate procedures for local residents, and emphasize lead agency status for the Town's waterfront policies and regulations.

(f) Sea Lake and Overland Surges from Hurricanes (SLOSH) Model

The SLOSH Model commissioned by the ACOE is "the latest and most sophisticated mathematical model yet developed by the National Weather Service to calculate potential surge heights from hurricanes." (SEMO, 1993) It models storm surge elevations above MSL on both open coasts and within tidal basins, given barometric pressure, storm movement and size, and generates maps showing surge elevations and boundaries of maximum inland flooding for hurricane categories 1-4 on the Saffir/Simpson Scale.

The zones indicated on the SLOSH maps are the worst case scenario for a hurricane of given strength, that is, if the hurricane makes a direct hit at a particular location. "The end result is a line that represents the maximum inundation that could be expected from any category storm, but is not an accurate representation of hurricane flooding potential unless the storm matches the worst case conditions, and then only for the shoreline immediately adjacent to where it makes landfall. The probability for that occurrence has not been determined, and could be quite large. SLOSH cannot be directly related to the FEMA 100 year flood plain." (Fred Anders, personal communication, July 1995)

SLOSH does not adjust for tidal levels at the time of impact but is based on the datum for MSL (NGVD 1929). "Other factors that contribute to the total water height are the initial water level within the basin at the time the hurricane strikes and wave effects. Storm surge is defined as the difference between the observed water level and the normal astronomical tide. Any astronomical tide level above the mean is additive to the storm surge. The timing of the arrival of storm surge is important in that the difference in total flood elevation can be as much as 7 feet in the study area, which can easily be the difference between a catastrophe and a non-event. **... If astronomical high tide occurs coincidentally with the peak storm surge, the combination could be considerably higher than the SLOSH surge values shown on the inundation maps...." (SEMO, 1993)**

Although designed primarily to identify areas for evacuation, the SLOSH model provides a useful indication of the potential extent of flooding and erosion, particularly for more frequently occurring Category 1 or 2 storms, as well as vulnerability of evacuation routes, designated shelters, and other infrastructure, which can be incorporated in local Civil Defense planning. Anecdotal reports from

coastal experts indicates the SLOSH model has been fairly accurate in predicting flooding for recent hurricanes.

B. REACH INVENTORY & ANALYSIS

1. Reach 1 -- Northwest Harbor

(a) **Description**

Sag Harbor Bay, Northwest Harbor and Shelter Island Sound form a sheltered embayment with limited wave energy, opening to the more exposed coast of Gardiner's Bay at Cedar Point. Large tracts of parkland and preserved open space including Barcelona Neck, the Grace Estate, Cedar Point County Park, and Mashomack Preserve on Shelter Island, make this reach one of the premier natural areas of the Town, and have kept the shorelines in a largely natural state.

Historic uses of Northwest Harbor have altered Reach 1's littoral processes in ways that affect flooding and erosion but are difficult to quantify. Sag Harbor was a major east coast port during the heyday of whaling in the mid-1800's. A stone breakwater shelters the anchorage, altering circulation and littoral drift. Cedar Point Lighthouse, constructed in 1868, was not originally connected to the mainland, but the spit has since filled in with reentrant material from Hedges Bank and the eroding bluffs to the west.

Present development consists of sparse residential construction in the subdivisions of Settlement at Northwest and Grace Estate, a small concentration of residential housing at Northwest Landing, the unirrigated golf course at Barcelona, the County dock at Northwest Creek, and the infrastructure of Cedar Point County Park.

Geologically, Reach 1 is a composite of undifferentiated morainal till and glacial outwash deposits. Knobs and kettleholes with slopes of 20% and greater, and drainage swales are found throughout the reach. Barcelona Neck abutting Northwest Harbor has elevations approaching 100', which slope down to 50' at Barcelona Point to form steep cliffs. Sediment size, composition and sorting, all of which determine erosion potential, vary widely through the reach, with unsorted till washing out of the morainal bluffs and mixing with reentrant material of previous glacial outwash and nearshore sands.

(b) Natural Protective Features

Reach 1's curvilinear shores with their bluffs, dunes and beaches bordering Sag Harbor Bay and Northwest Harbor are dynamic erosion areas relative to the low energy context of the north shore. Beach profiles vary from flat with sandy tidal flats along Cedar Point, to steeper rocky beaches backed by eroding bluffs. There is a low dune complex, partly spoil and fairly well-vegetated, on the barrier spit of Northwest Creek, another at the base of Cedar Point, and at the west end of Barcelona.

The bluffs on the west side of Cedar Point Park are exposed to the fetch from the northwest across Shelter Island Sound, causing rapid erosion that deposits sediment at the base of Cedar Point. The longest fetch and highest wave energies in the reach impact the bluffs of Hedges Bank facing Gardiner's Bay. The low bluffs of the Grace Estate and the higher bluffs on the Barcelona Neck also receive intense wave energy in nor'easters, evidenced by storm-cut terraces and stony beaches. There is a strong littoral movement to the south along the west side of Barcelona, contributing to a large infill area at the base of the peninsula. Longshore currents in this area are affected by the parallel breakwater at Sag Harbor.

Two major spits have formed as a result of wave action on headlands. The first composes Cedar Point and the second is at the entrance to Northwest Creek. Northwest Harbor, located between these two spits, is somewhat protected from wave action, and wave heights exceed about two feet only in extreme storm conditions. The harbor is shallow with sand deposits from the eddying circular currents. A smaller spit forms the entrance to Alewife Brook. Much of the low lying area around Northwest Creek and Cedar Point and the harbor in between is within CBRA zone # NY-51P.

The inlets of Northwest Creek and Alewife Brook trap some sediment from the littoral drift, which has a net movement to the north because of prevailing southwesterlies. Some of the remaining sediment is swept offshore in the deep channel of Shelter Island Sound off Cedar Point. Shoals form regularly at the Northwest Creek inlet, which has often been only marginally navigable, providing minimal tidal flushing of the Creek. The inlet was moved from the eastern side of the barrier spit in 1962, which may have contributed to the navigation and flushing problems. The inlet channel was dredged in May 1995 to improve the navigation and flushing. Spoil from this and other maintenance dredging of the channel has been used to build the low dune complex that forms the barrier spit.

Reach 1 contains a number of small coastal ponds, one in the infill area at the base of Barcelona Neck; Cedar Pond; Alewife Pond; Scoy Pond; Little Scoy Pond; Cow Pond and Fresh Pond in the Grace Estate; and Larkin's and Staudinger's Ponds at the head of Northwest Creek. These ponds act as receiving areas for floodwaters, with Alewife and Cedar Ponds having the greatest potential capacity.

Creeks include Little Northwest Creek, Rattlesnake Creek and Red Creek at the ends of Northwest Creek, Alewife Brook and Scoy's Run. There is also an intermittent creek opening into the pond on the west side of Barcelona, and one into the saltmarsh on the east side of the Northwest Creek spit, and a seep on the east side of Northwest Creek itself. The creeks are primary floodwater corridors in storms and hurricanes.

Tidal marshes border the low area on the west side of Barcelona, Little Northwest Creek, the mouth of Alewife Brook, all of Northwest Creek except around the County dock, and around the old inlet east of the present entrance. Drainage ditches installed by Suffolk County Vector Control have altered the marsh characteristics of Northwest Creek, accelerating distribution and inland penetration of floodwaters and probably increasing the storage capacity of the marsh.

Extensive surrounding wetlands are a factor in the designation of Alewife and Scoy Ponds, the Cedar Point peninsula, Northwest Creek, and Sag Harbor-Northwest Harbor as NYS Critical Habitats (see

Significant Habitats Policy #7, and Water/Air Resources Policies #30-44). These wetlands serve an important buffer function by storing floodwaters and retarding the wave energy of a storm surge.

(c) Coastal Structures

Coastal hard structures are few in Reach 1, the largest being the County dock at Northwest Creek, actually a filled bulkhead as noted above, and the Cedar Point Lighthouse with the approximately 100 yards of rock revetment that protects it at the tip of Cedar Point. A smaller light, known as Gin Lighthouse, is on a rock bordering the channel into Sag Harbor. About 50' of riprap is up in the beach grass east of the launch ramp at the County dock, which may have been used to stabilize the shoreline when the inlet was moved. There are also low jetties partially overgrown with wetland vegetation and some associated bulkheading at the inlet to a former marina site east of Northwest Landing, and the remains of a private dock and shoreline riprap near Settlement at Northwest.

The remaining shoreline is essentially undisturbed by coastal structures.

(d) Flooding and Erosion Zones

Potential flooding in storm events is represented on the FIRMs issued by FEMA for the Town, as revised 5/18/92 (see FIRM #'s 360794-0024D, -0027C, -0028C, -0029C, and -0031C). Velocity (V) Zones, highest flood hazard areas subject to wave velocity in major storms, are indicated for all the waters and surrounding shorelines of Sag Harbor Bay, Northwest Harbor, Gardiner's Bay, and adjacent creek mouths. A-Zones, also subject to high flood hazard but not to wave action, surround Little Northwest Creek, Barcelona Neck, Northwest Creek, and back the V-Zones along the coast of the Grace Estate and Cedar Point, extending inland around Alewife Brook and Alewife Pond, Scoy Pond and Cedar Pond. As noted, a CBRA zone covers the spit of Northwest Creek, and Northwest Harbor across the spit of Cedar Point.

In addition, the State of New York Hurricane Inundation Map (Greenport Quadrangle #O2 and Gardiner's Island West Quadrangle #P2) utilizing the FEMA developed SLOSH model shows that much of Barcelona Neck and the shores of Northwest and Little Northwest Creeks, as well as the east shore of Northwest Harbor, and area surrounding Alewife Brook and Alewife Pond, could be subject to substantial inundation in a Category 2, 3, or 4 hurricane.

NYS DEC CEHA photos issued 6/7/88 (#23-730-83 Sheet 41-N, #23-727-83 Sheet 42-N, #23-723-83 Sheet 43-N, #24-1145-83, Sheet 44-N) show Erosion Hazard Areas extending along all of the Gardiner's Bay shore to Hedges Bank. The CEHA line does not extend west of Cedar Point, presumably because this is not classified as an exposed shoreline, the program does not map small harbors, and the assumption is there will be no erosion.

(e) Analysis

Flooding and erosion have relatively minor consequences for development in Reach 1 because of the amount of parkland and open space, undisturbed shoreline, and relatively low wave energies. In general, the wide variety of coastal geomorphology, topography and natural protective features provide natural flood control mechanisms, and any structures that interfere with them should be avoided. Following the NYS DEC logic for not including the Northwest Harbor area within the

CEHA because it is not an erosion hazard area, no additional hard structures are needed to control erosion, and none should be permitted. The exception is the revetment preserving the historic Cedar Point Lighthouse in the County Park, which should be maintained. Most existing development in Reach 1 is set back sufficiently that shoreline recession from erosion should not threaten residences in the immediate future, although hurricane flooding could do so.

Remains of existing structures at the former private marina inshore near Northwest Landing, and the dilapidated dock and revetment at Settlement at Northwest are no longer functional, and they should not be repaired or replaced as they deteriorate.

The existing County dock/bulkhead in Northwest Creek should be evaluated regarding its utility for fishing and boating versus its impact on the wetland systems. It should probably be reconfigured when it deteriorates, removing the bulkhead and regrading to a pre-construction level, leaving a simple launch ramp facility. The dock may originally have been part of a Suffolk County Parks Department scheme for an extensive public marina/mooring area, but it currently receives minimal use except for some offloading from small craft by commercial fishermen and does not function in a flooding or erosion prevention capacity.

Use of the artificially relocated channel to Northwest Creek should be reconsidered because of its need for frequent maintenance dredging and poor tidal circulation. Because of rapid shoaling in the channel, flushing within Northwest Creek is sometimes inadequate and navigation in and out becomes difficult. The Creek has become anoxic in some parts in recent years and is presently closed to shell fishing year round by NYS DEC, except for conditional openings in the winter months. Consideration should be given to eventually re-opening the original channel at the east end of the barrier spit, either keeping or closing the existing channel. The spit is of sufficient elevation as not to require additional dredge spoil. Spoil from dredging of the Northwest Creek channel could be used to nourish beaches on the north and west sides of the neighboring State property at Barcelona Neck, or along the bluff toe of the west shore of Cedar Point County Park, although that distance may be impractical for hydraulic pumping.

Retaining the quality of the significant habitats in the reach requires they be kept in a natural state, and no coastal structures, bulkheading, etc. should be permitted to disrupt littoral processes which affect nesting areas or other elements of the habitat.

Additional development in Reach 1 should be discouraged in the 100-year FIRM flood zones, erosion hazard areas on CEHA maps, areas subject to a Category 1, 2, or 3 hurricane surge overwash on the SLOSH maps, or adjacent to fresh or tidal wetlands (NYS DEC Freshwater Wetland Maps), or near the various creeks. As is evident in other reaches of the Town, development in these areas leads to increased disruption of coastal processes, property loss, pollution of surface waters and habitat degradation. Development controls in these areas include updated (1999) FEMA flood regulations in **§153-3-40 to -45**, Town Natural Resource Special Permit requirements, and CEHA regulations proposed for local adoption (see Section XV, Local Implementation).

The residences at the end of Northwest Landing Road, particularly those close to or impinging on the wetlands surrounding Northwest Creek, are at high risk of flooding during storm events, and should be further analyzed in the *Hurricane Damage Mitigation Plan* (see **Projects**). Any additions to the homes in the area, as well as secondary structures, should be kept modest and on the landward side, and should be accompanied by required improvements in flood-proofing.

Consideration should also be given to restoring the Northwest Creek saltmarsh to more natural flooding and drainage patterns by closing the ditches cut for mosquito control, and replacing them with an Open Marsh Water Management (OMWM) system. This will aid in protecting the wetlands, reducing flood hazards by increasing the absorption capacity, and enhancing water quality (see **Water Resources Policies #30-40 & 44**). Increased flushing from recent dredging of the channel should also improve water quality.

The bluff areas at Cedar Point Park, both on the Northwest Harbor side and on the Gardiner's Bay side, are subject to vigorous erosionary forces, but if maintained in a natural state, the dynamic equilibrium of the beach/bluff system will be maintained and bluff recession will be more uniform. Hard structures are unnecessary here and should not be permitted. Beach nourishment, possibly utilizing spoil from future maintenance dredging of the Northwest Creek channel, should be considered if bluff erosion threatens park facilities. Historical erosion rate data could provide an estimate for whether this might occur (see Erosion Monitoring in **Projects**).

Beach vehicle access on the Cedar Point spit contributes to destruction of beach vegetation that inhibits erosion and effects of flooding. Beach vehicle use on the spit appears to be excessive and should be reduced. **Public Access and Recreation Policies #9 & #19-22** also recommend closure of this point to vehicles from April 1st - August 15th to protect nesting terns and piping plovers.

Reach 1 is one of the most unspoiled areas of the Town, and as immense effort and public resources have been expended to preserve the land, the coastal resources must likewise be maintained in a pristine state to the greatest degree possible.

2. Reach 2 -- Three Mile Harbor/Hog Creek

(a) **Description**

Except for the sheltered waters of Three Mile Harbor and Hog Creek, the Reach 2 coast is exposed to Gardiner's Bay, with Hedges Bank receiving the full intensity of northeast storms because of its NW/SE orientation. The wave-dominated shoreline of Hedges Bank forms storm-cut terraces, and some of the material from the high bluffs is carried in the littoral drift to feed Sammy's Beach, and some also to the northwest to Cedar Point. Unusual aeolian dunes perched along the bluff-top at Hedges Bank testify to winds powerful enough to force upward migration of bluff sediments. There are no shoreline hardening structures in the immediate Hedges Bank area, and it remains a fine example of a natural weather shore in the bay environment.

Steep bluffs with elevations of 25'- 40' comprise the coastline from Hedges Bank to Lafarge's Landing at the end of Old House Landing Rd., dipping to near sea level at Sammy's Beach and

Maidstone, before ascending to bluffs of almost 60' east of Maidstone Park Beach between Flaggy Hole Road and Runnymede Drive. The rocky beaches beneath the bluffs widen to sandy beaches at Sammy's Beach and Maidstone Park which have been enhanced by periodic dredge spoil from the Three Mile Harbor channel. Littoral drift along this shore appears to be predominantly west to east from Hedges Bank to Sammy's Beach, and east to west toward Maidstone from Hog Creek Point, resulting in sand buildup on either side of the Three Mile Harbor jetties.

Narrower beaches form an intermittent fringe along the shores of Three Mile Harbor. Windborne and other reentrant material inside the harbor in the Folkstone area is forming a low dune system within the harbor, partially burying the marsh. Both Hog Creek and Three Mile Harbor were originally closed intermittently to navigation by littoral drift, but were later opened and stabilized for boating use. Both harbor entrances are regularly dredged and maintained. The inlet to Three Mile Harbor is stabilized by a 650' steel-sheet pile jetty to the west and a 600' stone jetty to the east. Both were installed in the 1930's to prevent rapid shoaling of the channel.

Sediment transport around the Three Mile Harbor inlet is interrupted by the jetties, but the stabilized inlet may now constitute an effective null point in the littoral system where sediment from the headlands to both east and west accumulates and the longshore currents effectively cancel each other out.

The south end of Three Mile Harbor was not originally navigable south of Marina Lane, but has been dredged and a navigation channel extended to the marinas at the head of the harbor. Spoil from the channel has been deposited at the Marina Lane site which was originally wetlands.

Topography in Reach 2 continues the knob and kettle formations typical of outwash deposits from the Ronkonkoma moraine, which can be seen in cross-section in the escarpments of Hedges Bank and to the east of Maidstone. Three Mile Harbor itself is a drowned meltwater drainage basin, with two creeks still draining into it, Soak Hide Dreen at the south end, and Hands Creek to the west. Because of these formative influences, the harbor has steep slopes along its perimeter in several locations, which would be prone to erosion were it not for the reduced wave energy in the sheltered harbor. Marsh deposits have gradually built up around the perimeter of the creeks and harbor, notably on the harbor's north side where the marsh meets beach in a tidal flat. These areas, which form the fourth largest tidal wetland in the Town, also act to buffer and absorb floodwaters.

Land use in Reach 2 is primarily residential, densely built around the harbor and Hog Creek, with marinas and related restaurants and services along the east side of Three Mile Harbor. Three Mile Harbor is the second most active of the Town's harbors, and supports nine private and commercial marinas, plus two homeowners' association marinas and approximately fifty individual private docks. Town parkland preserves open space at the mouth of Three Mile Harbor at Sammy's Beach and Maidstone Park. Both of these areas are particularly prone to flooding. The largest tract in the reach, 170 acres of undeveloped land belonging to Camp Blue Bay Girl Scout Camp, also retains the only remaining long stretch of unbulkheaded bluff east of Maidstone.

Hog Creek was the center of another gently sloping glacial drainage channel west of Hog Creek Point. Hog Creek is now a narrow shallow estuary fringed with saltmarsh that was artificially opened to Gardiner's Bay and dredged and widened for development in the 1950's. Alteration and destruction of the original Hog Creek shoreline through installation of lawns, filling of wetlands, and construction of bulkheads, docks and piers have all contributed to erosion and instability of the present shoreline. As a result some residences are prone to flooding in time of major storm or hurricane. Hog Creek is one of the fastest shoaling inlets in the Town, having been dredged four times within the past fifteen years, approximately the same frequency as Accabonac Harbor. The inlet is bulkheaded with steel sheathing, and the immediate interior with CCA timber. The Creek shoals up abruptly immediately past the marinas, forming a bar that remains nearly impassable even at high tide.

The Lions Head and Clearwater Beach property owners' marinas just inside the mouth of Hog Creek contain approximately 150 slips for recreational boats, which could be vulnerable to storm surge (see SLOSH model). The south end of the Creek is shallow and marshy, and severe flooding in this area could interdict Hog Creek Road, isolating the Fireplace and Clearwater sections of Springs (see SLOSH, FIRM's). To the west of the creek mouth three small coastal ponds have formed in the infill area from the bluffs to the south. Home sites around these ponds were in some cases created by filling wetlands, leaving them particularly exposed to flooding and storm surge.

(b) Natural Protective Features

In Three Mile Harbor, Dayton and Penny Sedge Islands are both located near the north end. Penny Sedge Island has been artificially built up with dredge spoil (Geological Water Survey Paper 2073, 1982, Plate 1) but may have originated through natural deposition as part of an internal delta. Penny Sedge Island shelters Harbor Marina, and Dayton Island protects the backshore marsh of Sammy's Beach.

Sammy's Beach forms the barrier spit at the mouth of Three Mile Harbor, and it and the harbor, including the islands above and surrounding undeveloped lands, including part of Maidstone Park, form a designated CBRA zone under the Federal Coastal Barrier Resources Act. The mouth and immediate environs of Hog Creek are also in a CBRA zone.

Most of Three Mile Harbor is a State designated Significant Coastal Fish and Wildlife Habitat (SCFWH), with the remaining area (Soak Hide Dreen and the south end) a Locally designated SCFWH (see **Significant Habitats Policy #7**). The harbor contains extensive tidal wetlands around Folkstone, south of Gann Road, from Squaw Road to Duck Creek, and in the south end from Marina Lane on the east side of the harbor; also extensive wetlands all the way from Oyster Shores to Hands Creek and north to Sammy's Beach on the west side. Some of the tidal wetlands at Hands Creek have been ditched by County Vector Control and would become enhanced flood corridors, especially at the northwest end of the Creek, where hurricane flooding could make the end of Hands Creek Road impassable.

Tidal flats extend from Dominy Point to Sammy's Beach on the west side of Three Mile Harbor, and less extensive flats on the east side along Squaw Road. The tidal flats also dissipate wave energy in storms.

East of Three Mile Harbor high bluffs rise from the end of Flaggy Hole Road to a height of about sixty feet, at a natural angle of repose in front of the Blue Bay Girl Scout Camp, then are bulkheaded along the toe until they descend to the infill ponds west of Hog Creek. This provides a contrast between the naturally receding bluff and the adjacent attempts at stabilization through use of hard structures. The wide terraced beach of cobble and sand in front of the unarmored bluff at Camp Blue Bay is reduced in front of the bulkheads to a narrow strand submerged at high tide. Where bulkheads have begun to fail from storm damage the process of natural slumping and recession resumes immediately. As shoreline recession and storms expose the bulkheads increasingly to wave action, the fronting beach is rapidly scoured out by reflected wave energy, and the structures face increasing risk of failure.

East of Hog Creek inlet to Hog Creek Point the bluffs again rise gradually, though only to a 15-20' height, much of it secured by bulkheads and hard structures, fronted only by a rough cobble beach, all that remains of a beach derived from an exposed headland with its upland sediment supply confined by bulkheading.

(c) Coastal Structures

Numerous coastal structures erected in Reach 2 affect flooding and erosion, and circulation in the enclosed water bodies. Walkways over the bluffs at Hedges Bank have contributed to erosion, and at two sites swimming pools that were drained over the bluff caused substantial slumping from the bluff top. As noted above, there are otherwise no other hard coastal structures in the Hedges Bank area. Several homeowners have attempted to anchor the bluff toe using soft solutions such as revegetation and materials such as filter cloth to retard erosion, and have planted the bluff face to inhibit slumping.

The jetties at the entrances to Three Mile Harbor and Hog Creek obviously interrupt the littoral drift, although the Three Mile Harbor entrance, as mentioned above, is at this point fairly stable, with sediment accretion outside both jetties. The Hog Creek jetty causes accretion to the east and some starvation of the beach to the west. Shorefront homeowners on the headland near Hog Creek Point have attempted to forestall erosion by installing a variety of structures ranging from homemade bulkheads or seawalls of beach cobble, to a full fledged rock revetment, groins and bulkheads, which have probably contributed to flanking erosion of unarmored properties on either side.

A solid timber dock at Camp Blue Bay is acting as a groin, presently half buried in sand, accumulating to the east (littoral drift is east to west). It should not be reconstructed or repaired, but reduced in size, or reconstructed on pilings to bypass sand. The wide terraced beach of cobble and sand in front of the unarmored bluff at Camp Blue Bay terminates almost entirely at the first lot with a bulkhead to the east. The house above it is located close to the bluff edge, and the bulkhead has been recently reconstructed and backfilled. The house appears to have room on the lot to be moved back, possibly within standard bluff and frontyard setbacks.

The series of groins and bulkheads along Runnymede Drive in Lion's Head is depriving the longshore sediment budget to the west in a process that has lead to armoring of this whole length of bluff and a resulting loss of the beach fronting the structures. There are seven timber groins in the area, the westerly three of which are excessively long (30-40'), the easterly four about half that length. All are interrupting the east to west littoral drift, and should not be rebuilt. The increasingly exposed structures may become prone to failure in a storm event, lacking a beach to dissipate wave energy. The third or fourth bulkhead east of Flaggy Hole Road is presently failing and some slumping of the bluff has resulted. Beach loss is particularly severe along Kings Point Road, from #322 south along the bulkhead, where the beach has become very narrow.

Near the high point of the bulkheaded bluff (50-60') several houses have pools and lawns almost on the edge of the bluff. If these pools are lost to storm-induced bluff slumping or to shoreline recession, the homes will probably still survive and will have some land remaining on which to be moved back. Lot depths decrease approaching the east end of Runnymede Drive as the bluff descends near the infill ponds. There is still room to move houses back but they would probably require front yard variances.

The infill area at the false point near the ponds appears to be an accreting headland. The sediment supply may come from Hog Creek Point or from offshore currents carried from Hedges Bank or Gardiner's Island. The beach from the inlet to Hog Creek Point is cobble, gravel and boulders, with little sand. On this exposed headland the high rate of shoreline recession coupled with insufficient setbacks has motivated one homeowner after another to build hard erosion protection structures, with varying success in stemming flooding and erosion. Additional hard structures in the areas where bluffs are low would probably have minimal success in inhibiting flooding.

The interior of Three Mile Harbor contains numerous residential bulkheads and docks, as well as the commercial marinas on the east side. Bulkheading has in some cases been used to anchor steep banks, but has often resulted in loss of tidal wetlands, and even within the tidal-dominated environment of the harbor has diminished fragile strands of fronting beach. Erosion control structures, such as the several groins placed north of the mouth of Hands Creek, are generally ineffective in this low energy situation.

As noted above, bulkheading within Hog Creek has also contributed to loss of tidal wetlands, and instability of the shoreline, reducing flood retention capacity and increasing flooding and erosion in time of storms.

(d) Flooding and Erosion Zones

Potential storm flooding as indicated on FIRM's (#'s 360794 -0021D, -0022D, -0024D, -0025C) shows Velocity (V-7) Zones along the entire Reach 2 shore of Gardiner's Bay, plus much of Three Mile Harbor. Sammy's Beach is in A-8 Zone, and Hog Creek and Hands Creek as expected flood corridors are also in A-Zone, along with most of the remaining shore of Three Mile Harbor. As noted above Three Mile Harbor and its undeveloped shoreline and the mouth of Hog Creek are within the CBRA zones. These areas are subject to overwash. B- Zones back the harbor and creek areas, including arterial roads in some low areas.

The SLOSH Model (Gardiner's Island West Quadrangle #P2, East Hampton Quadrangle #P3) is also pertinent. It shows a Category 2 hurricane possibly inundating much of Sammy's Beach and Maidstone Park, and additionally cutting Springy Banks Road at the south end of the harbor from Soak Hide Dreen.

A SLOSH worst case Category 4 hurricane could overwash all of Sammy's Beach, Maidstone Park and the low parts of the east side of the harbor, including the marinas, interdicting 3 Mile Harbor Road. To the east, waters from the Hog Creek flood corridor cut off Fireplace along Fort Pond Boulevard, and Clearwater Beach along 3 Mile Harbor Road and Hog Creek Road. The Clearwater subdivision could be inundated, as that of Lions Head, up to about two blocks inland from the shoreline.

Coastal Erosion Hazard Areas (CEHA photos #23-723-83 sheet 43-N, #23-727-83 sheet 42-N, #23-730-83 sheet 41-N, #21-1139-83 sheet 40-N, #20-1135-83 sheet 39-N) include the bluffs of Hedges Bank and the bay shore of Sammy's Beach, covering the residences from east of Sammy's Beach Road to the beach access point at the road end. Maidstone Park is in a CEHA Area, including the municipal beach area, as are some houses on Runnymede Dr. west of Lions Head, and one residence on Bay Inlet Rd. Houses in Clearwater Beach on Kings Point Road between Hog Creek Point and Hog Creek inlet are also in CEHA Areas.

(e) Analysis

Reach 2's eroding bluffs at Hedges Banks and Flaggy Hole east to Hog Creek Point characterize the difference between natural and armored shorelines on the Town's coast.

The bluff at Hedges Bank, because of its direct exposure to northeast storms, would be expected to have a high rate of recession. The shoreline remains as yet largely undisturbed by coastal structures, and should be kept this way, since the natural slumping of the bluff and the consequent rocky beach profile provides an effective natural buffer to the high wave energy of Gardiner's Bay and ensures long-term maintenance of the beach. These bluffs also feed Sammy's Beach directly to the east, and any interruption of the littoral process would starve the beach there. Because of the exposure and the integrity of the natural system, Hedges Bank is an appropriate site for the proposed *Town Erosion Monitoring Program* (see **Projects**) and this data will help to determine erosion rates.

Sammy's Beach is one of the most vulnerable areas to flooding and erosion in the Town, with a number of dwellings within the CEHA. Because parts of it are also in a CBRA Zone, and a State designated SCFWH, with high quality marsh and tidal flats on the south side, it should receive special planning consideration in the *Hurricane Damage Mitigation Plan* (see **Projects**). Because of the habitat values, the present unarmored shore, and the sediment supply both from the bluffs to the west and the dredge spoil from Three Mile Harbor, no hard erosion control structures should be permitted in the Sammy's Beach area. These and other recommendations for flooding and erosion protection in Reach 2 are outlined on Flooding and Erosion Protection Map V-2.

Because the area is vulnerable to flooding and erosion, expansion of existing homes should be limited, including secondary structures such as pools. Homeowners should not receive automatic

relief for expansions or additions under the relief provisions of the Town Zoning Code **§153-4-37**, which also states that where minimum setbacks cannot be met they should be as great as possible. This provision should not be construed to allow additions or expansions of existing residences in sensitive areas. Additions to existing residences should not be granted relief from setbacks without meeting the standards for variances set forth in Town Zoning Code **§153-8-50** (**D**) and **§153-8-50** (**E**). From the end of Old House Landing Road east to the end of Sammy's Beach Road, any additions to existing structures should also require retrofitting of the existing structure to FEMA floodproofing standards under the provisions of the Flood Hazard Overlay District. Vacant parcels in the Sammy's Beach area should be acquired by the Town wherever possible, and options for acquisition or relocation should be further examined in the *Hurricane Damage Mitigation Plan*, particularly where setbacks cannot be met.

Hands Creek is also a flood-prone area. Although the saltmarsh naturally absorbs floodwaters, Hands Creek Road at the northwest end of the Creek could be obstructed by flooding in a major storm. On the harbor side, the several groins just north of the Hands Creek inlet are ineffectual in the low energy environment of the harbor, and should not be rebuilt or maintained. This protected western shore of Three Mile Harbor has a minimal erosion component and hard structures are of low utility. Map V-2, Flooding and Erosion Protection, designates all of the western shore of Three Mile Harbor as Condition 1, where hard structures should not be permitted, except for some isolated areas with preexisting structures which should be carefully evaluated if they require reconstruction (Condition 2), or not be reconstructed.

On the east side of the harbor, coastal structures at commercial marinas are eligible for emergency permits for in-place in-kind reconstruction when damaged, since they constitute an important water-dependent use and supply some public access (Condition 3 on map).

The inlet jetties at Three Mile Harbor must be maintained because of its importance to the harbor, but if at some point in the future it becomes clear that the inlet does not, as hypothesized here, constitute a null point in the littoral system, some mechanism for sand bypassing may become desirable. This could be as rudimentary as studying more carefully the apportionment of dredge spoil from the channel from maintenance dredging.

As noted above, the bluffs rising east of Flaggy Hole Road then descending to the infill area west of Hog Creek have already been armored extensively, with consequent loss of fronting beaches, except for the shore of the Blue Bay Girl Scout Camp. The remaining unbulkheaded bluff and beach in front of the Camp should be maintained in their natural state, and elsewhere shore parallel structures should only be replaced under conditions of exceptional hardship, and new structures should not be permitted (Condition 1 on map).

Along Runnymede Drive where structures provide the only remaining protection against erosion, from lot #24-4-13 to #23-4-2, the last house at the intersection with Pond Lane, existing bulkheads should be allowed to be replaced in-place in-kind for normal maintenance and for storm emergencies up to the 30-year storm standard (Condition 3 on map). The owners should also be required to maintain the public access and right of way along the shore, if necessary by sand placement and

replacement as needed. See **Policy #13/13A**. The timber groins which are interrupting littoral drift should not be replaced or reconstructed. Dredge spoil from the Hog Creek inlet could appropriately be used to nourish the beach along Runnymede Drive.

Should a catastrophic storm or hurricane beyond the 30-year storm cause these bulkheads and groins to fail triggering a massive bluff slump, the Town in the *Hurricane Damage Mitigation Plan* should consider requiring houses to be moved landward when lots have sufficient depth, reconfiguring the bluff to an angle of repose, and restoring the dynamic equilibrium of natural shoreline processes. Several homes have swimming pools within a few feet of the top of the bluff which are non-conforming, and should not be replaced if severely compromised in a storm event. See **Projects**.

From the east end of Runnymede Drive to the Hog Creek inlet no new erosion protection structures should be permitted, as this infill area is largely protected by the fronting beach and ponds (Condition 1). The Hog Creek inlet jetties and associated bulkheading should be permitted maintenance and in-place in-kind replacement within the 30-year standard. The property association marinas on either side of the mouth of the Creek should also be permitted to make necessary repairs or in-place in-kind replacements (Condition 3). In the low-energy interior of Hog Creek no new residential docks or hard structures should be permitted along the shore, nor should existing structures be replaced when damaged or deteriorated, except under conditions of exceptional hardship (Condition 1).

From Hog Creek inlet east to Hog Creek Point on the bay soft structures and beach nourishment should be used to maintain the existing beach (Condition 1). Tapering in of the structure at the first bulkheaded lot east of the inlet, tax map lot #024-1-4, will reduce scouring from the structures to the east. From that lot extending east around Hog Creek Point to the northerly boundary of lot #41-2-22, because of the number of already existing structures on this eroding headland, property owners should be allowed emergency permits for in-place in-kind reconstruction in case of storm damage, to the 30-year standard (Condition 3).

The SLOSH Model indicates the potential for extensive flooding around Three Mile Harbor and the creeks from the direct impact of a hurricane. In the improbable event of a Category 4 hurricane, the merging of floodwaters from Hog Creek and Accabonac Harbor along Fort Pond Boulevard could isolate the Lions Head-Kings Point-Clearwater Beach-Fireplace sections of Springs. In lesser category storms low-lying and bayfront areas could be subject to flooding and wave action, blocking arterial roads such as Fireplace Road and making evacuation problematic. Three Mile Harbor Road could be cut at a number of points, including at Soak Hides/ Springy Banks and at Duck Creek, further isolating the Springs.

If overwashed by storm surge damage to life and property in flood zones and vulnerable areas might be substantially worse than expected, since no major hurricane has struck the area since 1938, and a large proportion of the waterfront residences in the reach were not then built. Sammy's Beach, Hands Creek, the east side marinas, low-lying residential areas at the south end of Three Mile Harbor, and the area surrounding Hog Creek and Hog Creek Point could be at risk. Salt contamination of shallow surface wells in overwash areas could also prove a problem in the aftermath of a major hurricane. Given the high concentration of residential development in Reach 2, planning for hurricanes and catastrophic storms using available tools such as SLOSH should continue to be reviewed and upgraded.

3. Reach 3 -- Accabonac

(a) **Description**

Accabonac Harbor is a broad shallow estuary on a flat coastal plain, and the most significant feature of Reach 3. Two barrier spits on either side of the inlet to Accabonac Harbor, Gerard Park on the north and Louse Point on the south, separate Accabonac Harbor from Gardiners Bay.

In 1959, Suffolk County relocated the harbor inlet a quarter mile north of the then existing channel and used the dredge spoil to extend the Louse Point sandspit northward. The relocation probably altered the littoral system, as demonstrated by the channel's frequent requirement for maintenance dredging (four times in the last nine years) to keep it open for navigation. Also the Louse Point spit has accreted substantially, and a substantial sand flat has built up offshore of the old inlet since the channel shift. Flushing within the harbor also seems reduced. A former sluice between the north end of Accabonac Harbor and the bay along the southerly causeway to Gerard Park was filled and paved over, also reducing flushing in the harbor. The Town Trustees advocate restoring the channel to its original location and reopening the sluice along the causeway to Gerard Park to increase flushing and improve water quality.

From Accabonac Harbor, the coastline climbs sharply to Accabonac Cliff, morainal bluffs peaking at 100' high that have historically fed the beaches from Louse Point to Devon, but are now stabilized by bulkheads and revetments which have effectively eliminated the beach from the bluff toe and have starved sediment from the beach to the south. The groins have apparently diverted sediment transport offshore, contributing to a sand flat to the south. Littoral drift is generally north-south from Hog Creek Point to Gerard Point at Accabonac, and from Accabonac Cliff south to Devon.

From Accabonac Cliff the terrain descends to Barnes Landing, a municipal beach unintentionally stabilized by the Bell Estate dock, a sheet-steel structure built in the 1920's that now acts as a large groin. Lower bluffs ascend from Barnes Landing through the Bell Estate, descending again to Alberts Landing and Fresh Pond at the southerly end of the reach.

At a point near the north end of Waters Edge Road the Accabonac Cliff acts as a headland, with material also passing to the north into the extensive shoal on the south side of the Accabonac channel and the infill area at Louse Point. Littoral drift appears to reverse periodically here depending on storm conditions, etc. The longshore current runs nearly parallel to the shore in the stretch along Accabonac Cliff, where it has considerable velocity.

Land use in Reach 3 is almost entirely residential, with pockets of higher density along Gerard Drive, at Louse Point, in the Barnes Landing subdivision, and along Devon Landing Road south of Fresh Pond. Many of the residences in these areas are smaller summer cottages. Commercial development

is minimal within the coastal zone, the only instance being Springs General Store. Accabonac Harbor is an important anchorage for recreational and small fishing boats.

(b) Natural Protective Features

Much of the Reach 3 coastline is exposed to the force of nor'easters, though Gardiner's Island and Cartwright Shoal shelter this part of Gardiners Bay. The shoal is recorded as Cartwright Island on many maps and charts, was used as a bombing target during WWII, and was an island sand spit and rookery a few feet above MSL as recently as the 1960's. It is now almost entirely submerged. When Cartwright Shoal is overtopped by storm surge, waves traveling the full fetch of Block Island Sound bear down on Accabonac Cliff, and the wave energy is substantial. Storm winds from the north can also bear directly on this shoreline. Both conditions generate wave energies than can cause extensive erosion of this exposed and precipitous shore. Recent nor'east storms and hurricanes have repeatedly flooded the relatively narrow bay beaches and overtopped even the more massive of the stone revetments along the coast of Reach 3, causing erosion of the backshore and bluffs.

The bay beaches that are the first line of natural defense against flooding and erosion have been altered in many areas of Reach 3 by shoreline stabilization attempts, bulkheading or armoring by homeowners and, in a few cases, by the municipality. Eliminating the bluffs from the longshore sediment budget has starved these bay beaches, eliminating or degrading an important protective feature and an invaluable recreational resource and habitat. An approximately 200' wide beach between Barnes Landing and Louse Point at the base of the Accabonac Cliff has disappeared altogether in a 30-year period. The artificially stabilized bluffs are at a steeper angle than the natural angle of repose, and should significant toe erosion occur due to storm surge overwash, it could result in accelerated bluff slumping and recession.

Continued beach vehicle activity after significant storm events, often within a few feet of the beach grass line, has prevented regrowth and reestablishment of the natural shore vegetation community that helps to stabilize these fragile bay beaches and build dunes. The Town Trustees wish to see reasonable measures taken to encourage the regrowth and restoration of natural shore vegetation while at the same time protecting the public's right to use and enjoy our beaches. Some beach accretion occurs when less frequent storms from the southeast transport sand in from offshore flats to the beach. Dune building also occurs from aeolian deposition, especially in winter when northerly winds move sand onto the upper beach.

The beaches at the south end of Gerard Park and at Louse Point are the widest in the Reach, probably because this area is an infill area both from Hog Creek Point and the Accabonac Cliff, and where natural shore straightening is taking place. Both areas have also been dredge spoil sites for periodic maintenance dredging of the Accabonac channel.

The beach at Gerard from the first causeway south is composed of sand and cobble, and its profile is probably the steepest in the reach, indicative of intensive wave energy and rapid longshore currents. Both the Gerard and Louse Point barrier spits are low-lying and subject to overwash in storms, but in general protect the harbor. The entire shoreline of Accabonac Harbor is a designated CBRA Zone, including Louse and Gerard Points and also incorporating Wood Tick Island, but with

the exception of the developed parts of Gerard Park. The sand flat off Louse Point dissipates some wave energy, and because of the amount of offshore sand there, it is unsurprising that the channel requires frequent dredging.

The extensive salt marshes bordering Accabonac Harbor act to buffer and absorb floodwaters, although a network of County Vector Control ditches and some boat slips dug into the wetlands act as flood corridors that increase flood penetration and drainage. Recent efforts by the Town Natural Resources Department to manage the marshes with OMWM techniques should improve the floodwater retention of the marshes and restore them to a more natural state. In addition Chatfield's Creek and James Springs drain into East Harbor of Accabonac, and also act as channels for floodwaters.

Fresh Pond also has some associated tidal marsh but is more brackish. The Vector Control ditches which connect to it from Chapel Lane in Barnes Landing drain a large freshwater wetland system which would be a primary flood corridor in a major storm (see SLOSH). Accabonac Harbor is a State designated Significant Coastal Fish and Wildlife Habitat, and Fresh Pond is a locally designated Significant Coastal fish and Wildlife Habitat, so it is important to maintain their wetland systems and contributing watersheds for habitat reasons in addition to flood control.

(c) Coastal Structures

There are numerous erosion control and shore stabilization structures in Reach 3. From Clearwater Beach south to Gerard Park there are 15-20 groins and approximately 4000' of bulkheading; 10 groins and several new rock revetments south of the first Gerard causeway; a stone jetty at the end of Gerard on the Accabonac inlet; 15 groins and 3000' feet of bulkheading with 1500' of rock revetment along Accabonac Cliff to Barnes Landing; and 12 groins from Bell's dock to Abraham's Landing, not including the dock and a stone jetty constructed to stabilize the inlet to Fresh Pond.

The rocky beach from Hog Creek Point to the Fireplace Road end contains a variety of structures, including a sta-pod groin, one sizable rock revetment, and another homemade from beach stones. Most lots have bulkheads, some of which along the bluff area appear to have 8-10' of sheathing exposed, supporting green lawns up to the bluff edge. This indicates a high amount of reflected wave energy, and the possibility of bulkhead failure. Two or three older groins have been fashioned using natural beach boulders, and there are also some older style hollow timber groins, none of which appear to be accumulating sediment. Onshore sand is minimal and the beach is mostly stones and cobble sorted into terraces; the beach profile appears steep for a bay beach, all of which reflects the exposed nature of this shoreline, a direct hit for nor'easters.

The bluff rises to about 15' along Hog Creek Point then descends to Fireplace. These bluffs have some clay content, supporting sharp cliffs instead of sandy slopes, and are receding and eroding significantly where unprotected. A low tapered bulkhead and kneewall at the first lot north of the Fireplace Road end is an example of bluff stabilization where the structure is further from the active tidal and flood zone.

From Fireplace Road end south along Gerard Drive to the second causeway the area is extensively armored, including some unusual structures not found elsewhere in Town. Three large concrete and steel groins approximately 100' in length interrupt littoral drift just south of Fireplace Road, capturing sand and effectively causing downdrift scouring to the south. They are substantial, shielded by additional stone, and could be removed or reduced in size to restore sand movement. South of these groins the exposed beach is minimal or nonexistent.

The entire shoreline from Fireplace Road end to the first causeway on Gerard Drive is bulkheaded, mostly with heavy CCA pine. Doubled bulkheads on several properties indicate past failures of the devices. Some bulkheads have been doubled up, the replacement structure placed seaward of the original, with concrete apparently poured in between. At some points, notably Salter's cottages, new bulkhead was constructed well seaward (ca 15') of the old one and backfilled. Though bulkheads are high, 8-10' above MLW, and show signs of storm overwash with seaweed deposited on top and retardation of beach grass and lawns near the bulkhead. The landward margin upland along Gerard Drive to the second causeway appears insufficient to move houses back very much.

The Town-built rock revetment along the north causeway is poorly constructed and unlikely to remain in place in heavy storm overwash. It appears to have been simply dumped and heaped up as a stopgap. The causeway roadbeds wash out frequently in storms and often require repaying.

Between the first and second causeway are some bulkheaded properties, and several new rock revetments, as well as three or four timber groins approximately 40-50' in length. The groins are inappropriately long, capturing sand at the expense of the downdrift areas. As in the area further north, beaches have disappeared beneath bulkheads except where sand has been captured by groins. The area between the causeways is low lying, and as is demonstrated by the former bog mat present on the bay side beach, this barrier spit has been migrating steadily landward. The bulkheads and revetments may deter this natural movement for the short-term, but clearly do not forestall overwash in hurricanes and major storms, when larger amounts of material may be transported. Many of the homes from the causeway south along Gerard have been floodproofed by elevating them on piles, which is probably the most effective protective measure that can be taken.

Along the south side of the second causeway are the remains of a structure said to be a former tidal sluice to the north end of Accabonac Harbor, dating from the 1930's. Over the years, numerous discussions have occurred concerning the viability of a cut to improve flushing for the north harbor, and this is probably a logical spot for it to be reopened or restored.

The Reach 3 littoral system, shoreline dynamics and sediment budgets have been extensively disrupted by human interference. It is left to anecdotal recollection and conjecture as to what the natural coastline looked like, but it can be stated with certainty that coastal structures have accelerated and exacerbated erosion rates in this reach, especially during a relatively quiescent period of few hurricanes. Photographs from eighty years ago show the bluffs at a natural angle of repose, with wide beaches and extensive vegetation on the bluffs and upper beach. In contrast, residences that seemed well buffered by beaches and bluffs when built in the late 50's or early 60's now sit atop

steeply angled bluffs and are threatened by erosion and storm flooding to an extent that homeowners feel compelled to further armor the shoreline to protect their property.

The loss of beach resources in this area exhibits a pattern occurs in other areas in the Town. Residences were built on the bluff along Waters Edge Road in the Barnes Landing subdivision in the early 60's, predating zoning and current setbacks. As erosion of this naturally receding headland began to encroach on blufftop lawns and decks, homeowners constructed bulkheads and groins to secure the bluff toe. Construction of erosion protection devices was poorly conceived and engineered, and often did more damage than good.

Bulkheads were constructed at insufficient distance from the water, and when they were subjected to storm events, wave energy reflected from the vertical bulkhead surface caused rapid erosion of the beach. A first timber groin constructed in the 60's was overly long for the task and caused downdrift scouring, further diminishing the beach. Affected neighbors began constructing their own bulkheads and groins. By the mid-70's much of the beach had disappeared, the bulkheads were beginning to fail, and in the early 80's massive shore-parallel rock revetments were installed, with structures ultimately armoring virtually the entire length of the bluff. Little or no beach now remains along most of Accabonac Cliff. Unfortunately, the response to the accelerated erosion caused by the structures has been to build more, and more massive, structures.

North of the Bell Estate dock the beach has been held in place because the steel sheet pier, originally reached by a catwalk over water, began to act as a groin and filled in the beach behind it. There are buried bulkheads at the toe of the Bell Estate bluffs with several rock-filled timber groins south of the dock that were constructed to stabilize the bluff in the 1920-1940 era. A small section of seawall lies just south of Fresh Pond Road, and a hodgepodge of other bulkheading and small groins line the shore between Fresh Pond and Devon Yacht Club. With littoral drift from north to south in this part of the reach the structures have apparently contributed to progressive loss of beach to the south, most acutely along Cross Highway between Fresh Pond and Devon. The inlet to the marina at the Devon Yacht Club silts up rapidly and has to be dredged annually.

The stone jetties constructed by the Town to stabilize the opening to Fresh Pond are an example of intentions gone awry. In spite of the jetties, downdrift scouring and the vagaries of natural sedimentation have caused the inlet creek to shift and silt up, constricting flushing of the pond. The original channel from the 20's was 200' to the north.

Soft solutions have been utilized occasionally in Reach 3, notably terracing and planting of toearmored bluff faces, and a low bluff restoration at the south end of Waters Edge, on properties with Suffolk County Tax Map (SCTM) #103-5-34 & -35, where sand was brought in and vegetation used to stabilize it. These measures have bought time and mitigated erosion in recent nor'easters, but have to be seen as requiring ongoing maintenance and periodic restoration.

The Town Natural Resources Department, assisted by the Accabonac Protection Committee, Group for the South Fork and local Girl Scouts, has planted beach grass along the Gerard causeway and restored vegetation at the Gerard and Louse Points road-ends. Dredge spoil from the Accabonac

channel has also been deposited at Gerard and Louse Points, helping to build up these areas and reduce overwash potential.

Within Accabonac Harbor there are no coastal structures other than small residential docks, and several public launch ramps (see **Public Access and Recreation Policies #9 & 19-22**).

(d) Flooding and Erosion Zones

FIRM's (#360794-0018C, -0019D, -0020D, and -0022D, dated 5/18/92) indicate V-7 zones for the entire Gardiners Bay shoreline of Reach 3. All of Accabonac Harbor is in the A-zone including Gerard Park and Louse Point, and the A-zone cuts Fireplace Road near Gerard and at the Springs Church, and Old Stone Highway at Landing Lane, where it also extends inland to Pussy's Pond. A-zones also cover Fresh Pond and extend through the wetland system to Barnes Hole Road. Albert's Landing, Fresh Pond landing, and Cross Highway between Fresh Pond and Devon are also in the A-zone. Accabonac Harbor and its surrounding shoreline and wetlands, with the exception of some residential areas of Gerard Drive and Louse Point, is included within a CBRA zone, an indication of overwash potential.

According to the SLOSH model (Gardiner's Island West Quadrant #P2, Gardiner's Island East Quadrant #Q2, East Hampton # P3, and Napeague Beach #Q3) a category 1 hurricane would overwash Gerard and Louse Points. A category 2 storm could cut off Fireplace Road at several places, and flood Old Stone Highway in the Barnes Hole area. A category 3 or 4 hurricane could additionally inundate the evacuation shelter at Springs School, much of Fort Pond Boulevard, and merge Accabonac Harbor with Hog Creek along Hog Creek Road and Accabonac and Fresh Pond through the wetland system at Barnes Hole Road. Such a storm would sever all the main arterial roads in Springs, making evacuation from low lying areas problematic and threatening a shelter site as well.

Coastal Erosion Hazard Areas (photos #17-748-83 sheet 33-N, #18-742-83 sheet 34-N, #18-739-83 sheet 35-N, #18-736-83 sheet 36-N, #18-733-83 sheet 37-N, and #20-1133-83 sheet 38-N) in Reach 3 include the entire Gardiners Bay shoreline, encompassing houses on Kings Point Road just east of Hog Creek Point, some bay shore dwellings on Gerard Park and the causeway, all of Louse Point to the curve in the road, Accabonac Cliff to Barnes Landing including several homes at the south end of Waters Edge, and the Bell Estate bluff, possibly including some houses constructed since the photo maps were finalized. All of the bay shore houses on Cross Highway between Fresh Pond Landing and Abrahams Landing are also in the CEHA.

(e) Analysis

Reach 3 includes some of the Town's areas most vulnerable to flooding and erosion, especially Gerard Park and Louse Point. On the positive side, repeated overwash of these areas has resulted in some dwellings being floodproofed to NFIP standards. As with other reaches, much of the construction in these areas has occurred in a period that should properly be regarded as a lull in storm activity. Homeowners should be discouraged from expanding or enlarging residences in flooding or erosion hazard zones. Any permits granted for remodeling or expansion of residences in CEHA, CBRA, V- or A-zones should require floodproofing to NFIP standards. Floodproofing should not,

however, be construed to effectively allow three story houses in violation of the Town's multi-story zoning ordinances.

Hurricane evacuation planning should be reviewed by the Town in light of the SLOSH model, which indicates that severe flooding could occur in the areas surrounding Accabonac Harbor, the wetland system from Fresh Pond to Barnes Landing, in the Kings Point area, and at the Springs School shelter. Flood victims could be difficult or impossible to reach in a Category 3 or 4 hurricane. Kings Point, Gerard, Louse Point, Pussy's Pond, Accabonac Cliff and Cross Highway near Fresh Pond are all areas which should be examined for planning modifications in the *Hurricane Damage Mitigation Plan* (see **Projects**).

With respect to Gerard Park, proposals for re-opening the north-end sluice or opening a second inlet along the causeway to improve the flushing have circulated for years, and a solution could be combined with redesign of the causeway to ameliorate the nearly annual washouts of the roadbed there. The idea has merit but needs study to evaluate effects on the valuable shellfishery and bird habitat, on tidal range and circulation, as well as flooding and sedimentation within the harbor. Accabonac Harbor remains largely free of coastal structures, and erosion protection structures are of little utility in the low energy saltmarsh environment of this shallow harbor. No additional structures should be permitted on the interior shore of Accabonac Harbor.

Use of erosion protection structures has altered much of the immediate shoreline in Reach 3, particularly from Hog Creek Point to Gerard Park, along Accabonac Cliff south to Barnes Landing, and from the Bell Estate dock to the Devon Yacht Club inlet in Reach 4. Shoreline erosion protection structures have had limited effectiveness in controlling upland erosion in Reach 3, and while they may have retarded shoreline recession to some extent, they have typically done so at the expense of neighboring property or fronting beaches. Downdrift areas have been affected by scouring, and fronting beaches by erosion, accelerated by wave energy reflected from vertical surfaces such as bulkheads.

This has affected public access and the ability to traverse public trust lands and beaches, in some cases culminating in complete loss of the fronting beach. In these areas the sacrifice of recreational resources and public trust lands in order to protect private property seems an unacceptable cost. It is the Town's municipal responsibility to reverse or prevent these negative impacts on public resources wherever possible, and Town policy should make this its foremost priority.

The marked scouring of downdrift beaches evident in Reach 3 near or adjacent to perpendicular erosion protection structures has led to a chain reaction of shore armoring as downdrift areas are continuously affected by updrift structures. Throughout the reach, perpendicular structures have caused unconsidered negative effects downdrift, are too large for the designed erosion protection function, or are simply unnecessary. Perpendicular structures such as groins which interfere with littoral drift and sediment transport should therefore not be replaced or restored, except where used to protect navigational channels, as at Gerard Point, and no new perpendicular structures should be permitted.

In areas of Reach 3 with existing hard structures and minimal natural protection where structures provide the only remaining protection against flooding or erosion (Condition 3 on map), the shore-parallel structures should be permitted to be maintained to protect homes and property. However, expansion of structures into larger or more permanent types, e.g. from bulkheads to rock revetments, should not be permitted, as this may exacerbate loss of public resources or neighboring property, or foreclose other soft erosion protection solutions. Soft or non-structural solutions can be used to enhance protection or restore resources. Replacement structures should not extend seaward of the existing structure, e.g. a bulkhead replacement should be behind rather than in front of the existing bulkhead. Permitting of such structures should include provisions for maintenance of fronting beaches (see **Policy #13/13A**).

As an example, where existing erosion control structures on the bay side of Gerard Park are more or less continuous north of SCTM #41-2-22, property owners should be permitted in-place in-kind replacement of shore-parallel structures, with emergency permitting in case of storm damage.

Also, between Fresh Pond, starting at the northerly boundary of tax map #127-3-3, and Abraham's Landing, ending at the northeast corner of tax map #127-2-15 in Reach 4, the extensive existing sea walls and revetments should be permitted in-place in-kind replacement or maintained with emergency permits following storms (Condition 3).

Where the extensive bulkheading, groins and revetments under Accabonac Cliff have caused erosion of the fronting beach, restoration of lost beaches and public access should be explored, with sand recovery from offshore shoals or dredge spoil from the channel, and creation of an erosion control district as a possible means to finance initial project cost and annual maintenance (see *Hurricane Damage Mitigation Plan* in **Projects, Section XIV**). Existing bulkheads should be permitted to be replaced in-place in-kind (Condition 3), but no new groins or revetments permitted. Only beach nourishment or other soft solutions should be permitted at the north and south ends of the cliff outside of this area. (See also **Section XV**).

In order to restore the eroded beach in this area permit procedures should be revised to incorporate both downdrift mitigation and beach maintenance requirements, with financial surety to insure continuity, and sunset provisions to phase out structures if necessary to accommodate rising sea level or increased shoreline recession.

If an entire area, such as Gerard Park or Accabonac Cliff, is destabilized in a catastrophic (greater than the 30-year) storm event or by increased erosion rates, existing erosion protection structures should not be replaced if they no longer function as designed or if the shoreline position has been substantially altered. Mechanisms should be developed to relocate structures landward, or assist with buyouts as necessary. Such area mechanisms including possible erosion protection districts, and other parcel specific solutions should be put in place as part of a *Hurricane Damage Mitigation Plan* (see **Projects**).

In those areas of Reach 3 designated as Condition 2 on Flooding and Erosion Protection Map V-2, with isolated or discontinuous hard structures, or where natural features could furnish erosion

protection, permits for rebuilding or emergency replacement of structures should not be issued automatically. Structures should be analyzed on a case by case basis versus natural or non-structural protection. Under present conditions some shore-parallel structures should not be replaced. Groins and other perpendicular structures should not be replaced. As an example, the area from the Bell Estate dock (SCTM #104-2-11) past Fresh Pond to the northerly boundary of SCTM #127-3-3 has a number of pre-existing structures that are adversely affecting the beach.

In areas of the reach depicted as Condition 1 on Map V-2, predominantly without hard structures, new hard structures should not be permitted in order to preserve coastal resources and natural protective features. Existing structures should be replaced only under conditions of exceptional hardship. Groins and other perpendicular structures should not be replaced or restored unless protecting navigational inlets. As an example, on Gerard Drive south of lot #041-2-22 to Gerard Point, new structures should not be permitted. Existing shore-parallel structures should only be repaired or replaced only under conditions of exceptional hardship. Within the CBRA zone on Gerard Park armoring of the shoreline with erosion control structures should not be permitted.

Condition 1 also applies south of Louse Point at the bluff leading up to Accabonac Cliff. Spoil from the dredging of the Accabonac Harbor channel should be used there for beach nourishment, and soft solutions used for bluff stabilization in preference over structural ones. The Condition 1 recommendation also applies to the area south of Accabonac Cliff, past Barnes Landing to the Bell Estate dock, where soft erosion protection solutions should be used. The Town Trustees own, and have sole authority over, sale or gift of dredge spoil which has come from bottomlands within their ownership and/or control.

At Fresh Pond, where the inlet has filled in and shifted despite the presence of the Town jetties, removal of these jetties is recommended to restore natural movement of the creek channel. This would also decrease scouring of the downdrift area to the south. Widening of the channel to the pond would also increase flushing and improve water quality, and would stabilize the south side of the inlet where it has been eroding the Town park over the last decade. To help control flooding as well as improve water quality, stormwater catchment from the Bell Estate road system should be improved, and additional OMWM undertaken for the wetland system at the headwaters of Fresh Pond (see **Projects**).

Spoil from the dredging of the Devon Yacht Club marina could appropriately be used to nourish the beaches to the north between the Yacht Club and Fresh Pond. This is an area of strong tidal flow where the ebb tide pulls sediment south toward the Devon channel.

4. Reach 4 -- Napeague North

(a) **Description**

Reach 4 is dominated by a low sandy area between Devon and Hither Woods that follows the easterly curve of Gardiners Bay to Napeague Bay. The major coastal feature of this reach is Napeague Harbor.

Fossil bluffs along Bendigo Road mark what was once the post-glacial shoreline at a time when Montauk was an island. All of Napeague was submerged then except for another small island at Promised Land, and the moraine reemerged above sea-level at Hither Woods.

Wave-deposited sand gradually filled in the Napeague isthmus, also forming the spits of Goff Point and Hicks Island that enclose Napeague Harbor. From Napeague Harbor the terrain ascends through the 30-45' Walking Dunes to rejoin the moraine at Nominicks in Hither Woods at an altitude of 86'.

The coastal environment varies from the wave-dominated sections of Gardiner's and Napeague Bays, to the low-energy tidal conditions in Napeague Harbor. The highest wave energies occur along Water Fence where Napeague Bay is no longer sheltered by Gardiner's Island and waves with the long fetch from Block Island Sound break unimpeded on this shore in nor'easters and winter storms.

Littoral drift carries sediment southwesterly along the Gardiner's Bay shore, then eastward from Cherry Point which acts as the defining headland in this coastal compartment. From Abraham's Landing to Promised Land is mostly a lee shore in prevailing winds, and except in storm surge conditions is not subject to high erosion rates.

Land use in Reach 4 is primarily sparse residential; except for the Devon Yacht Club and its associated marina; the Multi-Aquaculture facility adjacent to the site of the old fish factory on Promised Land in Napeague State Park; the "Art Barge" on Napeague Harbor; and several restaurant operations and a tennis club along the north side of Montauk Highway. A more concentrated residential section at Lazy Point borders the west side of Napeague Harbor, including a small trailer park and numerous small cottages, originally summer "camps" on Town Trustee land along Shore Road, with a second trailer park and residential cluster at Crassen Boulevard. The extensive preserved open space in Reach 4 includes the 1253 acres of Napeague State Park and an adjoining 1441 acres in Hither Hills State Park, as well as Trustee lands on the west side of Napeague Harbor.

(b) Natural Protective Features

Much of the Reach 4 shoreline remains relatively undisturbed, leaving intact the wide variety of natural protective systems. The sandy beach from Devon to Promised Land is in a natural condition, with a gradual profile that buffers wave action, turning progressively steeper and rockier east of Napeague Harbor in a transition to the bluffs and wave-dominated shore at Water Fence in Hither Woods. A low dune affords limited protection to the houses along the shore on Cranberry Hole Road. However, the entire area is low-lying and would be subject to flooding and erosion in a major storm event. The low dunes extend east of Cherry Point through Promised Land to the Lazy Point area, with a dune complex extending inland until it meets the interior saltmarshes and brackish marshes of Napeague Meadow.

The beach at Cherry Point is a good example of natural terracing from storms, with discrete levels of storm cast cobble, and sandy areas with reasserting vegetation. The upland furthest from the water shows a combination of low dune migrating landward and encroaching on a wetland area behind it, vegetated with beach grass, shad, and blueberry. Seaward of the dune a low berm of sand and cobble is covered with poison ivy and beach grass, then a cobbly/sandy strip of beach, a runnel,

then another shallow cobble terrace, sandy beach, and rock cobble just offshore. Further east near Bayview Avenue submerged bog mat is visible just offshore, another indicator of the landward migration in the area.

Beamon's Creek at the southwest bend of Napeague Harbor and the small creeks and extensions of Napeague Pond broaden into a marsh system that projects west of Napeague Meadow Road for a considerable distance paralleling the Old Montauk Highway sand road, the wagon route to Montauk that predated NY Route 27. There is also a small tidal creek on the southeast corner of Napeague Harbor that connects to more marsh along the LIRR right-of-way.

On the harbor's east side extensive salt and brackish marshes border the Walking Dunes, behind a low dune system cut by ORV traffic in several locations. These breaks in the dune have increased flooding of the wetlands behind the dune as well as traffic damage to sensitive vegetation, and could cause potentially damaging blowouts. In season the harbor is favored by windsurfers, some of whom apparently prefer driving in to Goff Point on the fragile beach along the east side of the harbor.

Another extensive wetland system near the intersection of Bendigo and Cranberry Hole Roads on both sides of the road also has considerable floodwater retention capacity. Vector Control ditching in that system and throughout the extensive marshes fringing Napeague Harbor probably increases the retention capacity and velocity of floodwaters and the extent of their inland penetration. A channeled stream draining the Bendigo wetland terminates in the Devon Yacht basin.

Several coastal ponds also act as floodwater reservoirs, including Napeague Pond, Skunk's Hole on the east side of Napeague Harbor, and Fresh Pond in Hither Hills State Park. Fresh Pond, one of the larger purely fresh water ponds in the Town, covers approximately 34.2 acres, with 1.1 miles of shoreline.

A barrier island, Hicks Island, which has been used as a spoil site when the west channel to Napeague Harbor is periodically dredged, protects the mouth of Napeague Harbor, and is an important colonial waterbird nesting site. Just east of Hicks a barrier spit, Goff Point, shelters the east side channel to the harbor. Goff Point is subject to frequent overwash in storms. Hurricane Bob in 1991 breached the spit, creating another island in the mouth of the harbor that remained separate for six months before littoral drift sediments closed it again.

The bluffs rising along the Hither Woods shore of Napeague Bay are by and large in a natural state, except for a few areas where pedestrian trails and incursions by illegal ORV users have prevented the natural vegetation from establishing itself. These bluffs are a good example of natural recession in a high wave-energy environment where material constantly washes out of the slumping morainal bluff to feed a rocky but constantly replenished beach. It would provide a good natural control area for the Erosion Hazard Monitoring Program (see **Projects**).

(c) Coastal Structures

At the west end of Reach 4, Devon Yacht Club has a small marina basin excavated into the shore and stabilized with bulkheading around its perimeter with a 200' jetty to the north and 75' on the

south to stabilize the entrance. The inlet nevertheless requires frequent maintenance dredging. Dredge spoil which in the past has been transported offsite, might be better used to nourish neighboring beaches to the north diminished by numerous erosion control structures. A 350' pile pier is also part of the Yacht Club but is of sufficiently open construction to have a negligible effect on the littoral system.

A second disused marina lies at the site of the old fish factory at Promised Land. This was at one time a large industrial operation for reducing bunker fish (Menhaden) to fish meal and fertilizer, but ceased operations in the early 1960's, and the site is now New York State parkland. Deteriorating bulkheads and docks, as well as concrete and brick structures remain on the site, and some infilling of the old navigation channels is evident. A buried groin, which may actually be the remains of one of the bunker boat hulls, lies to the east of the old fish factory basin, and acts to deflect the littoral drift slightly. As mentioned above this coastal exposure, particularly this west side of Cherry Point, is relatively sheltered and the littoral disruption by these structures is probably minimal. See **Development Policy #1** and **Projects** regarding reuse and revitalization of this site.

As a result of erosion on the more exposed east side of Cherry Point two summer cottages at the end of Mulford Lane are for all practical purposes out on the beach, with their septic systems leaching into the bay and their foundations awash in any high tide. The structures seem unlikely to survive many significant storm events. They should not be rebuilt, and preparation should be made to reclaim ownership of the land by the State or the Town Trustees.

East of Mulford Lane and along Shore Road a series of groins and other erosion protection structures is affecting the beach. A single large rock groin near the west end of Shore Road is excessive in size and should be dismantled or shortened and reduced in profile to mitigate scouring to the east. There is one filled bulkhead, also near the west end of Shore Road which aggravates flanking erosion and interrupts the continuity of the beach profile. Another 5-6 groins to the east are minimal in profile, and have a commensurately low impact on the beach. The severity of erosion is greater, with less of an upland buffer around the eroding Cherry Point headland, and less approaching the entrance to Napeague Harbor at the east end of Shore Road, where a wider beach and established dune vegetation protect the upland.

At the end of the Shore Road loop on Napeague Harbor riprap has been placed by the Town to forestall erosion around the newly reconstructed Town launching ramp. Within Napeague Harbor are remnants of an old fishing station, Merrill's Irish Mist, on Fiore's Pond at the southwest side. Some bulkheading and a culvert between it and Napeague Pond remains which acts to increase flushing of the pond, and flooding in the marshes to the west. Bulkheads also protect the Art Barge and a neighboring home at the south end of the harbor, and there is a series of small groins and bulkheads fronting residences along the southeast harbor shore. No other coastal structures are present in Reach 4 east of Napeague Harbor.

(d) Flooding and Erosion Zones

FIRM's (#360794-0020D, -0017D, -0013D, and -0009D, dated 5/18/92) indicate flood Velocity (V-) zones along the shoreline of Gardiners and Napeague Bays throughout the reach, and covering the

shores of Napeague Harbor. Cranberry Hole Road, Napeague Meadow Road, Lazy Point and Goff Point are also within V-zones. A-zones include much of the Lazy Point area, plus the harbor borders backing the V-zones as far south as Montauk Highway. In summary, most of the low-lying areas of Napeague in Reach 4 are in the NFIP 100-year floodplain.

Most of Napeague Harbor is also in a Federal CBRA zone extending through to the ocean in Reach 10, a further indication of the overwash potential for the entire area.

The SLOSH model (Gardiner's Island East Quadrangle #Q2 and Napeague Beach Quadrangle #Q3) shows that a Category 2 hurricane could inundate the Devon area and much of the shoreline of Gardiners and Napeague Bays to Napeague Harbor, which could flood to sever Montauk Highway. A Category 2 storm could also break through on the east side of the Walking Dunes into Fresh Pond, as well as flood all of Lazy Point, Goff Point and much of Promised Land.

A Category 3 hurricane could additionally link the ocean and bay at Cranberry Hole and White Sands on the Napeague stretch. A Category 4 hurricane could submerge the Napeague area from the Bendigo bluff to the Walking Dunes, with Napeague Bay and the Atlantic merging to overwash the entire area. All structures in this part of the reach would be at risk in such a storm.

CEHA photo maps (#15-766-83 sheet 28-N, #15-762-83 sheet 29-N, #16-1205-83 sheet 30-N, #17-755-83 sheet 31-N, #17-751-83 sheet 32-N, #17-748-83 sheet 33-N and #18-742-83 sheet 34-N) show erosion hazard areas along all of the shoreline of Gardiner's and Napeague Bays and into Block Island Sound, including the structures of Devon Yacht Club, several homes along the bay shore on Cranberry Hole Road, the Multi-Aquaculture facilities, waterfront homes at the end of Mulford Lane, and all of the residences situated on the water side of Shore Road at Lazy Point. Lazy Point, Hicks Island and Goff Point are also within the CEHA but have no structures at risk.

Napeague was also chosen as a study area for the *Hurricane Damage Mitigation Plan for the South Shore of Nassau and Suffolk* (LIRPB, 1984). Some of the strategies in this study recommended:

- Accept the natural shoreline regression along the headlands portion of the reach as beyond practical control.
- Expand public open space in areas vulnerable to overwash and flood damage.
- Seek to expand undeveloped coastal barrier designations under the Coastal Barrier Resources Act on storm-damaged portions of the island.
- Develop plans for emergency response procedures in the event of a breach at Napeague.

The study goes on to note: "...Evacuation of the eastern end of the south fork is a particular concern because of the limited carrying capacity of Montauk Highway -- the reach's only major east-west transportation corridor -- and the potential for an overwash of the highway at Napeague, which would effectively cut off all land-based evacuation routes for the Montauk peninsula. The potential for flooding is particularly high at Napeague because the area is low-lying, narrow, and fronted by small irregular dunes." (LIRPB, 1984)

(e) Analysis

Reach 4 features some of the finest undisturbed stretches of coastline in the Town, largely due to the amount of parkland and open space. Insofar as structural and residential consequences of flooding and erosion are insignificant in the undeveloped parts of the reach, those sections of coast should remain in their natural state.

Further recommendations for Reach 4 are represented graphically on Map V-2. With a few exceptions for existing erosion protection structures within the reach, most of the Reach 4 shoreline is designated on the map as Condition 1: predominantly without shore-parallel hard structures, where no new hard structures should be permitted, and where existing structures should be replaced only under conditions of exceptional hardship, and perpendicular structures such as groins should not be replaced, except where used to protect navigational channels. This designation is intended to preserve the exceptional coastal resources and natural protective features of this reach.

Former dock and marina structures at the old fish factory site within Napeague State Park are designated as Condition 2 on the map, as isolated existing structures. They are in disuse and probably should not be replaced or improved, except insofar as they are used to enhance public access, including possible reuse as a fishing pier. If at some point the park facility is upgraded to enhance access, demolition and removal of the existing dilapidated structures should be considered (see **Development Policy #1, Public Access and Recreation Policies #9 & 19-22**).

Within Napeague Harbor there are two sites designated as Condition 2. The first includes the Art Barge, and a neighboring private home (SCTM's #109-1-20 & -21), both of which are presently bulkheaded and within both the V- flood zones and the CBRA zone. These properties are sufficiently low-lying that they would probably not survive without protection. The presence of the bulkheads does not appear to have a significant erosion impact on the adjacent parts of this otherwise unpopulated and well vegetated section of the harbor shoreline. This is generally a low energy tidal environment, and the buildings are occupied only in the summer. In this case, where flooding from winter nor'easters is the problem rather than erosion, the bulkheading should be permitted to be maintained within the 30-year storm standard, however, only by following the full permit procedure, and considering other floodproofing options such as elevating the structure.

The second Condition 2 area within Napeague Harbor is a group of residences along the southeastern shore of the harbor, from SCTM #109-1-13.1 to #110-2-3. The homes have some shore-parallel armoring (bulkheading), and also a series of small groins, which are essentially non-functional in the harbor environment. The residences are also on higher ground where flooding is somewhat less of a hazard. As noted in the general recommendations for Condition 2, there should be no reconstruction or replacement of the existing coastal erosion structures without full permitting procedures in which non-structural alternatives are also analyzed, and no additional structures should be constructed. The perpendicular groins should not be replaced or restored, as they serve little for erosion protection and otherwise disrupt littoral or tidal processes within the harbor.

As indicated by the flooding and erosion zones from the FIRM's, CBRA, SLOSH, and CEHA, Napeague is particularly susceptible to flooding and erosion in storms. It is also vulnerable to

shoreline recession from sea-level rise because of its flat sandy shoreline, wetlands and low lying terrain.

The low dune system and gradual profile of the beach along the residential area of Cranberry Hole Road provide as good a natural buffer as is likely to occur in such a low-lying area and should not be disrupted with coastal structures. Any post-storm reconstruction or routine building permits for improvements in this and the Lazy Point/ Crassen Blvd. area around Napeague Harbor should incorporate residential flood-proofing.

In a severe hurricane or nor'easter all of the homes in this Lazy Point area are potentially in harms way of floodwaters. Many of the waterfront homes at the west end of Shore Road and near the road ends of Mulford Lane and Bay View Avenue are also at risk from normal erosion of the Cherry Point headland.

The *Hurricane Damage Mitigation Plan for the South Shore of Nassau and Suffolk Counties*, under Napeague Strategies recommends, "The structures located on Napeague Bay between Cherry Point and Lazy Point are highly vulnerable to flooding. Many of these houses are on land owned by the Trustees of the Town of East Hampton, which is leased to individual homeowners. Approximately one-half of the houses in this area appear to be year-round residences. All of the structures along the shoreline are within the 100-year floodplain. It should be public policy to severely limit any additional development in this area, and to phase out housing on the Town Trustee owned land. This land could then be retained for public access and recreational use." (LIRPB, 1984, p. 156).

The *South Shore Plan* continues with more detailed comments, excerpted here: "It is recommended that the Town Trustees immediately formulate a plan to phase out the leases and remove the structures at Lazy Point. The Trustees should investigate the option of extending the leases to allow present leaseholders a chance to amortize their structural investment over a 10 year period, in exchange for leaseholder agreement that structures will not be rebuilt after sustaining damage from storm-related flooding and/or erosion equal to or exceeding 50% of structural value." (LIRPB, 1984, p. 163). This recommendation is also consistent with NYS DEC Regulations for structures within CEHA zones. Note: The Trustees disagree with the above recommendations.

The two dwellings on the beach at the end of Mulford Lane should be condemned and removed by the County Health Department and NYS DEC, and the underlying State and/or Trustee lands should be reclaimed. Other policies and mechanisms to address long-term flooding and erosion hazards at Napeague should be further resolved in a local *Hurricane Damage Mitigation Plan* or *Hazard Mitigation Plan* (see **Projects**). The Town Trustees should formulate such policies as they see fit for Trustee lands to which they hold title.

A Town *Hurricane Damage Mitigation Plan* or *Hazard Mitigation Plan* should address eventual removal of the perpendicular erosion control structures along the bay shore of Shore Road on Lazy Point (Condition 1), which are disrupting sediment transfer. While some structures are of short stature others are excessively large and interfere with coastal processes. The stone groin furthest to the west appears to be accumulating sand on the Lazy Point side, contributing to the scouring at the

end of Mulford Lane above. At minimum, no new erosion protection structures should be permitted on Lazy Point, and existing structures, especially perpendicular structures such as groins, should be phased out and not repaired or replaced as they deteriorate. If through eventual extinction of the Trustee leases at Lazy Point the area were to revert to public open space, it would be even more desirable to restore the natural shoreline dynamics.

On the east side of Napeague Harbor the primary erosion concern is damage to the narrow east harbor beach, back-dune wetlands, and dune areas from ORV use. For detailed recommendations regarding signage, recommended ORV restrictions and enforcement, and revegetation of dune cuts, see Townwide Recommendations in **Public Access and Recreation Policies #9 & 19-22**.

5. Reach 5 -- Hither Woods/Fort Pond Bay

(a) **Description**

All of the Hither Woods section of Reach 5 to Rocky Point on Fort Pond Bay is preserved open space, where natural coastal processes prevail. Flooding and erosion are inconsequential to development in this area, but it is an excellent example of a naturally receding bluff line, with elevations to 60' overlooking boulder strewn beaches. The bluffs descend to near sea level at the eroding Rocky Point headland.

East of Rocky Point two of the highest points in Montauk, "Montauk Mountain" on the west and Fort Hill on the east, frame Fort Pond Bay and overlook Fort Pond. The morainal bluffs rise from Rocky Point to 60-80' before descending to the southerly shore of Fort Pond Bay where a low marshy infill area divides the Bay from Fort Pond, formed when glacial meltwater filled a kettle. Along Fort Pond Bay's eastern shore, approaching Culloden Point, the coastal terrain again rises gradually to 30-50' bluffs.

Fort Pond Bay is a natural deep water anchorage, the deepest (47') harbor of the Town, and the site of the original Montauk fishing village prior to the 1938 hurricane. While it was an advantageous anchorage in the days before Lake Montauk (Great Pond) was opened and stabilized for navigation, it is exposed to the north, and the '38 hurricane effectively wiped the fishing village from its shore. Nor'easters pound unimpeded into this harbor from Block Island Sound, especially onto its western shore.

A former sand mine on Fort Pond Bay's western shore is now a proposed residential subdivision. An existing condominium project, and a Town affordable apartment complex, the Town Shellfish Hatchery, a motel, the Montauk Railroad Station, a lobster packing operation, and a variety of small businesses and a residential enclave now occupy the site of the old fishing village. They are similarly vulnerable to storm surge in a hurricane, although the condominiums at Rough Riders Landing are of relatively recent construction and are floodproofed to NFIP standards.

Fort Pond itself is bordered by considerable residential and commercial resort construction including houses, restaurants, motels, a day camp, movie theater, etc. There are a number of small residential docks as well as two commercial docks at the south end, including one for a sailboat rental business.

Town and State parkland rims the immediate shore at the south end of the pond, and there is a NYS DEC launch ramp.

Eastward along the shore of Fort Pond Bay up to the Culloden tract are residential areas interspersed with several guest houses and the Hotel Montauket with its bar and restaurant. Several stairways pass down the bluff to the rocky boulder-strewn beach, which has a steady northwest exposure.

The littoral drift in Block Island Sound appears to be southwesterly west of Rocky Point and southeasterly in Fort Pond Bay, east of the Point. The remainder of the reach to the east has the prevailing southwesterly longshore current.

(b) **Protective Natural Features**

Bluffs and coastal ponds are the two distinctive natural features of Reach 5. For all of the reach shore, except along the southern edge of Fort Pond Bay, bluffs back rock strewn gravelly beaches which effectively dissipate much of the wave energy. The 20-60' bluffs along Culloden are fairly stable and well vegetated, and because of their clay-based deposits support unusual and rare plant communities.

The coastal ponds, Fort Pond, Tuthill Pond and half a dozen small coastal ponds fringed by wetlands in the Culloden tract can receive and hold floodwaters, and Fort Pond and Tuthill Pond also act as flood corridors inshore. By the SLOSH model, Fort Pond in a Category 2 hurricane could be an avenue for the waters of Fort Pond Bay to enter the central business area of the Montauk hamlet. In a Category 3 or greater hurricane the ocean and bay could merge through this area, overwashing most of the downtown business area and the dunes along the ocean.

Wetlands in the low area between Fort Pond and Fort Pond Bay also have some flood absorbing capacity, albeit minor. Steep banks along the east shore of the Pond may be undergoing some erosion.

(c) Coastal Structures

No coastal structures are present along the Hither Woods coastline from Quincetree Landing to Rocky Point.

Within Fort Pond Bay there are several large timber docks on pilings, a 600' pier at the sand mine site at Benson Point, a 450' pier with a 270' "L" at Rough Riders Landing, and a 260' pier at Duryea's along Tuthill Road. All are of sufficiently open construction not to interfere with littoral drift. Several sustained damage in Hurricane Bob in August '91 and winter storms in '92-93. In a major hurricane waterborne debris from these heavy timber structures could damage other nearby structures or property.

Remains of part of the concrete World War II sea-plane pad and launching ramp at Benson Point have caused some visible scouring downdrift. Three groins installed by homeowners along Navy Road also produce scouring. The groins are stone, fairly low in profile but substantially built. In addition to the groins two of the residences have backing bulkheads supporting the bluff toe and one has a shore parallel revetment partially buried by the bluff. The residence furthest to the northwest also has a long stairway down the 60-80' bluff, which was damaged in the 1992-3 winter storms.

A smaller groin protects the seawater intake to the Town Shellfish Hatchery, and two groins are at Rough Riders Landing just west of the L-shaped dock. The latter three do not appear to be having a noticeable effect on littoral drift. The former Navy dock at Rough Riders Landing has a NOAA tide gauge, which was installed in the 1940's and has accumulated data over a period of fifty years, which is useful in analyzing past coastal flooding patterns for this area.

Riprap has been used to armor the shoreline near Duryea's lobster dock along Tuthill Road, probably to mitigate the frequent overwash from Fort Pond Bay into Tuthill Pond, which has flooded Tuthill Road several times in recent winter storms. There is also some riprap in front of the Town Hatchery, and by the Montauket Hotel further east of Duryea's.

A LIPA emergency substation for Montauk is located in the A-flood zone on wetlands along the northern shore of Fort Pond. This installation has been built up with fill to the extent that it properly constitutes a coastal structure. A number of private docks and commercial enterprises with structures are located on Fort Pond's shore.

(d) Flooding and Erosion Zones

FIRM's (#360794-0008C & -0007C dtd 2/19/87 & #360794-0006B dtd 3/16/83) indicate a V-7 zone along the shores of Hither Woods on Block Island Sound and of Fort Pond Bay. A-zones cover the old sand mine site at Benson Point, and the backshore of Fort Pond Bay through Fort Pond to South Emerson Street in the Montauk business district. The old fishing village site, the railroad station, and a LIPA sub-station on Fort Pond are in the A-zone, and the wetland areas of Culloden. All are backed by B-zones.

The SLOSH model for Reach 5 (Gardiner's Island East Quadrangle #Q2 and Montauk Point Quadrangle #R2) shows a worst case Category 1 overwash along Industrial Road and the Fort Pond shoreline. A Category 2 storm could additionally inundate Quincetree Landing in Hither Woods, and expand the overwash at Fort Pond from Second House Road to Tuthill Road, including the railroad station, firehouse area, and Rough Riders Landing, to the Montauk business district. In a Category 3 hurricane the ocean could break through at the business area to merge with Fort Pond and Fort Pond Bay, and a Category 4 storm could completely overwash the business area as well as low parts of Culloden within the reach.

CEHA areas (Photos #12-1110-83 sheet 23-N, #12-1111-83 sheet 24-N, 13-1115-83 sheet 25-N, #14-1120-83 sheet 26-N, #15-769-83 sheet 27-N, and 15-776-83 sheet 28-N) cover the dock at Benson Point, the Port Royal Motel on Fort Pond Bay, and the condominiums at Rough Riders Landing. Duryea's lobster business, the Hotel Montauket and the solitary Sexauer residence near a wetland in Culloden are also in CEHA erosion hazard zones along the shore west of Culloden Point.

(e) Analysis

Flooding and erosion along the undisturbed shoreline of Hither Woods and the uninhabited part of Culloden have little if any impact on human life or property. However, some endangered plant species, such as Scotch lovage (*Ligusticum scothicum*), are vulnerable to flooding and natural erosion of the bluff toe along Culloden, and their preservation should be considered. These shores provide the best erosion buffer to storms and should be kept in a natural state to the greatest extent possible.

Shore hardening structures along the southwest shore of Fort Pond Bay are causing evident downdrift scouring. Shore-parallel erosion protection structures along all of the shore of Fort Pond Bay are designated Condition 2 on Flooding and Erosion Protection Map V-2, for a variety of reasons, including that the structure is interrupting coastal processes, obstructing public access, or because erosion protection could be furnished by natural protective features.

The most vulnerable areas in Reach 5 are the low-lying southern shore of Fort Pond Bay, Tuthill Pond and Fort Pond itself which could form a major flood corridor extending to the Montauk business district in a hurricane or catastrophic storm. Present infrastructure and residential and commercial construction in this area are at high risk and should be closely examined in the *Hurricane Damage Mitigation Plan* (see **Projects**). Commercial sites on Industrial Road should be checked for toxic materials and potentially hazardous debris that could become water borne in an overwash from a catastrophic storm. Alternative siting should be considered for these facilities out of the 100-year floodplain. No new facilities with similar hazards should be sited here, and the present ones should not be permitted to expand.

The LIPA substation situated in the wetland on Fort Pond is a concern during flood conditions and hurricane overwash. The siting of this installation, theoretically designed to provide emergency power to Montauk in hurricanes and other catastrophic events when power lines to the west are likely to be interrupted, is inconsistent with floodplain management. If not for its elevation on fill the substation would be submerged in any heavy rains. It is located in the A- flood zone, and the SLOSH model indicates the site could be overwashed in any category hurricane. Fuel for the generators is also stored onsite, and serious environmental consequences could result if a hurricane propelling timber debris from Fort Pond Bay docks impacts this facility, or if the tanks were to break loose causing a substantial fuel spill. The facility should be relocated. One possible alternative site is the former Town landfill, now a transfer facility, in Hither Woods; others should be examined.

6. Reach 6 -- Montauk North side -- Culloden Point to Shagwong

(a) **Description**

Lake Montauk, known to the colonials as Great Pond and to the native Montauketts as Wyandanee Lake, is the dominant feature of the reach and the Town's largest harbor, covering 1037 acres. Formed as an elongated glacial kettle and closed by littoral drift sediments from the eastern headlands, it was fresh water until the Benson purchase of much of Montauk in 1879. It was privately dredged and stabilized in 1926 with two stone jetties installed to form a 500' wide inlet,

which later became the Federal channel. Dredge spoil from the inlet was used to raise and enlarge Star Island and to connect it to the mainland with a causeway.

The open coast between the two points defining this reach is wave-dominated, except for the tidaldominated system of Lake Montauk. From the bluffs at Culloden Point a series of intermittent dunes and beaches travels along the shore of Block Island Sound. Some of these have migrated inland to form the northern shores of the harbor, extending on the east side to Big Reed Pond and its adjacent wetlands.

The uplands are typical moraine, with rolling knob and kettle topography and elevations exceeding 100'. East of Lake Montauk, Prospect Hill with an elevation of 142' is part of the backbone of the moraine. Banks on the west side of Lake Montauk slope more gradually than those on the east side, and are more flood prone. While marshes developed along the western side, the erosive forces of chronic wave action have eroded the shoreline creating shallows and narrow beaches along the receding eastern bank.

Lake Montauk, especially in the Coonsfoot Cove area, has the highest concentration of private and commercial marinas, waterfront restaurants, fish-packing and other water-dependent businesses in the Town. On the northwest side of the Lake is a concentration of residences and motels. South of Star Island, Lake Montauk is primarily single-family residences, with some condominium development, restaurants and a pre-existing non-conforming marina.

On Block Island Sound along Sound View Drive and Captain Kidd's Path, waterfront homes have been armored with bulkheading and/or rock rip-rap, and beach loss has been dramatic. The area is downdrift of the massive inlet jetties, which interrupt sediment transport to the west. Erosion problems have also resulted from insufficient setbacks, aggravated by the effects of erosion protection structures, construction of which has progressed westward in a typical chain reaction of downdrift beach loss and attempts at structural response. The shore armoring has accelerated erosion of the fronting beach by reflecting wave energy and restricting the upland sediment supply. Spoil from recent maintenance dredging of the Federal channel for the inlet has been deposited on the west side but has been insufficient to alleviate the erosion problem.

(b) Natural Protective Features

The natural protection afforded by the dune system from the Lake Montauk jetties west to Culloden Point has been compromised by the downdrift scouring from the jetties, residential and motel construction on or in close proximity to the dunes, and attempts by property owners to preserve the upland with shore-hardening devices that have accelerated beach erosion. This shoreline is exposed to the full fetch of Block Island Sound in nor'easters and would be vulnerable to erosion in any case. The erosion control structures, by reflecting wave energy, have unfortunately hastened erosion of the natural beach which would otherwise dissipates the wave energy. The difference is striking where bulkheads have been installed and beaches have disappeared nearly completely, versus unarmored sections of the same shoreline where the beach has maintained a relatively gradual profile. The bulkheads and revetments in front of houses and motels along Sound View Drive west of the Montauk jetties accumulated a sand beach during the '93-94 winter, after several years of erosion, demonstrating the variability of conditions there. In fall of '93 there was deep water in front of the property owners' bulkhead of the Sound View Drive Association. In spring/summer '94 there was a slender beach in front of the bulkhead, which was once again removed by the Christmas nor'easter of 1994. Dredge spoil from maintenance of the channel was again deposited west of the jetties in spring of 1995, but considerable sediment was lost to the surf conditions engendered in August 1995 by Hurricane Felix before it drifted out to sea. Dredge spoil was again deposited in 1996, but by 1997-98 the beach had again disappeared.

The scouring effect of the west jetty remains a concern, with pronounced buildup on the updrift side of the east jetty. Some form of sand bypassing around the Federal channel to Lake Montauk remains desirable. Bulkheads and revetments continue to cause rapid loss of fronting beaches in the area when exposed to surf conditions. The present channel location appears to occupy the inner curve of a cove between two headlands, along with mobile dunefields on what was the barrier spit across the mouth of Great Pond (now Lake Montauk).

In sharp contrast the beaches and dunes east of the jetty in Montauk County Park remain wide and well supplied because of accumulation by the upstream jetty and past deposition of dredge spoil. There is, however, a substantial cut in the dune east of the jetty used for ORV access. ORV camping and fishing use in the park is heavy, particularly on summer holidays, when camper vehicles literally line the beach, contributing to erosion and retarding growth of protective beach and dune vegetation. The access cut in the dune would likely be exacerbated by storm flooding, and could lead to a further blowout in the dune system and accelerated flooding of the interior dune system, Big and Little Reed Ponds, and possibly East Lake Drive (see **Public Access and Recreation Policies #9 & 19-22**).

The dune at the east end of the runway at Montauk Airport is in good condition and well vegetated, particularly on the landward side, rising to a height of about 30'. An old blowout seems to have been halted with snow fencing, and vegetation as appears on aerial photos has increased over the last decade. With present dune height, observations indicate a low probability of a breach by storm surge at this point.

Several coastal ponds and their neighboring marshes in the reach act to absorb floodwaters, including Big and Little Reed Pond on the east side of the Lake, Stepping Stones Pond to its southwest, and the ponds in Culloden. Big Reed Pond has been ditched for drainage to some extent by County Vector Control, particularly on the north side nearest the Montauk airstrip, which reduces its flood retention ability somewhat. Big and Little Reed Pond and Culloden should continue to be maintained in their natural state for flood control and as part of the State designated SCFWH.

Creeks and streams entering the Lake could become flood corridors in extreme flood conditions, including Peter's Run on the west side, Little Reed on the east, and Rock Run, and Clear Creek from the Ditch Plains area. A current Town drainage project at the south end, known as the *Oceanside Drain Project* will act to further impound floodwaters in wetland areas and should increase

floodwater retention as well as reduce non-point source pollutants (see **Water Resources Policies** #30-40 & 44 and **Projects**).

(c) Coastal Structures

Besides the inlet jetties and the shore-hardening structures alluded to along Sound View Drive on Block Island Sound, there is extensive timber bulkheading and dock construction in the northern portion of Lake Montauk, particularly in the Coonsfoot Cove area, the area surrounding the Town's commercial dock and the Coast Guard Station, and the marina and fishpacking operations along the north end of East Lake Drive. The causeway to Star Island was originally culverted, but the culverts have closed up over the years from lack of maintenance and/or sedimentation, leaving Coonsfoot Cove with poor flushing.

The south end of the Lake has relatively few coastal structures: some 12-20 small groins, which have little scouring effect because of the limited circulation, bulkheads and a seawall, half a dozen residential docks, and a non-conforming 87-slip commercial marina, Captains Marina (Montauk Lake Club) on East Lake Drive. Because of the low energy tidal environment of the Lake these structures are of minimal utility for flooding and erosion control.

From the inlet jetties east to Shagwong Point there are no coastal structures.

(d) Flooding and Erosion Zones

On the FIRM's (#360794 -0002C, -0004C, -0005D dated 5/18/92, and #360794-0006B dated 3/16/83) V-zones encompass all of the shore of Block Island Sound and the water area of Lake Montauk. A-zones backed by B-zones cover West Lake Drive's northern end as well as the Sound View Drive and Capt. Kidd's Path areas west of the inlet, and all of the shoreline of the Lake including Star Island and the marina area in Coonsfoot Cove, and inland on the east side at the airstrip to Big Reed Pond. Big Reed Pond and the surrounding area are also a designated CBRA zone, another indication of overwash potential.

Worst case hurricane overwash zones demonstrated by the SLOSH model (Montauk Point Quadrangle, Drawing #R1) show possible inundation of Star Island and the wetlands surrounding Big Reed Pond in a Category 1 storm. A Category 2 hurricane could also overwash much of the Sound View Drive and Coonsfoot Cove areas, as well as along West Lake Drive and the south shore of the Lake. Block Island Sound could break through the dunes to Big Reed Pond, and Stepping Stones Pond could flood to merge with Lake Montauk, as it does regularly in nor'easters.

In a Category 3 hurricane, the remainder of Sound View Drive could be inundated and an area from the east jetty to south of Big Reed Pond on East Lake Drive could be be overwashed. A Category 4 storm could overwash all of the jetty area, all of West Lake Drive and the western shore of the Lake in the Stepping Stones area, and the Atlantic Ocean could overwash the Ditch Plains area to merge with the Lake, forming continuous open water from the ocean to Block Island Sound.

While damage from wind and storm surge overwash in a Category 4 hurricane is difficult even to contemplate, we can hope such events remain sufficiently infrequent so as not to threaten the Town.

However, smaller category hurricanes are by no means unknown in East Hampton, and concerns for life and property in potentially affected areas should not be underestimated. Although designed for evacuation planning, SLOSH is a useful tool for indicating areas of potential overwash which development should be directed away from, and which should be examined in more detail in the *Hurricane Damage Mitigation Plan* (see **Projects**).

State Coastal Erosion Hazard Areas as delineated on CEHA photo maps #11-782-83 sheet 20-N, 11-780-83 sheet 21-N, 11-776-83 sheet 22-N and 12-1110-83 sheet 23-N, include within the hazard zone the houses along Captain Kidd's Path and Sound View Drive, and all shores of Block Island Sound, including the County Park. Town-owned land adjacent to the jetties, and the end of the Airport runway near the dunes are also within the CEHA hazard zone.

(e) Analysis

The Sound View Drive area is one of the most vulnerable in the Town to storm-induced erosion and flooding because of downdrift scouring from the inlet jetties and the cumulative effects of erosion control structures in this exposed high-energy location. Two houses have been lost in the last decade to storm and wave action. Sand deposited from the periodic maintenance dredging of the inlet is insufficient to compensate for the combined sediment deficit and storm erosion, so the problem will likely recur. Spoil from the channel dredging should no longer be deposited on the east side of the inlet where beaches have in general been accreting but should be deposited exclusively on the west side.

Hard structures are the only remaining erosion protection along parts of Sound View Drive, and emergency maintenance and reconstruction of erosion protection structures and filling in of gaps should therefore be permitted within 30-year storm parameters. The area is designated Condition 3 on Flooding and Erosion Protection Map V-2. The numerous erosion protection structures that have been erected in this area have not alleviated beach loss, but to the contrary have accelerated it. Inevitably the need for erosion protection has lead to demands for government intervention to solve the problem with coastal engineering solutions. This is one of the few areas in the Town where there is some Federal responsibility, because of the ACOE role in maintaining the inlet channel and the jetties, which probably cause some downdrift scouring. The Federal government should fund mitigation measures such as an effective sand-bypassing plan as part of the regular maintenance of the Federal channel by the ACOE.

Coonsfoot Cove and the other extensive water-dependent and marine oriented businesses at the north end of Lake Montauk are also vulnerable to storm flooding, especially in a Category 2 or greater hurricane. Little can be done to reduce the exposure of these docks and other water-dependent enterprises. The structures of these water-dependent businesses provide needed public access to the Montauk waterfront, and should be permitted in-place in-kind replacement or reconstruction. They are so designated as Condition 3. Non-commercial areas in the north end of the Lake now predominantly without coastal structures should remain so (Condition 1), and some existing structures should be reevaluated versus non-structural alternatives before replacement or reconstruction (Condition 2). See Map V-2. The remaining shore of Lake Montauk is also vulnerable to storm flooding. Because of the amount of residential development surrounding the Lake, it is important to maintain natural protective features such as wetlands, ponds, and streams with flood absorption and retention capacity. In the low energy tidal environment of the southern portion of the Lake hard erosion protection structures are relatively few and have little utility in retarding erosion. Therefore, as indicated on the map, new structures should be prohibited and existing hard structures should not be replaced except under conditions of exceptional hardship (Condition 1).

According to the SLOSH model and the FIRM's, a hurricane of Category 2 magnitude or greater could overwash much of the Sound View Drive, Coonsfoot Cove, and Star Island areas, as well as the Montauk airstrip, and much of the remaining shore of Lake Montauk. A direct hit by a Category 3 or greater hurricane could allow Block Island Sound to breach the dunes at the airstrip and the Atlantic to break through to the Lake at Ditch Plains, connecting the ocean with Block Island Sound and wreaking significant damage over the low-lying residential areas of East and West Lake Drives, as well as the marina complexes at the north end.

Planning mechanisms should be instituted through the *Hurricane Damage Mitigation Plan* (see **Projects**) to limit damage and plan for both the emergency response and for the aftermath of a catastrophic storm. Should a storm cause wholesale destruction of structures and facilities, their reconstruction should be used as an opportunity to modernize facilities, improve floodproofing and enhance public access, for example, the linked public walkway for the Coonsfoot Cove waterfront proposed in the **Public Access and Recreation Policies #9 & 19-22** and **Projects**. It should also include desirable improvements for hazard mitigation and remediation including relocating structures, upgrade of aging septic and drainage systems (see **Water Resources Policies #30-40 & 44**), and restoration of vegetative buffers and natural shorelines, etc.

7. Reach 7 -- Oyster Pond/North Montauk Point

(a) **Description**

Montauk Point and Oyster Pond are the principal features in Reach 7. Montauk Lighthouse is a prime landmark, scenic and historic site for the Town and the State, and its preservation is a priority. The armoring at the Lighthouse constitutes the largest coastal structure in the Town.

All the land in this reach is government owned, and the only structures and facilities present are those relating either to the lighthouse or Montauk State Park. Flooding is not a significant consideration for structures in Reach 7 except as it affects these facilities and their accompanying infrastructure.

The reach terrain consists of morainal outwash deposits gradually sloping northward to low wave-cut cliffs. The cliffs are bordered by sandy beaches from Shagwong Point to around False Point, then changing to cobble as they approach Montauk Point. Eroded Montauk Point forms a truncated 65' hill with the Montauk Lighthouse at its top, a precipitous bluff to seaward and a steep swale behind.

Oyster Pond, a mile east of Montauk Harbor, is known for its abundance of oysters and historic use by the Montauk Indians. Oyster Pond gut opens naturally to Block Island Sound 2-3 times per year, depending on tidal or storm events. The Pond and its intervening bar are a designated CBRA zone. On 1800's maps it appears to have been more landlocked with a substantial landmass between the pond and the sound. Three north-flowing streams feed Oyster Pond, Rely's Run, Hatty's Run, and Ogden Brook. A number of smaller coastal ponds including Rush, Reed, and Money Ponds are also located in the reach.

Erosion is especially critical in the vicinity of the Lighthouse. Geologically Montauk Point is the most prominent eroding headland of the South Fork, and its sediments have fed beaches to the west since the retreat of the glaciers. The Montauk Lighthouse was commissioned by George Washington in 1796 on the Montauk Point headland with a projected 200-year lifetime. It was originally set back some 300' from the ocean but now withstands the forces of nature only with the aid of massive rock revetments. Numerous attempts at stemming erosion over the last fifty years have utilized both hard and soft solutions, including extensive planting of the bluff face using the reed-trenching method pioneered by Georgina Reid, a dedicated volunteer who single-handedly guided stabilization of the upper bluff at the Lighthouse. The most recent erosion control project has been completed using a combination of Federal, State and local resources to reconstruct and extend the existing revetment and revegetate the bluff.

Depending on the rapidity and magnitude of sea level rise and recurring storm events, alternatives such as moving the lighthouse back from the bluff may ultimately have to be reexamined, as has occurred at other historic lighthouses on Block Island and at Cape Hatteras.

(b) Natural Protective Features

Natural erosion protection in Reach 7 comes from beaches and bluffs, whose cobbled and sandy shores dissipate wave energy except where the erosion control structures have essentially formed a vertical seawall backed by steep cliffs at the Point. Montauk Point receives the largest amount of wave energy of any landmass in Town for the simple reason that it is the farthest point east on Long Island, and also that ocean waves refract around the headlands to focus energy in eroding more resistant areas. Overall littoral drift appears to follow the coast east-west and southeast-northwest.

The coastal ponds act as receiving and retention areas for storm floodwaters, and there is a low swale/runnel area just west of the Point that also acts as a flood retention area. The marshes rimming Oyster Pond act similarly. Just offshore of the State Park concession stand are the remains of stumps from a drowned forest, indicative of the magnitude of shoreline recession that has occurred here over time.

The barrier spit at Oyster Pond intermittently opens and closes the pond, depending on overwash and the severity of storm events. Conceivably in a catastrophic storm or due to sea level rise, a breach could remain open indefinitely and become a permanent inlet. As Oyster Pond is a State designated SCFWH, this possibility and potential strategies for mitigation should be examined (see **Projects**).

(c) Coastal Structures

Montauk Lighthouse and its approximately 800' of massive rock revetments armoring the Point are together the largest coastal structure in East Hampton. The recent work builds on earlier efforts by the Coast Guard and ACOE. The new revetment uses larger rocks, a more extensive structure, and improved stone setting to increase the level of protection. Earlier work ca. World War II by the ACOE included toe protection with a less massive and well-placed rock revetment, which is now seaward and forms a foundation for the current rock revetment. Later the Coast Guard installed rock-filled gabions, and reed-trenching and terracing with beach grass planting of the bluff was initiated and carried out for many years by Georgina Reid. More recently, local landscaper Greg Donohue has worked to further revegetate the bluff in conjunction with the present revetment work. The completed project wraps the revetment around the bluff to the south where it descends to Turtle Cove. No additional coastal structures are present in Reach 7.

(d) Flooding and Erosion Zones

FIRM's #360794-0001D, -0002C, and 0003D, dated 5/18/92 show V-zones along the entire shore of Block Island Sound to Montauk Point, with A-zones covering Oyster Pond and its shore areas, as well as the wetlands west of the Point. Both Oyster Pond and its fronting bar, and the area from west of False Point to Montauk Point are designated CBRA zones, indicating the potential for overwash and erosion.

The SLOSH model (Montauk Point Quadrangle #R2) also shows Oyster Pond as a primary flood corridor in Reach 7, which could extend inland to overwash Montauk State Parkway in a Category 4 hurricane. The wetlands and ponds west of the Point are also overwash areas.

CEHA areas in Reach 7 (CEHA map-photos #9-792-083, #9-789-83, and #11-782-83) cover all the undisturbed shores of Block Island Sound to the Point, including the Oyster Pond barrier spit and the coastal ponds along the north side of the point.

(e) Analysis

Montauk Lighthouse is one of the most vulnerable sites to erosion on the entire east coast. Because it is one of the State's and the Town's premier historic and tourist spots there is strong support for its preservation, and for the heroic and expensive erosion control measures required to prevent its demise. George Washington's colonial survey that sited the structure for a 200-year lifespan from the eroding bluff turned out to be remarkably accurate, as the bluff has since receded almost to the Lighthouse.

The question of how to preserve the Montauk Lighthouse remains. The history of attempts has been one of trial and error. To date, structural erosion protection remedies have dominated, and the prospect of moving the massive stone Lighthouse back from the cliff is sufficiently daunting that it has not yet been seriously considered. The recent relocation of the lighthouse from the south bluff of Block Island is a possible paradigm. However, the Montauk site is complicated by its hilltop location and concerns over preserving its historical/archaeological integrity. In any case, the ability of the present fortifications to withstand the hydrodynamic and meteorological force of Atlantic storms will eventually become apparent. Should sea level rise indeed prove to be accelerating, and hurricanes become more frequent and severe, costs of further armoring may escalate and alternatives have to be reevaluated.

The armoring of the Montauk Point headland and its removal from the littoral sediment budget may be having untoward consequences on other coastal areas in this reach and along the Atlantic Ocean shore. Wave energy, reflection and refraction at the Point have already been altered by replacement of the graduated profile of slumping bluff, natural shore and nearshore by a rock seawall. The effects on shoreline dynamics will likely manifest both at the Point and reverberate locally in offshore and longshore patterns, in ways as yet undetermined. These phenomena and alternative solutions should be investigated and analyzed further through monitoring and any future impact studies for the Point. Given the degree of public ownership and natural coastline in Reach 7, no additional erosion protection structures other than the revetment at the Lighthouse should be contemplated or permitted (Condition 1).

Changes in littoral patterns, sediment movement or storm incidence could also affect the barrier spit at Oyster Pond. If the spit were permanently breached by storm events or rising sea level, the pond could conceivably become an inlet, altering the brackish pond habitat in unforeseen ways. The Town and State should monitor breaches after storms and develop contingency plans for possibly closing breaches to preserve the high habitat values and numbers of threatened or endangered species around Oyster Pond (see **Significant Habitats Policy #7**).

Beach vehicle traffic by recreational fishermen on the State parklands is seasonally heavy and may contribute to erosion by limiting establishment of natural vegetation, forming nearshore runnels from ruts, or disturbing beach sediments. However, this is generally a cobble beach, and LI State Parks personnel monitor beach traffic, controlling the situation carefully. (Larsen, PC, 1995)

8. Reach 8 -- Montauk Bluffs

(a) **Description**

Dramatic clay bluffs known as hoodoos line much of the Reach 8 shoreline, a scenic marvel of natural erosion forces without parallel on the east coast. Land use in Reach 8 consists largely of undeveloped parkland with isolated residences dispersed in the moorlands along the ocean bluffs, a Town affordable housing project in the Camp Hero, and the Montauk Shores condominium trailer park along the ocean at the western end of the reach. The rocky shore west of Montauk Point was the site of numerous shipwrecks in the nineteenth century, and the Montauk Lighthouse serves as an important navigation beacon to keep boats clear of its hazards.

A few of the prestigious resort homes are close to the bluff edge. From Montauk Point to the western edge of the reach the shoreline coincides with the terminal moraine. The wave-cut bluffs are 30'-80' high, generally bordered by narrow boulder strewn beaches. The rapid erosion of the Montauk Point bluffs has generated some of the sediments that have maintained beaches to the west, carried by the littoral drift which is predominantly east to west.

A 10' to 80' thick deposit of Montauk till underlies the morainal and outwash deposits in Montauk. As pockets of the Montauk till are exposed along the bluffs, channels erode from wind, seeps, and rain runoff, and landslides drop boulders that collect in the gullies. The intermittent flow of water out of the bluff faces also exerts a recurring erosion force on the bluff. This process is apparent in the dramatic bluffs that begin at Driftwood Cove two miles west of the Lighthouse. These hoodoo bluffs contain large vertical fluted sections of hardpan clay and stone that rise from 7' above MSL to approximately 70' above MSL.

Where the glacial erratics accumulate below they offer protection to the bluffs behind. Depending on the clay content and distribution of boulders in the bluffs, and offshore underwater boulders and sandbars, the bluff line tends to retreat at an irregular pace. As the bluff erodes, the boulders are exposed and eventually settle into the sea and along the shore to form natural barriers. A series of scalloped coves are sheltered by natural promontories and defended by boulder strewn beaches. The offshore boulders also play an important role as a barrier or reef in absorbing wave energy.

The resulting irregular coastline is distinct from the more usual process of shoreline straightening through erosion and littoral drift. The shore straightening process is still active, but local geology plays a major role in shoreline configuration. Some areas, such as Driftwood Cove, exhibit a certain amount of natural stability. Surfers and recreational fishermen are attracted by the rocky shores and small coves, and the hoodoo bluffs attract hikers and beachcombers.

Flooding and erosion are not a hazard to structures in the parklands but may threaten some residences, particularly those built near the receding bluffs, and the Montauk Shores condominium trailer park at the west end of the reach. In some areas of the clay bluffs perched ponds and freshwater wetlands support an unusual community of rare and endangered plants. These habitats may be threatened when the receding bluff edge causes the ponds to drain out over the bluff, sometimes also washing out sections of the bluff.

(b) Natural Protective Features

The bluffs and rocky cobble beaches of Reach 8, dotted with glacial erratics and interspersed with sandy coves, are the primary protection from the high wave energies of the Atlantic. The clay and stone content of the bluffs causes them to erode more slowly and irregularly than the sandy bluffs in other reaches of the Town. The weather sculpted hoodoo formations are a bizarre native land form and scenic attraction unique along the east coast that are worthy of protection in their own right.

Because of the seeps, wetlands and the general impermeability of the clay soils, drainage over the bluff face is an important erosion factor in Reach 8. While secondary to the unchecked wave energy of the Atlantic Ocean, surface runoff over the bluffs is a significant factor in consideration of erosion problems and solutions in this reach.

At several points the bluffs descend to coastal ponds, including Lily [Church's] Pond just west of the former Warhol estate, which acts to receive floodwaters. Under storm conditions these ponds occasionally breach, opening them to tidal flow and/or wave action. West of Montauk Point a stream

empties onto the beach, although it has minimal flow and probably does not contribute greatly to erosion.

Where the bluffs descend at the Montauk Shores condominium trailer park, flooding and erosion are a significant problem. Mobile homes within this low lying development lack the protection of the higher bluffs and the ones nearest the water suffer from inadequate setbacks.

(c) Coastal Structures

Over the years several attempts at bluff restoration and erosion control have been made along this rocky coast. Gabions, bluff-toe armoring, filter boxes, drainage pipes and terraced plantings have been installed with varying results.

Driftwood Cove, west of Camp Hero in the hoodoo bluff area of Old Montauk Highway, includes erosion control structural attempts at Stone House and at the Richard Avedon and Peter Beard properties. Stone House is the site of an extensive private bluff stabilization and erosion control project designed to protect the bluff toe, channel drainage off the 60-80' bluff face, and establish vegetated terraces with filter boxes at the bottom. The project, an attempt to preserve an historic home in danger of being destroyed which was situated 10' from the edge of the bluff, was never satisfactorily completed. It's success has been limited by inadequate size and placement of the toe armoring rock and by the steep angle of the cliff. However, due to the sheltered character of Driftwood Cove, with bouldered promontories to both east and west, the bluff is stable to the extent that flanking erosion of the bluff to the west of Stone House is not dramatically different from the armored area.

East of Stone House various efforts at revetments and drainage diversions on the Avedon and Beard properties have attempted to stabilize the bluff, with no greater success. In landscaping the bluff these projects have eliminated the dramatic hoodoo formations unique to the area. These formations are an unusual artifact of erosion forces on the clay bluffs, so their preservation as a scenic native land form conflicts with erosion control efforts that involve regrading, terracing or revegetating the bluff face. From time to time similar proposals are considered by the Zoning Board of Appeals for adjacent sites.

Concrete rubble and other remnants of World War II military installations at Camp Hero are occasionally dumped out on the beach by storms and the natural recession of the shoreline.

At the Montauk Shores condominium trailer park just east of Ditch Plains the beach begins to narrow starting from the Otis Avenue groin toward the eroding headland at the east end of the trailer park. In the same distance the bluff ascends from 2' to about 10' at the headland, which marks the beginning of another cove cell with bluffs rising 20-30'. Rock and concrete rubble have been placed on the beach as riprap at the eroding east end of Montauk Shores, and the cobbled beach though steep, affords some dissipation of wave energy. There are three wooden stairway access structures at intervals over the length of Montauk Shores. Water seeps out of the bluff at several locations. What appear to be cesspools and remains of concrete drainage rings are out on the beach at several

locations. Montauk Shores condominium applied to construct an additional revetment following erosion from the 1992-93 winter nor'easters but no action has yet been taken.

No other coastal structures of significance are present along the Atlantic shore of Reach 8.

(d) Flooding and Erosion Zones

FIRM's #360794 -0001D, -0003D, and -0005D, dated 5/18/92 show V-zones along the entire Atlantic Ocean shoreline of Reach 8, extending inland somewhat at the lower elevation of the Montauk Shores condominium. A-zones surrounded by B-zones encompass the low area of wetlands extending toward the ocean south of Deep Hollow Ranch into the Warhol Estate.

The SLOSH model (Montauk Point Quadrangle, drawing #R2) indicates a that a flood corridor could form through Montauk Shores condominium in a Category 2 hurricane, with additional inundation of the Warhol Estate wetlands and complete isolation of Montauk Shores condominium in a Category 4 storm.

CEHA areas (Photo map #7-455-83, sheet 15; #7-459-83, sheet 16; #8-1200-83, sheet 17; and #9-172-83, sheet 18) include all of the shore and bluffs of Reach 8 along the south shore, including the Stone House, several of the perched ponds on the bluffs, and the southern edge of the Montauk Shores condominium.

(e) Analysis

The spectacular hoodoo bluffs and cobbled beaches of this reach, though isolated, have unique scenic and geologic value to the community and for the entire east coast. The storm-driven waves of the Atlantic and the geologic, hydrodynamic and erosionary forces that produced these formations dwarf man's efforts to control them, and except where historic or biologically unique resources are at risk the natural systems should be left intact.

The Montauk moorlands ecosystem in the upland portion of the reach supports many rare indigenous and endangered plants (see **Significant Habitats Policy #7**), and the perched ponds and wetland systems periodically flood and drain naturally. Where minimal interventions, such as enhanced drainage via a simple pipe, can prevent loss of these significant habitats, such measures would be consistent with the goals of this plan.

The high proportion of public ownership permits a generally laissez-faire policy for much of this reach. Where larger tracts of undeveloped land remain in private hands, extended coastal setbacks and low density development should be required in order to preserve these unique features and natural coastal processes. Where possible, public acquisition of remaining undeveloped lands should be pursued (see **Development Policies #1-6** and **Appendix B**). Problem areas remain where residences have been constructed overly close to the striking ocean vistas of the bluffs. Because of the sparse distribution and large lots, homes can generally be moved back from the receding bluff rather than permit erosion protection structures to interrupt natural littoral systems and storm-generated transformations.

At the Montauk Shores condominiums, approximately 200 mobile homes and cottages front on 920' of the ocean. Recent winter storms exposed septic systems and encroached on residential lots. Some of these homes are classified within the CEHA hazard zone and most are also within the V-zone for NFIP. The NFIP flood hazard designation requires hurricane straps for mobile homes. However, none of the mobile homes observed have complied with this safety requirement. The development was recently converted to condominium ownership. As the only waterfront high density residential area in Reach 8, other than the affordable housing project in Camp Hero, hurricane evacuation from Montauk Shores is a necessary concern. Particularly with respect to residences within the CEHA zone, this area deserves further examination in the *Hurricane Damage Mitigation Plan* (see **Projects**).

A rock revetment has been proposed to armor the bluff toe at the east end of Montauk Shores. The relatively low height of the bluff (ca 10'), the high energy wave environment, the narrow beach, and the proximity of the first row of trailer homes to the bluff edge all indicate that the project would have limited effectiveness over any but the very short-term. A revetment here would not be really effective without being high enough to obscure the ocean view. Where the bluff descends toward Ditch Plains at the western end of Montauk Shores, there is a wider beach affording some natural protection, the result of updrift accretion from the Otis Avenue groin (see Reach 9).

9. Reach 9 -- Hamlet of Montauk/Hither Hills

(a) **Description**

Reach 9 varies from knob and kettle and outwash terrain of the moraine in its eastern and western extremities, to a sandy floodplain deposited by littoral drift in the Montauk hamlet area. At the eastern extremity of the reach, Ditch Plains is a low wetland area that was ditched and drained in the 1950's for housing development. This artificial drainage system is unusual in that water flows north into Lake Montauk through several surface and subsurface watercourses instead of south into the ocean. Because of the high groundwater condition, septic infiltration has been an ongoing source of pollutants into the south end of the Lake, especially in heavy rain or flood conditions. Several attempts at drainage diversion by the Town and NYS DOT have not improved the situation. The Town Natural Resources Department and Concerned Citizens of Montauk are in the design phase for construction of a series of marsh ponds to impound and filter runoff and pollutants from the area (see **Water & Air Resource Policies #30-44**, especially **Non-Point Discharges #37**).

The Town bathing beach at Ditch Plains is an important tourist and recreational facility, both for swimming and as a mecca for surfers. 30-50' bluffs in the section west of Ditch Plains continue the hoodoo formations of fluted clay formed by the erosive forces of waves, wind, rain, surface seepage, and freezing and thawing. The fronting beaches are relatively narrow and boulder strewn, and there are numerous trails atop the bluffs and upland through the undeveloped Montauk moorlands tract, known as Shadmoor. In some cases, particularly where ORV's have driven along the bluff top, overuse of the trails has accelerated destabilization and consequent erosion of the bluff.

The Montauk hamlet to the west is the center of business and resort activity for the area, with numerous motels along the oceanfront, many of them built into the dunes themselves, and a busy

downtown area extending to the traffic circle presided over by East Hampton's sole six-story "skyscraper". The Town's Kirk Park is located along the beach with a large paved parking lot just behind the primary dune. Virtually all of the business area is within the hundred-year floodplain. However, since most construction predates the NFIP, little of it adheres to NFIP floodproofing standards.

West of the business area the terrain again ascends to 50' morainal bluffs, with generally more outwash than the eastern sector between the moraine and the beach. The beach throughout this area is also wider and sandier due to deposition from littoral drift, and the bluffs are generally less steep, better vegetated and more stable than those to the east. West of the business area a substantial portion of the brushy upland between Old Montauk Highway and the bluff edge is in the Benson Reservation, an undeveloped buffer which provides access and uninterrupted vistas to the Atlantic, as well as containing a dune/bluff ecosystem. Further west buildings are again present on the south side of Old Montauk Highway including residences and several resort hotels, with Gurney's, Panoramic View and Wavecrest built into the actual slopes of the bluff. In the last fifty years these bluffs have not retreated extensively due to the infrequency of severe hurricanes hitting on high tides and the tendency of this beach to accrete from littoral drift. However, winter storms of the '93-94 season severely narrowed the beach and eroded the bluff toe, to an extent that drainage and other structures were exposed or washed out onto the beach.

(b) Natural Protective Features

Natural protective features in Reach 9 can generally be characterized by the four primary types of terrain: the wetlands, dune and beach system at Ditch Plains; the hoodoo bluffs to the west; the beach and dune system bordering the Montauk business area; and the sandy beaches and sloping bluffs of the Hither Woods moraine.

The fronting beach and dune system at Ditch Plains is both an important recreational facility and protects the upland areas by dissipating wave energy. Both the sandy beach and the low dune backing were subject to extensive erosion and loss of sand in the 18 winter storms of '93-94, which made up in frequency what they lacked in severity, and left the beach with an exposed cobble base that was uncomfortable for bathers. The Town, concerned about the condition of the beach for summer use, and having just completed a new comfort station and paved parking area, in June '94 decided to place sand on the beach to make it usable for the summer. The subsequent '94-95 winter storm season was less severe, and although there was some continued erosion at the toe of the dune and the beach remained narrow, by summer most of the cobble remained covered by sand. In mid-August 1995, heavy surf from Hurricane Felix, which hovered well offshore for several days before drifting out to sea, again reduced the beach to cobble and caused additional toe erosion. The Town again placed sand from dredge spoil on the beach in 1997. Aside from reducing use of the bathing beach, there is concern that alteration in the dune profile may increase the potential for overwash into the residential area in storm conditions.

In terms of coastal dynamics Ditch Plains functions as a somewhat distinctive cell of the scalloped cove coastline extending through the bluff section of Montauk. The Otis Avenue groin, constructed in the late 50's- early 60's, while somewhat porous and deteriorating, contributes to scouring at Ditch

Plains beach. According to coastal geomorphologist Jay Tanski (site visit 5/19/94), it is less of an erosion factor than the onshore wave action in storms. Fred Anders, Coastal Hazards Specialist, NYS DOS, believes the Otis Avenue groin is a significant contributor to the erosion at Ditch Plains (site visits 3/28/95, 5/6/98). Aerial photographs tend to bear out this hypothesis, which suggests shortening or removal of the groin as one possible remedy. The Town Board has authorized an intensive study of these erosion factors and possible solutions, and as of December, 1997 had obtained a matching grant to determine causes and solutions for the erosion problems at Ditch Plains (see **Projects**).

Just west of Ditch Plains, there appears to be a large cache of sand offshore of Rheinstein Park, which when wave direction changes, may constitute a natural sand reservoir to replenish the Ditch Plains beach. Prevailing southwesterlies may bring sand back in to the beach from these offshore bars. The Town Natural Resources Department has periodically installed snow fence along the dune toe to capture wind blown sand and allow dune vegetation to reestablish itself. Long-term monitoring of beach profiles has also been begun as part of the *Town's Beach Monitoring Pilot Project* (see **Projects**).

The situation at Ditch Plains is an example of the powerful erosionary forces at work along the ocean shore in Reach 9 and the effects of an erosion protection structure in a high-energy ocean environment. The great variability in the onshore sediment budget and consequent beach width, and shoreline recession may begin to threaten upland development in the Ditch Plains subdivision.

The hoodoo bluffs fronting the Shadmoor tract have similar characteristics to those in Reach 8, with similar concerns about their preservation as an intact natural system. This unique coastal morphology and the related upland should be a primary focus for preservation efforts at all levels of government.

The dune system that protects the Montauk business area is in a dangerously depleted condition, both from unregulated pre-zoning construction with inadequate setbacks, and storm events that have cut back the existing beach and dunes. A large unvegetated indentation seaward of the wooden catwalk from the parking lot near the Montauk IGA supermarket at Kirk Park is evidence of the heavy pedestrian traffic on the dunes. Behind the dune the cleared parking lot for the park and for the supermarket continue the unvegetated area. This is also the closest point in the business area to the southern end of Fort Pond, so the potential for a storm surge to breach the dune and open a flood corridor from the Atlantic to Fort Pond Bay or vice versa at this point is significant (see SLOSH).

The Town owned beach all along South Emerson Drive in the Montauk business area has suffered from cutbacks in the dune from winter storms. There are access points to this beach via road ends at South Embassy Street, Emery Street, and South Eton Street and also via the wooden catwalk, as well as several sand paths crossing the dune. The latter two road ends ascend 8-10' to cross the dune and their use by beach vehicles with consequent ruts and impact on vegetation increases their tendency to blow out from winter winds.

As noted, the bluff and beach profiles along Old Montauk Highway west of the Montauk business area are relatively stable. However, winter storms of the '92-93 season made inroads into the toe of the bluff and greatly narrowed the beach before onshore winds began to bring sand inshore for the summer. Beaches remained unusually narrow following the '93-94 winter storm season, and the normal seasonal accretion of the '94 summer.

A catastrophic storm could radically alter the dynamic equilibrium of bluff and beach in this area. At the time of the last revision of the Town Code property owners maintained that the bluff in this area was stable and well vegetated and convinced the Town to measure bluff setbacks from the bluff toe rather than the top of the bluff, effectively reducing setbacks. In light of beach and bluff erosion from the recent storm activity this policy bears reexamination.

(c) Coastal Structures

A single 150' stone groin at Otis Avenue, installed some 30-35 years ago, constitutes the only sizable hard erosion control structure in the reach. It has caused evident scouring to the west at the Ditch Plains bathing beach.

Riprap and rubble placed along the beach to protect the Montauk Shores trailer park condominium just to the east in Reach 8 may also influence erosion at Ditch Plains. Proposed revetments to protect Montauk Shores could further aggravate this situation.

Numerous (30-50) stairways, paths and walkways for private and common use traverse the bluffs and dunes extending west to Hither Hills Park, in some cases damaging or interrupting natural vegetation. Any opportunity to reduce or consolidate the number of accesses should be taken advantage of here to help reduce the harmful impacts.

Several of the Old Montauk Highway resorts, including Gurney's and Wavecrest, have some structures and drainage installations that are situated, for all practical purposes, on the beach itself. While not erosion control structures, in overwash or catastrophic storm conditions some of this construction will be in the surf zone and will interfere with natural overwash, probably increasing localized erosion.

(d) Flooding and Erosion Zones

The FIRM's (#306794 -0005D dated 5/18/92, and -0007C, -0008C, and -0009C, dated 2/19/87) indicate V-zones along the entire Atlantic shoreline of Reach 9. The V-zone extends inland at Ditch Plains, and again at the Montauk business area to include the motels along South Emerson Street. A-zones cover the remaining area between Ditch Plains north to Lake Montauk, except for an area of B-zone; and from the south end of Fort Pond to the V-zone along the Ocean. The high density of residential, commercial and resort development in these areas constitutes the most concentrated liability for storm-driven flood damage in the Town.

The SLOSH model (Montauk Point Quadrangle #R2 and Gardiner's Island East Quadrangle #Q2) shows that in a Category 2 hurricane much of the Ditch Plains area could be overwashed, possibly with a breach through to Lake Montauk. This becomes a greater probability in a Category 3 or 4

storm, which could also breach the ocean dune just west of the hamlet, connecting the Atlantic and Fort Pond Bay and causing an extensive overwash of the business area, with consequently increased destruction of property and significant erosion of the ocean bluffs to the east and west.

CEHA photo maps (#7-443-83 sheet 10, 7-447-83 sheet 11, 7-451-83 sheet 12, 7-455-83 sheet 13, 7-459-83 sheet 14 and 7-455-83 sheet 15) show part of the East Deck Motel within the hazard zone, a residence just east of Rheinstein Park at Ditch Plains, and the ocean bluffs along the Shadmoor parcel within the CEHA zone. The dunes and the beachfront motels on the south side of South Emerson Avenue in the Montauk business area are also in the CEHA, as are the dunes and bluffs extending west in the Benson Reservation, some of the southerly units of Gurney's resort complex, a corner of the Panoramic View hotel, and some units of the Wavecrest. Immediate dune and blufff areas and associated structures along the entire reach are generally contained within the CEHA zone.

(e) Analysis

The intense wave energies of storms focused on the Atlantic Ocean shore dictates prudence in attempting to divert or disrupt these awesome forces with engineered structures. Use of structural erosion solutions in other locations on the south shore has had predictably negative consequences on downdrift and neighboring areas, which have occasionally been catastrophic, as at Westhampton Beach, or progressively harmful as with the effects of the Federal groins in East Hampton Village on the beach at Wainscott. The single hard erosion control structure in Reach 9, the Otis Avenue groin, produces scouring on the public beach at Ditch Plains immediately to the west. An opportunity still exists to preserve the natural coastal processes for the remainder of this reach, and the Town should prohibit any further installations of hard erosion protection structures along this highly dynamic shore. The entire shoreline of the reach is designated Condition 1 on Flooding and Erosion Protection Map V-2.

Ditch Plains is especially vulnerable as a low-lying floodplain with relatively little distance between the Atlantic Ocean and Lake Montauk, and because of the potential for storm surge overwash in a Category 2 or greater hurricane. The Ditch Plains wetland system has great floodwater retention capacity. However, it channels water back into Lake Montauk because of artificial drainage projects dating to the 1950's. Floodwaters accumulate rapidly in the system, and in case of a catastrophic storm or overwash from a hurricane surge (see SLOSH), it would become a major flood corridor between the Lake and the Ocean. If the Atlantic Ocean and Lake Montauk were to merge at Ditch Plains, the destruction of homes and property would be substantial. Again, this area should be included in a Town *Hurricane Damage Mitigation Plan* to encourage flood-proofing and other mitigation measures in the wake of a storm. In addition, because of the beach's recreational importance the Town may need to consider ongoing beach nourishment, dune enhancement or other conservation measures to provide flooding and erosion protection and maintain the beach.

The best protection from storm related flooding and erosion remains the natural bluff and dune systems, and beaches replenished by littoral processes. Planting additional beach grass, revegetating dunes with native species or encouraging dune formation by trapping sand with snowfencing are well-proven ways to enhance these resources. The Town is exploring using non-structural or soft

solutions to the erosion at Ditch Plains, and is studying the causes and possible mitigation with the aid of a consultant (see **Projects**).

At Kirk Park, heavy pedestrian traffic has caused significant beach grass loss at the boardwalk over the dune. Snow fencing and beach grass planting can be used to revegetate the area and to make it continuous with the rest of the dune line. Artificial reconstruction of the dune here may also be desirable. This location is of particular concern because of the potential for a hurricane storm-surge overwash, which could conceivably connect Fort Pond Bay to the Atlantic through Fort Pond, wreaking havoc in the low-lying Montauk business area just behind the dune. Not only the storm surge itself, but the "ebb surge" of escaping floodwaters trapped behind the dune, and wind and wave-driven debris would cause additional damage.

The Montauk business area should be evaluated in the proposed *Hurricane Damage Mitigation Plan* and *Revitalize Hamlet of Montauk* (see **Projects**), including restoring and rebuilding the natural protective features, floodproofing structures and other mitigation measures in the wake of a catastrophic storm. Structures within the CEHA zone should be given particularly careful consideration. If recurrent storms or rising sea-level cause further deterioration of the dune system protecting the Montauk business area, more comprehensive management measures such as an erosion control district may also need to be considered. Shoreline recession rates should be established by beach profile monitoring and historical shoreline analysis (see also *Erosion Monitoring* in **Projects**).

Along the bluffs of Old Montauk Highway, where resort structures are in the CEHA zone, the Town established reduced bluff setbacks, measured from the toe rather than the edge of the bluff, originally on the assumption that this is an accreting and stable, rather than retreating shoreline. Judging from the effects of storm activity in 1993-94 this is probably not the case. The Town should eliminate the reduced bluff setbacks, and bring them into line with the rest of the Town. Historical shoreline change analysis should be used to confirm erosion rates in the area, and monitoring should be instituted on an ongoing basis (see **Projects**). If a catastrophic storm substantially damages or destroys these structures, particularly those within CEHA zones, they should not be rebuilt, and native plantings should be used to stabilize the bluff.

At Gurney's Resort on Old Montauk Highway, part of the dune area has been used for a refreshment and towel stand on the beach and for additional guest cottages which are almost on a level with the beach. These lower structures of the resort complex are vulnerable to hurricane flooding and erosion, a risk increased by the lack of a protective dune or a vegetative buffer. The upper beach should be revegetated and these structures should not be rebuilt if substantially damaged or destroyed.

Neighboring Panoramic View resort, to the immediate west, has done a better job of preserving their dune system and utilizes a minimal pedestrian path for access to the beach that has maintained vegetative cover. The bluff in the immediate area is well vegetated, gently sloping and appears fairly stable. However, several private residences, including some of recent construction, have been built

near the toe of the bluff close to the beach, and these dwellings would be at risk in storm surge conditions. The homes built higher on the bluff are at less risk of tidal and storm flooding.

Effects of recurring storms and sea-level rise on the resorts along this section of Old Montauk Highway may eventually precipitate reexamination of land use patterns and zoning. For instance, in the eastern section of Old Montauk Highway approaching the business area, the Benson Reservation provides an extensive well-vegetated buffer zone which protects homes on the north side from flooding and erosion, as well as preserving the scenic water views from the Old Montauk Highway. This buffer is absent from Davis Drive west to the reach boundary at Hither Hills State Park. The Town may wish to institute a similar buffer for this western stretch. This analysis should be performed as part of the *Hurricane Damage Mitigation Plan* (see **Projects**).

The capital investment in resort facilities built on and into the bluffs will surely generate emergency requests for reconstruction in the wake of a storm, and therefore the Town should plan before the event and establish priorities and procedures while cooler heads prevail. Because of the resort businesses, calls for protective hard structures may also be anticipated. Use of shore hardening structures in CEHA zones is discouraged by the CEHA law and should not outweigh potential damage to public resources. As noted at the beginning of this reach analysis, it is recommended that hard erosion protection structures not be permitted on the Town's south shore Atlantic Ocean reaches.

10. Reach 10 -- Napeague South/Amagansett

(a) **Description**

The area of Reach 10 extending from Hither Hills west to Amagansett is characterized by beaches and dunes associated with the tombolo complex of spits which formed Napeague. Sediment deposition from the Montauk headlands carried by littoral drift continues to build this area, and it is one of the few reaches where beaches are generally accreting rather than receding.

Because of its composition, much of Reach 10 exhibits characteristics of a barrier beach rather than the outwash plain or morainal structure common to other reaches in the Town. These include the broad sandy beach and dune system, backed by low backshore areas such as the wetlands of Napeague Harbor. Barrier beaches and dune systems tend to be highly mobile land forms, which may present future problems for development in this area.

A large section of the Napeague beach, mostly within Napeague State Park, is a designated CBRA zone in the Federal Coastal Barrier Resources System. The CBRA zone does not include the residential development within the Montauk-By-The-Sea subdivision and also excludes other residential areas. It extends from the bay in Reach 4 through Napeague Harbor to the ocean in Reach 10, an indication of the potential for storm surge overwash and possible breach in this area. Much of this CBRA zone is also a State designated SCFWH. The 490-acre tract of undeveloped parkland consists of sandy beaches and primary dunes with elevations to 20'-30' above MSL, some of which are well vegetated.

A second Reach 10 CBRA zone is located in Amagansett extending through the National Wildlife Refuge and The Nature Conservancy land in the double dunes system from Atlantic Avenue to west of Indian Wells Highway.

The majority of development along this Napeague stretch, consisting of multifamily condominiums, single family residences and several restaurants, is contained within the NFIP Velocity (V-) Zone. Elevations range from 24' along the dune ridge to approximately 3' above MSL at roadside. The inland area contains numerous freshwater wetlands and is primarily within the A8 Flood Hazard Zone. This low area periodically experiences flooding problems from heavy rains and/or coastal storm overwash.

Bluff Road to the west represents an ancient shoreline cliff, or fossil bluff, cut into the Ronkonkoma outwash plain by wave action. A complex system of dunes known as the Atlantic Double Dunes evolved between this ancient shoreline and the present shore, now separated from the fossil bluff by distances up to about 1/4 mile in the area south of Bluff Road between Atlantic Avenue and Indian Wells Highway. Formed by littoral drift and wind and water erosion, the topographic features of the double dune system include a wide sandy beach, a primary dune, inter-dune area and secondary dune. The system is further characterized by interdunal swales, frequent ponds and numerous boggy areas, with unusual and fragile plant communities including lichens and a forest of native shadbush. This dune system has one of the largest remaining areas of undeveloped barrier beach with an accompanying back dune ecosystem on Long Island.

The Atlantic Double Dunes system extends from Napeague Beach west to the Town's boundary with the Village, interrupted by access roads to public beaches and areas of development. (Nature Conservancy, 1978). Some 200+ acres along 3.2 miles of shoreline have been acquired for conservation purposes. The remaining land is mostly privately owned and some areas, such as Beachampton, have intensive development of resort homes on small lots. Additional subdivisions extending to the western border of the Napeague Beach State Park were approved by Town governments of the 1970's in sensitive areas of the Double Dunes, which could be subject to overwash in a Category 2 or greater hurricane. Most of the residential construction has occurred since the last major hurricane in 1938, when a massive overwash of the Napeague isthmus occurred. Montauk was cut off by flooding in Napeague for nearly a week, and some structures in the dunes in Amagansett were destroyed. Many residences and structures in Reach 10 would be at risk from flooding and erosion in a similar event today, and from any storm that breaches the primary dune.

(b) Natural Protective Features

In common with Reaches 9 and 11, Reach 10's primary protective features are its beaches and dune system. Because of the Napeague State Park and Amagansett Double Dunes preserves, significant acreage is held in relatively undisturbed natural areas. Unfortunately the isolated character and remote location of many of these areas make them attractive for users of ORV's, and in some locations ORV's have damaged features or prevented regrowth of the fragile vegetation which stabilizes the dynamic dune system. The Town Trustees believe that damage caused by irresponsible ORV use can be minimized, or eliminated, by increased enforcement of existing laws which are

specifically designed to prevent such damage, while at the same time permitting responsible ORV use.

As noted above, because of the depositional nature of much of the reach, it exhibits many characteristics of a barrier beach, including a highly dynamic and somewhat migratory coastline and normally wide sandy beaches with an offshore bar that builds and recedes seasonally. The dune system is also subject to fluctuation through normal processes of aeolian deposition and occasional blow-outs. The primary dune is the defensive barrier to storm events which may cause cycles of substantial erosion, later rebuilt by winds and seasonal fluctuations of the beach and the anchoring effects of opportunistic vegetation such as beach grass. Dune building can sometimes be aided by minimal human intervention.

At the Navahoe Road access point, a well designed dune restoration project using snow fencing has successfully trapped sand. The access path traverses a high dune which appears to have been in danger of blowing out. The access path is well defined and protected by the snow fencing to give the dune an opportunity to revegetate itself. Following the '93-94 winter storm season the beach was unusually narrow, and remained at a reduced width beginning through the '94-95 winter.

At the Dolphin Drive/Atlantic Drive access point, a storm-narrowed ocean beach left the area vulnerable after the '93-94 winter, and prevailing southwesterlies did not rebuild the beach to normal post-summer widths. Because of the narrow beach, ORV's are driving high up on the beach close to the beach grass line, preventing it from regenerating in some places, and restricting nesting area for colonial shorebirds.

In general where residential construction, ORV intrusions or road-ends make breaks in the primary dune, storms can open flood corridors that will impact the residences sheltered behind the dunes. This is evident in locations such as the east end of Marine Boulevard, where constant use by ORV's has decimated a dune and attendant vegetation, opening a new flood corridor during Hurricane Bob in 1991, which has since flooded repeatedly in winter storms. The Town Trustees wish to point out that the east end of Marine Boulevard has been used for access for many years, and wish to see the access maintained and improved so as to afford safe passage to vehicles traversing it.

Dune scarping occurs routinely from storm tidal surges, but generally repairs itself over time through normal littoral, aeolian and vegetative processes where structures, road-ends and other human activities do not interfere. As noted in the *NYS Coastal Erosion Task Force Report*, "Research suggests at least 100 ft of dry beach is needed in front of a dune to ensure natural maintenance." (NYS DOS, 1994) Much of Reach 10 normally enjoys beaches of this magnitude, though they were severely narrowed by the winter storms of 1992-93 and 1993-94, and have only partially recovered since.

The Double Dune system constitutes an additional buffer for coastal erosion and flooding and in areas where the interdune and secondary dune remain intact, forms a significant catchment basin for absorbing and dissipating floodwaters. In Double Dune areas such as Beachampton where the interdune has extensive residential construction, a hurricane tidal surge breaching the primary dune

would be partially impounded between the primary and secondary dunes and would likely cause considerable secondary property damage during the "ebb surge" as debris is circulated by receding floodwaters. This possibility should be further evaluated in the proposed *Hurricane Damage Mitigation Plan* (see **Projects**).

(c) Coastal Structures

Shore-hardening structures have generally not been permitted or constructed in Reach 10, except for one isolated shore-parallel rock revetment (known by the lawsuit it engendered, Pappas-Leeds) buried in the primary dune in front of a residence west of Napeague Lane. To date it has only been rarely exposed, and its impacts therefore not apparent. Other than soft erosion solutions such as snow-fencing and beach grass planting, and the disruptions caused by beach vehicles and heavy pedestrian use by summer bathers, coastal processes in the reach remain in a largely natural state. Paved road-ends with associated parking, ORV access points, and dune-transiting catwalks and stairways constitute the only prevalent breaks in the primary dune system.

Some residences on Marine Boulevard not constructed to NFIP or CEHA standards are built on top of or into the landward side of the primary dune. In severe storms or as the dunes continue to migrate landward, they may eventually act as waterfront structures that will chronically interact with storm tidal surge or floodwaters, with consequent scouring of adjacent beaches.

(d) Flooding and Erosion Zones

NFIP FIRM's (# 360794 -0009c dated 2/19/87, and # 360794 -0013E, -0017D, -0020D, and -0023D dated 5/18/92) show Reach 10 to be one of the most vulnerable to flooding in the Town, indicating V-zones along the entire Atlantic shoreline, extending inland, starting from the east to include the campground and the back dune wetlands in Hither Hills State Park, much of the dune and residential area to the south of Napeague Harbor, the dune areas along the ocean extending through Napeague State Park to the east end of Marine Boulevard in Amagansett, and much of the residential section of Beachampton closest to the ocean. A-zones back the V-zone throughout the reach, and include most of the back dune area from the intersection of Old Montauk Highway through the motel and residential areas of Napeague and Beachampton to the Village line.

The SLOSH model (maps from Gardiner's Island Quad #Q2, Napeague Beach Quad #Q3, and East Hampton Quad #P3) for Reach 10 also indicates extensive flooding potential from hurricanes. In a Category 2 storm SLOSH shows potential overwash of the dunes in Hither Hills, and Montauk Highway could be overwashed from Napeague Harbor and Napeague Bay in the areas immediately south of the harbor, and at Cranberry Hole. The Double Dune system could flood from Atlantic Avenue to a point south of the intersection of Skimhampton Road and Further Lane.

A Category 3 hurricane could cause near complete inundation of Napeague from both the harbor and the bay, with the ocean breaking through to join the bay. Most of Beachampton could be flooded.

In the more substantial overwash from a Category 4 storm, Napeague could be completely overwashed, as with the Double Dunes up to Bluff Road and along Further Lane, with a significant inland flood corridor opened up along Indian Wells Highway. Virtually all of the residential

construction in Napeague and south of Bluff Road, which constitutes most of the homes in Reach 10, could be at risk in such a storm.

Because of the relative lull in severe hurricanes since 1938, and because recent hurricanes, such as Gloria ('85) and Bob ('91), lost force or did not strike on high tide, present residents have never experienced the direct impact of a major hurricane. In contrast, the SLOSH model suggests that a direct hit by a Category 3 or 4 hurricane could damage or destroy most of the residential construction in Reach 10.

CEHA photo maps (#7-414-83 sheet 3, #7-418-83 sheet 4, #7-422-83 sheet 5, #7-426-83 sheet 6, #7-431-83 sheet 7, #7-435-83 sheet 8, #7-439-83 sheet 9, and #7-443-83 sheet 10) indicate erosion hazard zones covering all ocean beach areas and much of the dune lands in the reach. Considerable residential and resort construction is at risk in the hazard zone, including: seaward units of Driftwood, Sea Crest, Driftwood Shores, Ocean Colony and White Sands motel/condominiums in Napeague, plus a residence on the beach between Driftwood Shores and Ocean Colony, and a house south of Shore Road; the dune areas of Napeague State Park; houses at the end of Whalers Lane and Raymond Lane; houses on the south side of Marine Boulevard and at ocean road-ends in Beachampton; the sole beach house between Atlantic Avenue and Indian Wells Highway; and the unpopulated Double Dunes system south of Further Lane in Amagansett. Although CEHA in general regulates construction in secondary dune systems, in spite of the extensive secondary dunes in Reach 10, to date they have not been included by NYS DEC on the CEHA photo maps.

(e) Analysis

Proximity to the Atlantic and low-lying topography behind the dune system make Reach 10 one of the most vulnerable in the Town to flooding and erosion, with Velocity (V-) flood zones backed by A-zones along the entire shoreline, and numerous structures within the CEHA zones. Since the beaches and dune system provide the primary and best defense against storms and the elements, everything possible should be done to keep these natural features intact, and to discontinue practices that degrade them. Fortunately much of Reach 10 is in an area where littoral deposition has caused long-term accretion and widening of the beach. This does not forestall extensive erosion during storms, or the need for stringent conservation.

Town maintained road-ends provide public access, but also are significant potential flood corridors, and means of restoring dunes and revegetating these areas should be considered. The Town would do well to consider closing off and revegetating paved road-ends in a manner that would restore the primary dune while still providing parking, and visual, pedestrian and limited vehicular access. In Reach 10 these road-ends include Navajo Road, Dolphin Drive, Atlantic Drive, Napeague Lane, the east end of Marine Boulevard, Atlantic Avenue, and Indian Wells Highway. The Village-maintained beach at Two Mile Hollow is a possible prototype, where a low vegetated dune provides a view from the road end, but ORV and pedestrian access is provided through side corridors and a path to the beach (see **Projects**). While the Town Trustees believe that restoring the primary dune is a worthy objective, they do not wish to see further limitations on vehicular or pedestrian access to the beach, and believe all revegetation should be accompanied by alternate access at the revegetated site.

ORV use for fishing and recreation in Reach 10 is widespread and has caused significant damage at access points such as the east end of Marine Boulevard; to the dunes and back dune area in Napeague State Park; and to beaches, where beach grass regrowth is retarded, especially after major storms. Flooding and erosion in Reach 10 will continue to increase if beach vehicle traffic is not reduced, and restrictions are not strengthened to prohibit vehicles within a minimum of 20 feet from the beach grass line. This is the subsurface length of beach grass root runners, and the standard used in Fire Island National Seashore. In addition plant communities must be given time to naturally reestablish following major storm events. Post-storm moratoria on beach vehicle use should be routinely considered based on minimum beach width to allow beach grass to regenerate and the vegetation line to be redefined. Besides flooding and erosion considerations, Napeague Beach and the Atlantic Double Dune preserves are State designated SCFWH's, and ORV restrictions should be enforced to limit detrimental effects on nesting habitat of colonial shorebirds (see **Significant Habitats Policy #7**).

Note: The Town Trustees, unanimously (1999), do not support further restrictions on beach vehicle use. In many areas of the Town, beaches would be completely inaccessible to residents if they were not permitted to drive on the beach. Many waterfront, and near waterfront, owners seek to "privatize" the beaches in their neighborhood. For example, there are 'no parking' signs on virtually all roads, public and private, within walking distance of the ocean beach (except for a few road ends). Also, many areas, such as Beach Hampton, have private walkways over the dunes which are not open to the general public. On busy weekends, these walkways are policed by individuals who require proof that walkers are resident within adjacent subdivisions. As to damage at access points such as Marine Boulevard, as stated above, the record shows that the access is through an "existing natural gap in the dunes". Current restrictions prohibit travel within 50' of the beach grass line "where possible". The Town Trustees would consider an amendment to the current regulations to prohibit parking within 20' of the beach grass line. No data is supplied to indicate how long it takes for beach grass to regenerate and the duration of any resulting moratorium. The Town Trustees have steadfastly monitored and protected the nesting habitats of colonial shorebirds, while at the same time protecting the public's right to use and enjoy the beach.

Additional conservation recommendations for the Double Dunes area include selective use of snowfencing to close blowouts in the dune and trap sand, beach grass planting, consolidation of access paths to the beach, and annual evaluations of erosion conditions each spring. (TNC, 1978)

Shore-hardening erosion control structures have not been utilized in Reach 10, with one exception, and the Town should continue this policy by prohibiting hard erosion protection measures in Reach 10 for the foreseeable future. The same conclusions regarding dynamic coastal conditions and potential problems of erosion protection structures along the ocean discussed in the Reach 9 analysis apply to Reach 10. All of Reach 10 is designated Condition 1 on Flooding and Erosion Protection Map V-2. Where property or residential structures become threatened by erosion or receding shorelines due to storms, sea level rise, or natural migration, the integrity of the primary dune system should be maintained by setbacks and soft solutions such as dune rebuilding and revegetation.

Although CEHA regulates construction and other activities on both primary and secondary dunes, the extensive secondary dunes in Reach 10 have not been included on current CEHA photo maps. Their inclusion is recommended in any future remapping by New York State, and/or adoption of local administration of CEHA. Local administration of CEHA would help to integrate State and local planning measures, and provide more rapid permitting responses to residents in the wake of a storm.

As the SLOSH model demonstrates, Reach 10 is potentially vulnerable to overwash from severe (Category 3 or 4) hurricanes. The reach contains dense concentrations of resort homes in Napeague and Beachampton, as well as some of the Town's most luxurious oceanfront homes along Further Lane in Amagansett. A large proportion of the Town's most valuable oceanfront property is at risk here.

Pre-storm planning initiatives to mitigate future flooding and erosion related damage in CEHA hazard zones, V-zones, etc. should be instituted through the *Hurricane Damage Mitigation Plan* (see **Projects**) or other planning mechanisms in cooperation with NYS and Federal NFIP authorities. The *NYS Coastal Erosion Task Force Report* should be further consulted for policy guidelines. Some of the *Task Force* recommendations can perhaps be implemented immediately, such as mandatory subscription to NFIP, which would help to mitigate some storm-related costs. The Town should also consult with private insurers and local agents as well as the NFIP to set up a framework for rapid assessment and repair of property damage in the aftermath of a storm.

Town efforts to provide responses to flooding and erosion problems in its coastal zone are interrupted by the municipal boundaries of East Hampton Village located between Reaches 10 and 11. To insure consistent coastal zone management the Village should be encouraged to undertake its own LWRP, and to provide consistency review with the relevant policies of the Town. This is especially true as regards hard erosion protection structures along the ocean beaches, where rock revetments are more the rule than the exception in the Village, and a series of stone groins is present on the ocean shore.

11. Reach 11 -- Wainscott

(a) **Description**

The terrain of Reach 11 is flat and sandy, consisting primarily of outwash plains, the ocean beach and dune system, and two coastal ponds, Georgica Pond and Wainscott Pond. The ponds were originally glacial drainage basins which were drowned by the rising sea level and subsequently closed by littoral drift.

The beach in Reach 11 acts as a simple barrier, lacking an interdunal buffer or back dune system as is present in the Double Dune system of Reach 10. The transition from the beach and primary dune directly to the outwash plain and coastal ponds leaves the backdune area more vulnerable to coastal flooding and to erosion and overwash from a storm surge.

Both of the ponds are locally designated SCFWH's (see **Significant Habitats Policy #7**), therefore particular consideration should be given to preventing habitat degradation in any applications for structures in their vicinity. Also, the wetlands bordering the ponds act to absorb and buffer floodwaters and any decrease in their capacity from bulkheading or filling will increase the sensitivity to flooding.

Georgica Pond is prone to substantial fluctuations in water level, resulting in periodic flooding of basements and septic systems on bordering properties even under relatively normal conditions. This has been a recurrent source of strife between homeowners and the Town Trustees, who traditionally open the Pond spring and fall to increase flushing and enhance fishery productivity by allowing migration of anadromous fish and crustaceans such as blue-claw crab. A storm drain that emanates from NYS Route 114 and empties into the Pond at Cove Hollow in the Village constitutes an additional and substantial input of stormwater runoff which increases flooding and pollution in Georgica Pond.

(b) Natural Protective Features

Georgica Pond is fronted on the ocean by a low barrier beach backed by sandy shoals within the pond, which are accumulating primarily from breaching and overwash and secondarily from windblown sand from the beach. In theory the shoals should be diminished by the outflow of the pond when it is opened at the gut, but the amount of accumulated sand appears to be too substantial to be greatly affected. The pond may also be breached by the ocean at the gut under storm conditions, or occasionally opens itself because of elevated water levels.

The primary dune rises to a maximum elevation of about 20 ft. in Reach 11, although erosion damage from the December 1992 and March 1993 winter storms have probably altered the dune/beach profile since the most recent FIRM dated 5/18/92.

Wainscott Pond also has a fronting beach with a dune, in contrast to Georgica, and has consequently not been open in recent times either naturally or artificially, probably since the 1938 hurricane. In the past, junked automobiles were apparently used to build some of the dune fronting Wainscott Pond after '38, and they are occasionally exposed by storms.

Flooding in Wainscott Pond is exacerbated by runoff from fields and roads to the northwest, a drainage corridor that culminates in the Pond through the culvert near the Wainscott School. As much of these floodwaters originate in the Town of Southampton, mitigation should be an intermunicipal effort (see **Projects**).

The ocean beaches in Reach 11, and more particularly the Village beaches to the east of Georgica gut, have been some of the best monitored and most intensely studied in the Town, because of concerns centered on the effects of a groin field in the Village consisting of two large Federally built groins and two smaller State built groins. Oceanfront property owners have funded research efforts by the Marine Sciences Research Center at SUNY Stony Brook and other coastal experts as well as a student monitoring project run by Tony Minardi, then a science teacher at East Hampton High School. A number of recent studies and articles have been reviewed for the LWRP, which examine

historical beach width, effects of the groins on the beach, and shoaling within Georgica Pond, among other parameters. Periodic reversals of the littoral drift, encompassing cycles of several years at a time, in the Wainscott-East Hampton Village area make it difficult to predict shoreline trends for Reach 11. However, the predominant littoral direction remains east to west, and long-term shoreline recession west of the groins is clear.

Dramatic interannual variation of the Reach 11 shoreline position occurs in response to storms, as exemplified in the '92-93 and '93-94 winter storm seasons. The long duration and easterly set of the December '92 and March '93 storms caused extensive loss of sand from the Wainscott beach, and the primary dune was compromised and several structures damaged. These nor'easters demonstrated the pronounced effect of storm events on short-term shoreline change. It can be difficult to identify long-term trends because of the magnitude of short-term events. At Wainscott following the summer of '94, the beach was the widest and had the flattest profile in recent memory, then narrowed dramatically following the Christmas nor'easter of December '94. It substantially rebuilt itself in '95-96, then during the '97-98 winter storm season was struck by a series of storms that dramatically decreased the beach elevation, leaving an 8-10' dropoff at the Beach Lane road-end, and revealing erosion protection structures on the beach that had been buried for 20 years or more. Anecdotal reports indicated one such structure, a row of sta-pods uncovered just east of Beach Lane, had supported the foundation of shorefront home that 20-30 years ago had a 200'lawn between it and the dune.

Long-term erosion along the ocean beach in Reach 11 has been increased by the massive Federal groins to the east, which according to one study (Leatherman, 1989) have a downdrift littoral shadow of at least 5000 feet where the sediment budget is decreased. A 1991 study by the Marine Sciences Research Center at Stony Brook notes that "If storm activity occurs during the time of a narrowed barrier (because of the westward shadow zone, especially evident in the winter months), then increased overwash activity can result." This was evident in the '92-93, '93-94, and '97-98 winter storms. Initiatives to shorten or remove these groins to restore natural littoral drift have to date met with little response from the relevant Federal, State or County agencies.

By historical shoreline analysis using aerial photogrammetric techniques, combined with beach profile surveys, the Town expects to determine long-term erosion rates for Reach 11 and other sensitive reaches (see *Erosion Monitoring Program* in **Projects**).

(c) Coastal Structures

The only coastal hard structures within Reach 11 are an unpermitted shore parallel revetment in front of the Kennedy home on the ocean just west of Georgica Pond, installed in April-May 1993, and remnants of sta-pod groins and revetments of unknown origin periodically uncovered on the beach by winter storms.

Soft solutions include sand fill, beach grass plantings and dune restoration projects done in summer/fall '93, covering about 1000' of Wainscott beach to mitigate damage from the '92-93 winter storms, with maintenance efforts over the same stretch in spring of '94, '95, and '98. The Town Trustees have favored soft solutions. In those cases where coastal hard structures were permitted in

the recent past, the Town Trustees required the upland owner to execute a covenant requiring the removal of the structure if it remains uncovered by at least 12" of sand for a period of 12 months or more.

The seasonally opened or storm-breached inlet at the Georgica Pond gut might also be construed as a structure in terms of coastal dynamics. The 1989 Leatherman study concludes however, that "the possible impacts associated with the opening of Georgica Pond should be minimal as long as the inlet channel is relatively small in size (cross-sectional area) and only allowed to stay open briefly (few days to a week)." (Leatherman, 1989) What the effect would be on shoreline dynamics if the inlet remained open for an extended time because of a catastrophic storm, rising sea-level, or natural shoreline migration, can only be speculated. At present it exhibits a tendency to close fairly rapidly from littoral drift or onshore sediment buildup.

As noted above the substantial Federal groins, and the lesser State groins, in the Village to the east, while not within Reach 11, have a pronounced impact on the Wainscott beach. Possible mitigation is discussed in the Analysis.

(d) Flooding and Erosion Zones

FIRM #360794-0033D dated 5/18/92 shows the V-zone covering all of the Atlantic shoreline in Reach 11, as well as most of Georgica Pond, the southern end of Wainscott Pond, including the residences along the dune from Georgica Pond to Town Line Road. A- and B-zones back the V-zone including the northern and western arms of Georgica Pond and its associated shores.

Both Georgica Pond and Wainscott Pond and their immediate shorelines are also designated federal CBRA zones, extending across the intervening dunes or spits to the ocean. This is also an indication of potential for flooding and overwash from storm surge.

The SLOSH model as shown in East Hampton Quadrangle #P3, shows the Georgica Pond gut can be breached by overwash in a Category 1 hurricane. A Category 2 hurricane surge could overwash the entire Georgica Pond area to Montauk Highway at Stephen Hands Path, cutting the Highway, with extensive flooding of the Pond shores. Wainscott Pond could be inundated up to the Wainscott cemetery.

In a severe Category 3 or greater hurricane the SLOSH model shows that Georgica and Wainscott Ponds could flood to merge across Beach Lane, and additional overwash of Montauk Highway could extend into Stephen Hands Path and west to the Airport Road, with Town Line Road and Beach Lane forming flood corridors extending inland 1/3 to $\frac{1}{2}$ mile. This could inundate most of the residences within the reach, and extending beyond the coastal area.

CEHA zones, as delineated in Photo Map 7-402-83 Sheet #2 and 7-398-83 Sheet #1, extend along the ocean from the Town/Village line east of Georgica gut and include the Georgica Association cabanas and Kennedy residence, as well as houses at the south end of Wainscott Pond.

(e) Analysis

Because of its low primary dune system, the readily breached inlet to Georgica Pond, and the downdrift erosion shadow of the groins in the Village, much of Reach 11 is vulnerable to flooding and erosion in both hurricanes and severe winter storms. FIRM's indicate V- and A-zones along the entire shore, with several structures within CEHA zones, and potential hurricane overwash indicated by the SLOSH model. Measures to mitigate flooding and erosion in the reach should be addressed in the Town's existing emergency response plans and the proposed *Hurricane Damage Mitigation Plan* (see **Projects**).

As indicated on the FIRM's and more extensively by the SLOSH model, potential hurricane flooding is a concern in Reach 11 not only on the ocean beach but also along the Georgica and Wainscott Pond shores. The SLOSH model shows that much of the reach could be inundated in the direct impact of a Category 3 or greater hurricane, with possibly extensive damage to homes along the ocean and the ponds, and flooding of Montauk Highway, the primary artery for the Town and the Village, at the head of Georgica. As the SLOSH modeling indicates potentially more hurricane flooding than the FIRM's, the Town should examine hurricane emergency response planning in these areas in coordination with the Village of East Hampton. They should also be included in the study area for the *Hurricane Damage Mitigation Plan* (see **Projects**).

The 1989 study by Stephen Leatherman discusses the adverse impact of the Federal groins on the Wainscott beach and indicates the desirability of mitigating their downdrift effects. While shoreline position and beach width on the Village beach to the east appear to remain within seasonal and interannual variations, this is probably from the filling of the groin field, or from the periodic reversals of littoral drift in the area. There has been significant shoreline retreat in Reach 11, however, and Leatherman states "There is an obvious and unacceptable adverse impact of these groins on the Wainscott shoreline... resulting in the wave-eroded and storm-susceptible downdrift beaches...." (Leatherman, 1989) Similarly, a 1991 MSRC study notes "the shoreline change is approximately 15% to 20% greater for the existing, long Federal groins condition." (MSRC, 1991)

Potential remediation includes removal or shortening of the Federal groins to improve sand bypass and restore littoral drift. Leatherman suggests the two Federal groins be shortened by 205 feet to bring them in line with the State groins, which "would go a long way to correct the present shoreline problem." This action would require approvals from County, State and Federal agencies, particularly the ACOE. An August 1984 report (appended in Leatherman) commissioned by the ACOE on removal of the groins states "the short-term effects of removing the groins at the Easthampton (Georgica Pond) groin field and the Ocean Beach groin field should not be dramatic, since both of these fields are nearly filled and effectively by-passing." (Leatherman, 1989)

In the interest of improving the erosion situation on the Wainscott beach and forestalling further erosion and ensuing requests for hard structures, the Town should encourage initiatives for removal or remedial action on the Federal groins in the Village. In light of recent settlements regarding the Federal groin system in Westhampton, the Town should petition the Congress and/or the ACOE and other involved agencies to fund mitigation or removal of the groins as consistent with Town policy

against perpendicular hard structures, particularly on the south shore ocean reaches (see *Reduce Impacts of Federal Groins on Wainscott Beach* in **Projects**).

As in the other highly dynamic ocean reaches of the Town, hard structures constitute an undesirable interference with coastal processes, wave dynamics in storm conditions, potential storm surge from hurricanes, and natural dune building and migration. Perpendicular structures cause the most interference and as noted above, the most pronounced downdrift effects. Hard structures should not be permitted on the ocean beaches in Reach 11, and the Town should continue to pursue removal of the single anomalous and unpermitted shore-parallel revetment in the reach, particularly since the Kennedy residence in question is within the CEHA zone and has sufficient property to relocate further back from the dune. Relocation, dune rebuilding and enhancement through sand-trapping with snow-fencing and revegetation or beach grass planting, and other soft solutions should continue to be the methods of choice in responding to erosion under these high-energy ocean shore conditions.

In the confines of Georgica Pond bulkheading and revetments or other hard structures interfere with the flood absorbing capacity of the wetlands, and should not be permitted except under conditions of extreme hardship. Reach 11 is designated Condition 1 on Flooding and Erosion Protection Map V-2, reflecting the recommendation not to permit hard structures in the reach.

Periodic high water in Georgica Pond between openings can be partially attributed to the stormwater runoff from NYS Route 114 that empties into Georgica Cove and from NYS Route 27 (Montauk Highway). This problem can be mitigated by redirecting or otherwise impounding the stormwater runoff before it enters the pond. The Town should consult with residents and Village, Town Trustee and NYS DOT agencies to reduce this significant input into the Pond, both from the standpoint of flooding and pollutants. Recent improvements to Route 27 by NYS DOT included leaching basins and vegetative buffers to filter and impound stormwater. However, due to shallow depth to groundwater and the number and location of leaching basins installed, their ability to actually reduce flooding and remove pollutants is limited. Flooding at times of high water can cause coliform infiltration from home septic systems into the Pond, which could necessitate eventual closure of crabbing and shellfishing. Modifications to upgrade septic systems that consistently flood should be considered at Georgica Pond (see *Septic Waste Remediation* in **Projects**).

Because some flooding and erosion related problems in Reach 11 originate in East Hampton Village, for instance the Federal groins and the drainage inputs into Georgica Pond, the Town should encourage East Hampton Village to undertake its own LWRP to complement Town efforts (see *Drainage Mitigation, Georgica Cove* in **Projects**). Similarly, as some drainage and flooding problems affecting Wainscott Pond originate in Southampton Town, mitigation efforts should be undertaken in conjunction with Southampton and NYS DOT for this watershed (see *East Hampton/Southampton Cooperative Run-off Mitigation, Wainscott Pond* in **Projects**).

12. Reach 12 -- Gardiner's Island

(a) **Description**

Gardiner's Island is one of the largest privately held islands on the east coast, and represents an immensely important part of East Hampton's historical and natural heritage. It was purchased by Lion Gardiner in 1639 from the Montauk Indians, and received a patent from the King of England in 1640, establishing what is usually regarded as the first English settlement in New York State. It remained an independent manorial estate until after the American Revolution when it was annexed to Suffolk County and East Hampton Town. The Gardiner family trust remains the owner of the Island, and continues to maintain it for private use.

From an historic and archaeological standpoint Gardiner's Island contains the longest continuous intact record of colonial settlement in the Town and probably for much of New York State. Ecologically it provides exceptional habitat for many rare and endangered species, including the largest concentration of nesting osprey in New York State. The entire island is a State designated SCFWH. Federal CBRA designations cover zones at the northern and southern spits and surrounding the coastal ponds and associated shorelines.

Since Gardiner's Island is effectively a single residence, flooding and erosion are generally not significant threats to structures. Should future owners of the island elect to develop it further and intensify use, however, flooding and erosion would be significant planning considerations and should therefore be examined at least briefly in this plan.

From a coastal management standpoint, the island is an exceptional laboratory and historic record of coastal processes. Though much of the island was intensively farmed during its rich colonial history, the shoreline remains in an almost entirely unaltered natural state. Coastal topography varies widely, from coastal ponds and sheltered harbors to high bluffs fronted by rocky shores, providing an unspoiled and encyclopedic sample of the coastal environments found on the north shore of the Town.

The geological origin of Gardiner's Island is unknown, but one theory holds that it represents evidence of a post-Ronkonkoma, pre-Harbor Hill moraine (Town of East Hampton Comprehensive Plan, 1984). It's soils have more in common with Shelter Island and North Haven than other parts of East Hampton.

(b) Natural Protective Features

The central portion of the island is composed of knob and kettle topography with peaks ranging in elevation from 50' to 100'. Beaches extend around the entire perimeter of the island. The most extensive are associated with the major coastal ponds, Great Pond, Bostwick Creek and Tobaccolot Pond. Cliffs with elevations ranging from 25' to 100' run from Bostwick Creek to Eastern Plain Point. The steepest cliffs are found at Whale Hill on Block Island Sound, at an elevation of 130' the highest point on Gardiner's Island. Steep banks ranging from 25' to 75' are also found from Crow Head to Cherry Hill Pond. A portion of the eastern coast south of Tobaccolot Pond also contains cliffs which range from 25' to 47'. The exposed glacial till of the cliffs on Gardiner's Island is subject

to slumping and erosion, particularly on the west side where they face the full fetch of Block Island Sound. A World War II observation bunker on the Whale Hill cliff is getting ominously close to the bluff edge, demonstrating substantial shoreline retreat in the half-century interval.

On the north side of the island, Bostwick Creek has been closed off from Gardiners Bay and Block Island Sound by two sand spits, and marsh deposits have formed in the creek. On the west side, both Cherry Hill Pond and Home Pond have also been closed off from Gardiners Bay by littoral drift, with substantial marshes forming along the perimeter of Home Pond. Home Pond opens periodically to the bay.

The pattern of coastal ponds closed by baymouth bars and dunes formed from littoral drift is typical of the island. Tobaccolot and Lily Ponds on the eastern coast and Little Pond, Gales Pond and Airport Pond in the southern section of the island are similarly closed off from Gardiners Bay. Great Pond on the southern tip of the island, with a shallow inlet opening to Gardiners Bay, is connected to a long sand spit forming to the south.

In general the northern tip of the island has been eroding while the spit at the southern tip has been accreting. The best example of this is a Spanish American War era fort, Fort Tyler, known locally as the Ruins, which was originally joined to Bostwick Point but is now separated by several thousand feet of open water. There was also a lighthouse on the north end of the island from 1855-94. This peninsula was destroyed by the Great Blizzard of 1888.

Littoral drift on the east side of the island divides northwest and south at Eastern Plains Point, while on the west side it is probably westward along Cherry Harbor and then turns south following the coastline.

The island contains numerous freshwater ponds, marshy swales, springs and streams. Wolfie's Hole, the largest inland pond on the island, is a large kettle pond. This pond is the source for Willow Brook, one of three streams feeding into Tobaccolot Pond. Another smaller kettlehole, Casey Pond, is found at the western edge of Rogue Woods. Another body of freshwater, Gaylor Hole, is presumably a kettlehole. Several streams, including Upper Willow Brook and spring-fed Canoe Place flow into Bostwick Creek. The coastal ponds and low-lying streams would likely become flood corridors in times of storm surge.

As noted on the FIRM's there are several CBRA zones on Gardiner's Island, including Bostwick Creek, Tobaccolot Pond, Cherry Hill Pond, Little Pond and Home Pond and their environs; and the southern tip from Great Pond to Cartwright Shoal including all of the barrier spit and its shores.

(c) Coastal Structures

The only coastal modification on Gardiner's Island that currently affects coastal processes is the dredged inlet and small marina with associated bulkheading about a half mile east of Home Pond. This man-made cove is relatively small but disrupts littoral drift to a visible extent, as evidenced by the relatively greater shoreline recession to its south.

Remains of an open water pier extending into the bay from the shore near Home Pond mark the previous docking site. Any effects of this structure have been obscured by dredge spoil from the present inlet deposited on the intervening beach.

The Fort Tyler ruins can be construed as a coastal structure related to Gardiner's Island but probably have little effect on present coastal dynamics since being severed from the island itself.

(d) Flooding and Erosion Zones

FIRM #360794-0010C dated 10/1/83, and #360794-0011D, -0014D, and -0015D dated 5/18/92, show Velocity Zones along the entire shoreline of the island, and extending inland to cover the coastal ponds including Bostwick Creek, Home Pond, Little Pond, Gales Pond, Airport Pond, Great Pond and Tobaccolot Pond. Additional A-Zones, B- and C-Zones cover Cherry Hill Pond, the marina cove, and the backshore areas along most of the coastline.

The SLOSH model (Gardiner's Island West Quadrangle #P2 and East Quadrangle #Q2) shows that a Category 2 hurricane could overwash the north end of the island to the southern shore of Bostwick Creek, all of Tobaccolot Pond, and all of Great Pond and the southern end from the tip to the airfield. A Category 4 storm could overwash additional shoreline surrounding the ponds, and some of the west side of the island at Cherry Hill Point and Little Pond.

CEHA gives the south end of the island an unusual designation as a "Natural Protective Feature Area", likewise the north end from Bostwick Creek. The CEHA photo maps also include an unusual note not found on any other map for the Town: "Any emergent land or nearshore area(s) within the boundaries of this map, has been designated a Natural Protective Feature and has therefore been classified a Coastal Erosion Hazard Area." CEHA zones otherwise extend along all of the Gardiner's Island shoreline, moving inland to surround the coastal ponds, and are delineated in the following photo maps: 98-768-84 45GI, 98-802-83 46GI, 98-806-83 47GI, 98-810-83 48GI, 99-818-83 49GI, 100-1124-83 50GI, 100-1126-83 51GI, 101-1130-83 52GI, 102-840-83 53GI, 102-844-83 54GI, 104-1195-83 55GI, 104-1197-83 56GI, 103-830-83 57GI, 103-827-83 58GI, 103-824-83 59GI.

(e) Analysis

Gardiner's Island contains more information about the land and heritage of East Hampton than any other single property in the Town. It retains features rated the highest quality in New York State, is unique in the country and is truly a rare place in the world, a place of national geographic prominence. Because of its unspoiled shoreline it is also an extraordinary laboratory of coastal processes.

The combined State designations of SCFWH's, Natural Protective Feature Areas and Coastal Erosion Hazard Areas; and Coastal Barrier Resource Areas and Velocity and Flood Zones by the Federal government indicate the extreme sensitivity and highly dynamic coastal environment of Gardiner's Island. Severe constraints to development exist all along the fifteen miles of shore and around the ponds because of flooding and erosion. For instance, none of the V7, A8, B or C flood zones within CBRA zones along the shore and surrounding Great Pond, Tobaccolot Pond, Bostwick Creek, Home Pond, Little Pond or Cherry Hill Pond would be eligible for Federal Flood Insurance.

Given the dynamic character and high energy environment of the island's shores, particularly the north and east coasts, structural erosion controls would probably be ineffective, or worse, damaging and disruptive to the dynamic equilibrium of shorelines, barrier beaches and habitats, and should not be permitted. The shoreline of the reach is therefore designated Condition 1 on Map V-2. Other than the existing marina basin, the coastal systems should be left to their natural workings without additional human interference. Any increase in human use or development of the island would necessitate an expansion of existing transportation facilities (the marina cove on Cherry Harbor) and infrastructure, which would likely also affect coastal dynamics.

The extraordinary catalog of natural and historic features and habitats that characterize Gardiner's Island underscores the need to develop long-range plans for its preservation in a cooperative effort with the Gardiner heirs and relevant agencies.

C. TOWNWIDE CONDITIONS

1. Summary

The Flooding and Erosion component of the LWRP provides the foundation for a comprehensive long-term response to flooding and erosion issues in East Hampton. The Inventory and Analysis provides an overview of the wave forces, storm conditions, natural features and manmade structures interacting in the coastal environment, and the historical changes that have lead to present shoreline conditions. It should be used to develop community consensus for flooding and erosion problems townwide, and forms the basis for the Policies that follow.

Flooding and erosion are the result of long-term geologic, oceanic, and climatic processes and cycles, punctuated by calamitous weather events. While manifesting locally, the origins of flooding and erosion problems are often truly global in nature, and while short-term storm events may precipitate public responses, many of these problems are accurately viewed only within the longer term context of natural cycles and migrating shorelines. While the future may be uncertain for accelerating sea level rise or increased storm activity, it is well established that present sea level is rising and statistically certain that storms will be an ever-present threat to the coastal zone.

The Town has a wide variety of coastal environments, from the low-energy tidal conditions of the enclosed harbors, to the open nor'east exposures of the bay beaches, and the high-energy wavedominated environment of the south shore. To accommodate this diversity the report examines each reach in terms of its specific conditions using existing planning tools, known data and applicable regulations, confirmed by field inspections and local input (see A.3. Methodology in the Introduction to this section).

The primary causes of flooding and erosion problems in the Town are storms and the interference of human development with coastal processes. Secondary causes include rising sea level and the littoral processes themselves. Among long-term concerns are manmade disruptions of sediment transport from inlets and shore protection structures, landward shoreline migration trends, and accelerating sea level rise with associated shoreline recession linked to the global warming of the greenhouse effect, and an accompanying increase in frequency and severity of hurricanes.

2. Planning Priorities

Planning horizons are necessarily limited to human time frames of years or decades, in contrast to millennial coastal processes or meteorological cycles timed by hundred-year storms. Man's coastal edifices are frail compared to the power of storm surf and hurricane winds, and coastal planning must consider the inexorable force of the elements for the foreseeable future. It is incumbent on local government to bring collective wisdom to bear in understanding these forces and adapting development to them. Living with the changes wrought on the coast, as a community we must learn to avoid the mistakes of the past.

Primary flooding and erosion issues on the Town's coast include:

- Formulating Town priorities and policy for coastal zone land use regulations in flood and erosion-prone areas.
- Minimizing damage to private property and public resources from flooding and erosion.
- Establishing flooding and erosion protection criteria that meet Town planning priorities.

The Town's flooding and erosion protection priorities, as reflected by the State Coastal Program Policies, are to maintain the natural features and resources that protect against flooding and erosion, and to balance the public interest in coastal resources with public safety and protection of private property. Ideally, the LWRP will be flexible enough to adapt to long-term environmental changes as well as to short-term consequences of storms and other events.

In relation to flooding and erosion protection, to simplify the complex forces and varied conditions on the shore the LWRP consolidates them into three Conditions, with related Recommendations that are meant to apply townwide. A summary of the Conditions and Recommendations is included under Methodology in the Introduction to this section, and in **Policy #13/13A**.

D. TOWNWIDE ISSUES AND RECOMMENDATIONS

1. Storm damage

As coastal storms are a primary cause of flooding and erosion of the Town's coast, what can be done to prepare for and mitigate storm damage?

Issues include:

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- · Improving emergency response and identifying critical areas for evacuation
 - Short-term measures to preventing flooding and erosion in storms

- Pre-storm measures to mitigate damage, e.g. conservation, improved building codes
- Planning for post-storm recovery and redevelopment
- Addressing private insurance concerns
- Long-term planning to mitigate damage from future storms
- Standards for erosion protection measures

The infrequency of major hurricanes in recent years has resulted in complacency by government and property owners about flood hazards from a severe storm. A catastrophic hurricane has not struck the area since 1938, when a large proportion of the residences in the Town were not yet built. Recent hurricanes such as Gloria (1985) and Bob (1991) either made landfall at low tide (Gloria) or were lesser category storms (Bob was a Category 2 and passed east of Montauk). In some densely built low lying areas of the Town, if a tidal surge of the magnitude predicted in a direct hit from a Category 3 or 4 hurricane were to overwash, the threat to life and property could be equal to or worse than the '38 Hurricane. Damage from storm propelled debris and salt contamination of drinking water supplies in areas with shallow surface wells could also prove hazards in a major hurricane. Provisions for emergency response, shelter, water, power needs, reconstruction and recovery in the event of a disaster should be coordinated with relevant State, Federal and private disaster relief agencies, particularly important for Montauk since it could be isolated by flooding at Napeague.

A local post-storm *Hurricane Damage Mitigation Plan* and *Hazard Mitigation Plan* (see **Projects**) should be drafted to promote better land-use and coastal management in the aftermath of major coastal events. The SLOSH model suggests the need to thoroughly reevaluate setbacks, flood zone designations, post-storm rebuilding criteria and civil defense planning for catastrophic storms and hurricanes. The Town Civil Defense Coordinator has completed a draft *Hurricane/Coastal Storm Emergency Response Plan* (Town of East Hampton, 1995) which addresses immediate post-storm exigency and relief issues. However, planning components for post-storm reconstruction and redevelopment require considerably more attention.

Pre- and post-storm planning measures require extensive public education for the public to understand their necessity and to support them with cooperation. This effort should be integrated into a broad public education effort so there will be better understanding of flooding and erosion hazards and solutions, coastal issues and the LWRP as a whole (see **Projects**).

2. Future Planning Needs

What additional tools and resources are needed to adequately assess flooding and erosion problems? How can critical areas of flooding and erosion be accurately identified and erosion rates quantified?

An *Erosion Monitoring Program* on both local and state levels will help to quantify shoreline changes and sea level rise over time, to quantify erosion rates and identify erosion hazard areas (see **Projects**). This data will assist the Town in formulating future policy for changing coastal conditions such as shoreline recession and wetlands migration, increased flooding and vulnerability of infrastructure due to storms or accelerating sea level rise, etc. Additional information should continue to be acquired on localized coastal processes and erosion rates, and the effects of coastal

structures, sea level rise, sediment movement and beach vehicles. A tide gauge network should be established to yield flooding data in cooperation with the National Weather Service at Brookhaven Lab (see *Storm and Flood Monitoring Cooperative with National Weather Service* in **Projects**).

To provide useful data, the *Erosion Monitoring Program* must be kept up over the long-term. While the Town has proposed looking intensively at erosion hot spots such as Ditch Plains beach, additional studies analyzing historical shoreline change for the whole town, mapping vulnerable parcels, and finding creative ways to fund needed mitigation are also needed. Erosion problems should be periodically reevaluated, and mitigation activities prioritized as to urgency and funding availability.

Present resources to identify vulnerable areas and infrastructure, such as those used in this inventory, include the Town's Comprehensive Plan, NFIP FIRM's, CEHA photo maps, and the SLOSH model. This information is presently in disparate formats and should be integrated in an overlay map of the Town along with erosion monitoring data (see **Projects**).

A detailed Town strategy to implement LWRP flooding and erosion recommendations needs to be further developed through initiatives such as those outlined in the **Projects**, including the *Hurricane Damage Mitigation Plan, Hazard Mitigation Plan, Erosion Monitoring Program, Sea Level Rise Model* and a number of area-specific measures such as the *Ditch Plains Erosion and Remediation Study, Montauk Harbor Channel Sand Bypass System*, and *Reduce Impacts of the Federal Groins on Wainscott Beach*.

3. Sea level rise

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What can the Town do to assess, plan for, and mitigate the effects of sea level rise, both present and future?

Aspects of this issue include:

- assessment and evaluation at regular intervals
- devising ways to include sea level rise in planning procedures, e.g. adjusting wetland and coastal setbacks on a periodic basis
 - developing policies of strategic retreat and/or selective protection of infrastructure and natural protective resources, e.g. wetland migration

It is important for Town residents and officials, both elected and appointed, to familiarize themselves with the issues surrounding global warming and sea level rise, and their potentially large consequences for the community. Monitoring, research, staying abreast of current knowledge, and formulating a flexible program of responses will help prepare the Town for the effects of sea level rise, keep them in the public awareness, and reduce the uncertainties associated with the problem. A program of ongoing seminars or white papers, as suggested in the *LWRP Public Education* **Project**, will assist in this regard, as will the monitoring programs above. Building in periodic reevaluations of setbacks and other coastal regulations into the Town's NRSP requirements would be one way of adapting permitting and planning procedures to future sea level rise.

4. Preserving coastal resources

Coastal development has sometimes disrupted the natural protective systems of beaches, dunes, bluffs, tidal flats and wetlands. How should the Town balance human activities and natural forces, protection of private property with stewardship of coastal public resources?

While the Town's primary obligation is to preserve the public resources of the coast for all its residents, this is really consistent with the enlightened protection of individual properties. The best protections against flooding and erosion for individual property owners are the same natural protective features the public enjoys: beaches, wetlands, dunes, and bluffs. Practical difficulties occur when development encroaches on dynamic shorelines and property owners seek to artificially alter natural features, and to halt the effects of wind and sea.

In the past the reaction to erosion has been construction of erosion protection structures by private property owners, primarily along the bay beaches. The interaction of these coastal erosion structures, the littoral system, and the beach is extraordinarily complex. Improperly placed structures can result in unnecessary loss of public and private property, with negative impacts on beaches and other coastal resources. Hard structures "can cause localized scour during storms, both in front of and at the end of the armoring", and "may be responsible for the redistribution of sand and can prevent sand from entering the system." (National Research Council, 1990) Construction of hard coastal structures also involves aesthetic, environmental, economic and engineering considerations. Areas of the Town's shore where armoring has already extensively altered coastal processes must realistically be treated differently from areas where natural processes remain unaffected.

In these areas reasonable allowances should be made for maintenance and reconstruction of existing structures, however, only after or in conjunction with other alternatives such as moving buildings back from the shore, dune reconstruction, beach nourishment or other 'soft' strategies. Measures beyond in-place-in-kind reconstruction of existing erosion control devices should be subject to restrictive permitting, with a sunset provision for phasing out such devices should shorelines retreat at increased rates due to catastrophic storms or sea level rise, or if the properties they are designed to protect are substantially damaged or destroyed.

The permitting process for hard structural erosion control solutions on north shore bay beaches should allow such devices only where soft solutions have not been effective, where other shore-hardening devices are present, or where remaining natural protection is minimal and hard structures provide the only remaining protection, and if the likelihood of damage to existing beaches or neighboring property is insignificant or adequately mitigated. While a structure may in some cases legitimately serve to provide public access or preserve a water-dependent use, no structure should interfere with access to existing public beaches or nearshore areas. Neither should structures increase the risk of damage to existing resources, as when an eroding shore recedes to a bulkhead or revetment and storm surge or wave action washes out the beach in front of it.

Permitted erosion protection structures should not interfere with natural processes such as beach formation, dune building, or wetland retreat or advance. Where structures result or have resulted in accelerated beach erosion, owners of structures should be required to renourish affected beaches with

clean sand of compatible grain type and size. Consideration should be given to making this policy retroactive to existing erosion control structures, either as a condition for in-place-in-kind replacement or through creation of erosion protection districts. Where structures have damaged adjacent property or beaches, replacement should be restricted and installation of structures on neighboring properties discouraged so as not to compound the problem.

In the areas of Town coastline that remain largely in a natural state, such as the south shore ocean beaches, construction of new hard erosion protection structures should be prohibited, and any existing structures rendered non-conforming, requiring full permit review before any reconstruction. Existing shore-parallel structures in these areas should be replaced only under conditions of exceptional hardship. See Flooding and Erosion Protection Map V-2, for specific geographic recommendations for erosion protection structures, as well as individual reach analyses and recommendations. Shore normal or perpendicular structures such as groins and jetties which interfere with littoral transport should be phased out or prohibited Townwide because of their downdrift effects, except where they protect navigational inlets as at Montauk and Three Mile Harbors.

Erosion control policy in general should encourage use of environmentally benign soft solutions such as beach grass plantings, snow fencing and other methods that encourage natural deposition of sand without interfering with littoral transport and other coastal processes. Standards should be revisited periodically to allow for changing technology and to incorporate effective new techniques.

To provide adequate protection for development, wetland and waterfront setbacks should be periodically reexamined, e.g. every ten years,, and if necessary, revised. Minimum lot sizes for undeveloped land along the shore should be increased to permit relocating buildings as an alternative to "hard" structural erosion controls. Existing setback exceptions for small lots should be excised from the Town Code, as should other anomalies such as the reduced setbacks in Reach 9 along the bluffs of Old Montauk Highway. Town Code **§153-4-32B** should be amended to require a minimum 100' bluff line or primary dune crest setback for all structures, regardless of the lot size, and **§153-4-37B** should be revised to make setbacks along Old Montauk Highway uniform with other areas of the Town.

Calculation of setbacks from eroding bluffs or primary dunes should be altered to measure from a point of intersection of the top of the bluff and a calculated angle-of-repose of the bluff-face, rather than from the current bluff edge or dune crest. Setback provisions to allow landward migration of wetlands may be necessary if sea level rise accelerates, as predicted by some models, in order to preserve these vital coastal resources.

5. Existing programs

How can the Town best adapt to program changes and new policies for flooding and erosion at other levels of government, the National Flood Insurance Program, NYS Building Codes, and ACOE priorities for local erosion mitigation and channel dredging? Recent reforms in the NFIP encourage floodproofing and landward relocation of storm damaged structures, and incorporate erosion hazard mitigation. The Town Code has been revised to include these measures in its Flood Hazard Overlay District. All Town residents in vulnerable areas should be encouraged or required to obtain NFIP coverage and to maintain it. The Town should consider participating in the NFIP Community Rating System if applicable guidelines will reduce flood insurance rates for residents.

The Town should also undertake a cooperative planning effort with local insurance agents, private insurance carriers and State regulators to forestall gaps in homeowner and waterfront business coverage and to facilitate a post-storm recovery.

When catastrophic storms cause substantial erosion or destruction in NYS CEHA zones or other identified erosion hazard zones, Town policy should discourage reconstruction or rebuilding of structures in the most hazardous areas, especially structures that interfere with coastal processes. By adopting local enabling legislation and taking over local administration of the New York State Coastal Erosion Hazards Act, the Town can simplify permitting for residents and coordinate and consolidate local and State erosion policy. Incorporating CEHA provisions into Town Code is recommended as part of the LWRP, to provide integrated management of erosion hazard areas.

E. VULNERABLE AREAS, ISSUES AND RECOMMENDATIONS BY REACH

The following section is intended to highlight key areas and key issues and to summarize recommendations inferred from the individual reach analyses. Please see the respective reach analyses above for further background and details.

1. Reach 1 - Northwest Harbor

(a) Vulnerable areas

Flooding Homes at end of Northwest Landing Road, homes along coast of Grace Estate, Colony at Northwest.

Erosion Bluffs at Cedar Point park, Cedar Point Light.

(b) Issues

With a largely natural coastline, large tracts of preserved open space and few existing erosion protection structures in a relatively low-energy environment, are erosion protection structures desirable or necessary? Should existing structures be rebuilt or reconstructed?

The County dock at Northwest Creek is overbuilt considering the minimal use it receives. Should the filled bulkhead/dock be reconfigured to reflect its current use and the fragile character of its surroundings? How can the deteriorated launch ramp be improved ?

- Homes in the vulnerable areas above are at risk of flooding in hurricanes or severe nor'easters. What strategies should be implemented to protect existing and future development in these flood and erosion hazard areas?
- The Northwest Creek channel shoals up rapidly, impeding navigation and flushing. Dredge spoil from periodic maintenance dredging of the channel is not needed on the spit protecting the harbor. Can this inlet be better managed, and can dredge spoil be better used?
- Excessive beach vehicle use is contributing to erosion and habitat degradation at Cedar Point Park. Should vehicles be restricted to conserve natural protective features and habitat such as colonial shorebird nesting areas?

(c) **Recommendations**

- Do not permit additional erosion protection structures. Existing structures should not be reconstructed or replaced, except revetment protecting historic Cedar Point lighthouse.
- Limit development, including additions and accessory structures in vulnerable flood areas at Northwest Landing, place any additions or new structures on landward side, and require floodproofing to NFIP standard.
- The County Dock in Northwest Creek is underutilized, serves no flooding or erosion protection function, and should be reconfigured when it deteriorates. Reconstruction of the launch ramp should be undertaken.
- Consider relocating the Northwest Creek inlet channel to its original position at the eastern end of the spit. Consider depositing dredge spoil on Barcelona Neck or toe of bluff south of Cedar Point for beach nourishment or bluff stabilization. The Town Trustees must approve of any relocation of the Northwest Creek inlet channel. See **Projects**.
- Restore natural saltmarsh tidal flooding and drainage patterns in Northwest Creek wetlands with expanded OMWM program.
- Restrict beach vehicle access, especially in colonial shorebird nesting season (April 1 August 15); see also recommendations in Significant Habitats Policy #7, and Public Access and Recreation Policies #9 & 19-22. Note: The Town Trustees do not agree with the recommendations to restrict beach vehicle access and wish to see reasonable measures taken to protect nesting shorebirds while at the same time protecting the public's right to use and enjoy our beaches.
 - Maintain coastal systems and uplands in their pristine condition.

2. Reach 2 - Three Mile Harbor/Hog Creek

(a) Vulnerable areas

- *Flooding* Sammy's Beach, Maidstone Park, Three Mile Harbor shorelines, Hog Creek and Three Mile Harbor Roads, Hog Creek interior shore, ponds west of Hog Creek.
- *Erosion* Gardiners Bay shorelines at Hedges Bank, Flaggy Hole Road to end of Runnymede Drive, Hog Creek to Hog Creek Point.

(b) Issues

- Sammy's Beach is characteristic of a barrier beach and part of it is a designated Federal CBRA zone. It presents special problems for evacuation in severe storms, and because of its potential for storm surge overwash should receive special treatment in terms of planning and zoning. How should existing and future development be regulated in the Sammy's Beach area?
 - With the large number of hard erosion protection structures in Reach 2, what should Town policy be to manage the coastal zone to protect both public resources and private property? The dock, acting as a groin, at Camp Blue Bay, the groins and bulkheading along Runnymede Drive to Hog Creek, and the bulkheading within Hog Creek and extending along the bay from the creek mouth to Hog Creek Point are cases in point.

(c) **Recommendations**

- Limit expansion of existing structures and do not permit secondary structures at Sammy's Beach. Do not grant relief from setbacks, and require floodproofing to NFIP standards for any additions or remodeling, but do not permit additional stories. Do not permit hard erosion protection structures. Town should acquire vacant parcels on Sammy's Beach whenever possible, and the area should be further evaluated in the *Hurricane Damage Mitigation Plan* (see **Projects**).
 - Minimize use of hard flooding and erosion protection structures within Three Mile Harbor (see Flooding and Erosion Protection Map V-2), except for the east side water-dependent businesses and municipal docks. Maintain inlet jetties for navigation, and maintain navigation channels at sufficient depth for a designated small boat harbor. Utilize dredge spoil materials for beach nourishment or habitat enhancement at other sites, after dewatering and temporary deposition at designated Marina Lane and Maidstone Park or Sammy's Beach spoil sites.
 - Maintain natural bluffs at Hedges Bank and in front of Camp Blue Bay and do not replace perpendicular structures or permit new structures. Do not repair or replace erosion protection structures within Hog Creek, except at community marinas.

Any future permits for new or substantially rebuilt structures should incorporate downdrift mitigation and beach maintenance requirements, with appropriate financial surety. The financial surety will pay for required mitigation if necessary, and should include a legally binding mechanism guaranteeing removal of the structure if mitigation requirements are not met (see **Policy #13**).

Use the SLOSH model to reexamine potential flooding risks in reach and evaluate in *Hurricane Damage Mitigation Plan* (see **Projects**).

3. Reach 3 - Accabonac

(a) Vulnerable areas

- *Flooding* Gerard Drive, Louse Point Road, Accabonac Harbor, Fireplace Road and Fort Pond Boulevard, Pussy's Pond area, Chapel Lane to Fresh Pond wetland system.
- *Erosion* Gerard Drive, Accabonac Cliff (Waters Edge Road), Bell Estate bluffs, Cross Highway between Fresh Pond and Devon Yacht Club.

(b) Issues

- The sandy spits of Gerard Drive and Louse Point are characteristic barrier beaches and have Federal CBRA zones covering their undeveloped portions. Most of the residential development in these areas is within NFIP V- and A- flood hazard zones. What can be done to minimize problems of storm flooding and erosion in these areas?
- Reach 3 is characterized by fragile bay beaches. Parts of Gerard Drive have been extensively armored for erosion protection, and there are pending applications for shore hardening erosion protection devices on the bay side of Louse Point. In several areas, notably along Waters Edge Road in Barnes Landing, and Cross Highway between Fresh Pond and Devon, homes are sufficiently close to the water to be threatened by flooding and/or erosion. Erosion has been exacerbated by erosion protection structures in these areas, which have eliminated beaches and restricted sediment. Particularly at the interface zones where hardened structures end and municipal beaches begin, permitting of additional structures must be carefully considered.
- Given the threat to homes and the destruction of coastal resources that has resulted from attempts to protect them, how should these areas be managed? Can public beaches and natural protective features be enhanced or restored?
- Circulation in the enclosed water bodies in Reach 3, Accabonac Harbor and Fresh Pond, has decreased as a result of human interference with inlet openings, which may also increase flooding in time of storms. The relocation of the Accabonac channel

and closing of the north end sluice, and the Fresh Pond jetties have restricted openings and captured sediment. In the case of Fresh Pond the inlet jetties have caused the opening to shoal up and caused scouring downdrift to the south. What can be done to improve circulation and minimize flooding and erosion problems in these water bodies?

(c) **Recommendations:**

Limit new construction and expansion of existing residences on Gerard Drive and Louse Point. Any building permits in flood zones should require flood-proofing; this should not, however, be construed as allowing multi-story construction. Educate present owners and prospective buyers on flood/erosion hazards. Include areas within NFIP flood and CEHA zones in evaluation of *Hurricane Damage Mitigation Plan* (see **Projects**).

- In Condition 3 areas of the reach that are already extensively armored, with no remaining natural protection, existing shore parallel structures should be permitted to be repaired or reconstructed within the 30-year storm parameter. However, they should not be expanded to larger or more permanent structures, though soft solutions can be added or combined to enhance protection or restore resources. Any future permits should incorporate downdrift mitigation and beach maintenance requirements, with appropriate financial surety. See Map V-2.
- Perpendicular erosion protection structures throughout the reach interfere with littoral drift and sediment transport, have either produced unconsidered downdrift effects, are too large for the design conditions or are simply unnecessary. Groins and other perpendicular structures should not be replaced or repaired except to protect navigational channels, as at Gerard Point.
- The remainder of the Reach 3 shoreline, including the interior shore of Accabonac Harbor, should have no hard structures, and is designated Condition 1 on Flooding and Erosion Protection Map V-2.
 - The Town should conduct a feasibility study to reopen the former north end sluice for Accabonac Harbor along Gerard Drive in conjunction with reconfiguring the causeway, which is regularly overwashed. At the inlet to Fresh Pond, the jetties should be removed to allow natural movement of the opening and improved flushing of the pond (**Projects**). The Town Trustees support restoring the Accabonac Harbor channel to its original location, reopening the north end sluice along Gerard Drive and improving flushing in Fresh Pond.
- Use of erosion control districts should be explored to renourish beaches that have been lost due to impacts of erosion protection structures. Dredge spoil from

maintenance dredging at both Accabonac Harbor and the Devon Yacht Club should be used to nourish beaches in Reach 3.

4. Reach 4 -- Napeague North

(a) Vulnerable areas

- *Flooding* Devon Yacht Club, Cranberry Hole Road, end of Mulford Lane, Lazy Point, mobile home parks at Lazy Point along Mulford Lane and Crassen Boulevard, all shores of Napeague Harbor, and much of the reach in a Category 3 or greater hurricane.
- *Erosion* Devon Yacht Club, Cranberry Hole Road, old fish factory site, end of Mulford Lane, Shore Road to Lazy Point.

(b) Issues

- The potential for storm and hurricane overwash at Napeague is particularly high, and in a severe hurricane or nor'easter all of the homes in the Lazy Point area are potentially in the way of floodwaters. Several of the waterfront homes at the west end of Shore Road and near the road ends of Mulford Lane and Bay View Avenue are already at risk from existing erosion, including two houses at Mulford Lane virtually out in the water.
- During the '38 hurricane Napeague was almost entirely inundated, cutting off Montauk from the rest of the Town for nearly a week. Since then many new homes have been built in the Lazy Point area, along Cranberry Hole Road and on the east side of Napeague Harbor. What can be done to protect these residences in a major storm, and what should Town policy be if they are destroyed?
- The hodgepodge of groins and other erosion protection structures along Shore Road at Lazy Point have had a negative impact on the beach and provide little protection. Within Napeague Harbor, a low energy tidal environment, hard structures also have minimal function. Should erosion protection structures be replaced or otherwise permitted in this flood and erosion prone area?

(c) **Recommendations**

- Napeague was a study area for the *Hurricane Damage Mitigation Plan for the South Shore* (LIRPB, 1984), which recommended (in part):
 - Accept the natural shoreline regression along the headlands portion of the reach as beyond practical control.
 - Expand public open space in areas vulnerable to overwash and flood damage.

- Seek to expand undeveloped coastal barrier designations under the Coastal Barrier Resources Act on storm-damaged portions of the island.
- Develop plans for emergency response procedures in the event of a breach at Napeague.
- Limit additional development in the Lazy Point area, and protect Montauk Highway as the only major east-west transportation corridor. The plan recommends phasing out Trustee leases on Lazy Point and returning those lands to public ownership and use. The Town Trustees do not agree with this approach.
- Two homes at the end of Mulford Lane are out on the beach due to erosion, and the land should be reclaimed by the Trustees or New York State.
- Except for the Devon Yacht Club, the relic structures at the old fish factory site at Promised Land, and some structures in the interior of Napeague Harbor, the Reach 4 shoreline is predominantly free of erosion protection structures and should remain so (Condition 1, Flooding and Erosion Protection Map V-2). Remaining structures are designated as Condition 2, and should be evaluated versus non-structural alternatives if requiring replacement or repair. Perpendicular structures such as groins should not be replaced.

On the east side of Napeague Harbor excessive ORV use is damaging the narrow beach, back-dune wetlands, and dune areas. ORV's should be restricted and dune cuts revegetated. See also **Public Access and Recreation Policies #9 & 19-22**. Note: The Town Trustees do not support further restrictions on beach vehicle use.

5. Reach 5 -- Hither Woods/Fort Pond Bay

(a) Vulnerable areas

- *Flooding* South shore of Fort Pond Bay, Industrial Road including LIRR station and LIPA substation, shores of Fort Pond, Tuthill Pond and Tuthill Road
- *Erosion* Southwest shore of Fort Pond Bay, steep banks in Fort Pond, Culloden shoreline

(b) Issues

The primary concerns in Reach 5 are the shore of Fort Pond Bay and Fort Pond which could be overwashed in a direct hit from even a Category 1 hurricane. Fort Pond could act as a flood corridor into the Montauk business district. What should the Town's planning responses be to these concerns? Erosion protection structures erected on the southwest shore of Fort Pond Bay along Navy Road have caused evident downdrift scouring to neighboring beaches. Should these structures be replaced or reconstructed, or new erosion protection structures permitted?

(c) **Recommendations**

Evaluate potential overwash of Industrial and Navy Road sites in *Hurricane Damage Mitigation Plan* (see **Projects**). Commercial sites on Industrial Road between Fort Pond Bay and Fort Pond should be checked for potential flood-borne dispersion of hazardous or toxic materials and potentially hazardous water-borne debris, e.g. lumber, fuel or chemical tanks, etc. Facilities with potential hazards should be sited elsewhere. Relocate the LIPA emergency substation from the 100-year floodplain to an alternative site such as the former Town landfill in Hither Woods, or elsewhere out of the flood zone.

- Revetments and other shore-parallel hard structures along the south shore of Fort Pond Bay should be carefully evaluated versus soft solutions before any new permitting or replacement occurs (Condition 2, Map V-2)
- Endangered plants along the shore of Culloden Point should be protected from ORV activity (see also **Significant Habitats Policy #7**).

6. Reach 6 -- Montauk North Side

(a) Vulnerable areas

Flooding Sound View Drive, docks in Coonsfoot Cove, area surrounding Big and Little Reed Ponds, all shores of Lake Montauk.

Erosion Captain Kidd's Path/Sound View Drive shore, shore of Montauk County Park.

(b) Issues

- The Sound View Drive area west of the Montauk harbor jetties has suffered extensive erosion and periodic flooding. The area is characterized by low dunes, insufficient setbacks, direct exposure to nor'easters, downdrift scouring from the jetties, and progressive installation of shore-hardening erosion protection devices, which have accelerated beach erosion. Can flooding and erosion and potential property loss be alleviated in this area? Can beaches be restored?
- Star Island, the Montauk airstrip, and the shores of Lake Montauk are in flood zones subject to hurricane overwash. Coonsfoot Cove is the heart of the Town's commercial waterfront with the largest number of recreational boat slips, as well as home to much of the commercial fishing fleet. How should the Town plan to

mitigate future hazards, and to aid recovery and redevelopment of these areas in the wake of a catastrophic storm?

- Erosion protection and other shore-hardening devices within the low-energy tidal environment of Lake Montauk have minimal utility. Should the Town permit replacement or reconstruction of existing devices, or new structural devices in the Lake?
- Seasonal beach vehicle use for camping and fishing in Montauk County Park is intensive and increases erosion and beach habitat loss in the Gin Beach area. Will proposed limits of 250 vehicles with a maximum of 200 campers, in the Montauk County Park Management Plan, adequately reduce damage?

(c) Recommendations

Two houses have been lost in the Sound View Drive area in the last decade to storms and wave forces. Spoil deposited from the periodic maintenance dredging of the inlet does not compensate sufficiently for the sediment deficit and storm erosion, so the problem will recur. Erosion protection structures along Sound View Drive should be permitted emergency replacement or reconstruction (Condition 3, Flooding and Erosion Protection Map V-2) because in most instances they are the only remaining protection, although they are also a factor in increased erosion rates. Maintenance of erosion protection structures will not solve the erosion problem. A Federal sand by-passing program should be implemented as part of the maintenance of the inlet. The inlet jetties are vital to navigation and must also be maintained, but sand bypassing plan can be incorporated in the periodic maintenance dredging. All dredge spoil should be placed on the west (downdrift) side. An erosion protection district should be considered for the area.

The marinas at the north end of Lake Montauk in the Coonsfoot Cove and Star Island areas are essential water-dependent uses and provide public access to the harbor. They are designated Condition 3 on Flooding and Erosion Protection Map V-2, permitting emergency in-place in-kind replacement within the parameters of a 30year storm.

Plans for rebuilding this area following a catastrophic storm or major hurricane should be addressed in the *Hurricane Damage Mitigation Plan* (**Projects**). The plan should include desirable improvements for hazard mitigation and remediation including floodproofing, relocating structures, upgrading of aging septic systems (see **Water Resources Policies #30-40 & 44**), restoration of vegetative buffers and natural shorelines, etc. It could also provide opportunity for other improvements, such as an integrated harbor walkway to facilitate public access (**Projects**).

In the low-energy tidal environment of Lake Montauk south of Star Island erosion protection structures are few and serve little function in retarding erosion. Erosion

protection structures in this section of the Lake should not be replaced except under conditions of exceptional hardship, especially perpendicular structures such as groins, and are designated Condition 1 on Flooding and Erosion Protection Map V-2.

To better protect the substantial amount of residential construction surrounding the Lake, it is important to maintain natural features such as wetlands, ponds, and streams that increase flood retention capacity (see **Development Policies #1-6**). Development in flood hazard areas around the Lake should be brought into conformity with NFIP standards.

7. Reach 7 -- Oyster Pond/North Montauk Point

(a) Vulnerable areas:

Flooding and Erosion

Montauk Lighthouse, barrier spit at Oyster Pond.

(b) Issues

- The Montauk Lighthouse is the most heavily armored coastal structure in the Town, probably in the state. As an exposed headland it receives the full intensity of sea and weather. If the massive rock revetment does not withstand the elements, what other alternatives for its preservation will be considered?
- The armoring of Montauk Point has removed material from the longshore sediment budget. What effect will this reduction have on beaches and coastal features to the west?
- The gut at Oyster Pond is vulnerable to storm overwash. Should the pond be breached and remain open, significant damage could occur to the rare and endangered plant communities on its fringe. How should government plan for such a contingency?

(c) **Recommendations**

- If rising sea level or increased storm activity render the newly constructed revetment at the Montauk Lighthouse ineffective, other alternatives such as relocating the Lighthouse may have to be evaluated. Consequences of the armoring at the Lighthouse and resultant reduction in the sediment budget on coastal processes to the west are not well understood and should be investigated before any further work at the Point.
- Contingency plans should be developed to close a sustained breach of the barrier spit at Oyster Pond, which could drastically alter this habitat for a number of threatened and endangered species (see **Significant Habitat Policy #7**).

8. Reach 8 -- Montauk Bluffs

(a) Vulnerable areas

Flooding Montauk Shores Condominium trailer park

Erosion Residences close to eroding clay bluffs, perched ponds and wetlands on bluffs, hoodoo bluff formations

(b) Issues

- Reach 8 is home to unusual blufftop communities of rare plants surrounding perched ponds and wetlands, as well as spectacular fluted "hoodoo" formations of the clay bluffs. Occasional attempts to forestall erosion of the bluffs has involved regrading and revegetating, and toe armoring with rock. Given the large tracts of publicly owned open space and generally sparse residential development with adequate setbacks in the reach, should these extraordinary natural features be further disrupted by erosion protection structures or construction of waterfront homes?
- The Montauk Shores Condominium trailer park is located in a low-lying flood zone, and subject to erosion in recent winter storms (1992-93). Part of the condominium is in an NFIP hazard zone, and few residences are even minimally floodproofed. Should they be replaced if destroyed by a hurricane or severe nor'easter? How should the Town respond to requests for structural erosion protection at the site, given its proximity to the Town bathing beach at Ditch Plains?

(c) **Recommendations**

The scenic hoodoo bluffs and unique geology and biology of the Montauk moorlands area should be maintained in a natural state. Public acquisition of remaining large tracts should be pursued. With the impermeable clay soils of the area, water draining over the bluff face is a significant erosion force, though secondary to the ocean surf on the bluff toe. Where minimal interventions, such as enhanced drainage via a simple pipe, can prevent loss of significant habitats, such measures would be consistent with LWRP goals. Homes close to the bluff edge should be moved back where possible if threatened by shoreline recession. No new shore-hardening erosion protection structures should be permitted in the reach. Existing shore-parallel structures should not be repaired or reconstructed except under hardship conditions and existing perpendicular structures should not be repaired or reconstructed (Condition 1, Flooding and Erosion Protection Map V-2).

The Montauk Shores condominium trailer park is particularly vulnerable to flooding and erosion, and does not meet NFIP flood-proofing requirements. Flood-proofing and relocating structures landward are preferable to hard erosion protection in this otherwise low lying area. Flooding and erosion solutions and post-storm reconstruction at Montauk Shores should be further examined in the *Hurricane Damage Mitigation Plan* (**Projects**).

9. Reach 9 -- Hamlet of Montauk/ Hither Hills

(a) Vulnerable areas

- *Flooding* Ditch Plains subdivision, Montauk business area, Kirk Park, lower levels of resorts along bluff on Old Montauk Highway.
- *Erosion* East Deck Motel, Ditch Plains bathing beach, beach and motels along South Emerson Street, dunes at Kirk Park, shore resorts on Old Montauk Highway.

(b) Issues

- Both Ditch Plains and the Montauk business area have experienced extensive beach erosion in recent years, and are in the 100 year floodplain, with velocity (V-) zones backed by A-flood zones extending to Lake Montauk and Fort Pond respectively. Many structures are also in CEHA zones. A Category 2 or greater hurricane poses substantial risk of overwash. What can be done to mitigate the hazards, both pre- and post-storm?
- Hard erosion protection structures cause downdrift scouring and other erosion damage in the high-energy environment of the ocean shore, and the Otis Avenue groin has affected the Town bathing beach at Ditch Plains. Should this structure be altered to mitigate its impact on the bathing beach?
 - Bluff setbacks along Old Montauk Highway are less than in other parts of the Town, on the supposition that these bluffs are relatively stable. Given the bluff toe erosion and shoreline recession that has occurred in recent winter storms, should the Town reconsider this assumption along with area setbacks?

(c) **Recommendations**

- Complete the study of flooding and erosion factors at the Ditch Plains beach and propose a strategy to mitigate bluff recession and protect the inland residential area (see *Ditch Plains Erosion and Remediation Study* in **Projects**). Continue to monitor beach profiles and erosion. Consider shortening/removing the Otis Avenue groin to bypass more sand to Ditch Plains bathing beach; also consider dune enhancement to protect residential area from overwash. Address dangers of an overwash and strategies to close a potential breach from a catastrophic storm in the *Hurricane Damage Mitigation Plan*.
- Include the Montauk business area in a *Hurricane Damage Mitigation Plan*. Undertake remedial steps to rebuild dune and repair damage from pedestrian traffic to dune system at Kirk Park with over-dune catwalks and a revegetation program.
- In the wave-dominated high-energy environment of the south shore structures should not be permitted to disrupt coastal processes. The Town should therefore not permit hard erosion protection structures in Reach 9, and the entire reach is designated

Condition 1 on Flooding and Erosion Protection Map V-2. Soft solutions enhancing natural protective features are preferable (**Policies #13 & 17**).

Along the bluffs of Old Montauk Highway the Town should consider increasing the bluff setbacks to bring them into line with setbacks in the rest of the Town. They are presently measured from the toe rather than the edge of the bluff on the assumption that this is a stable or accreting shoreline which, judging from the effects of recent storm activity, is probably not the case. If a catastrophic storm substantially damages or destroys these structures they should not be rebuilt, and native bluff flora should be planted to stabilize the bluff. This area should also be carefully evaluated in the *Hurricane Damage Mitigation Plan*, especially as the amount of investment in resort properties will generate impetus for reconstruction and erosion protection. Protection of private property should not outweigh potential damage to public coastal resources in Reach 9. No hard structures should be permitted along the Atlantic Ocean shore.

10. Reach 10 -- Napeague South/ Amagansett

(a) Vulnerable areas

- FloodingNapeague, especially Montauk-by-the-Sea subdivision and condominiums on
Napeague stretch, Beachampton (Atlantic Avenue to east end of Marine
Boulevard), Indian Wells Highway, some beach homes between Indian Wells
Highway and East Hampton Village boundary.
- *Erosion* Entire ocean shoreline and associated primary dune systems.

(b) Issues

- Much of Reach 10 consists of low-lying dune systems with migratory characteristics of barrier beaches, including vulnerability to storm flooding and erosion. Flood and erosion hazard zones are continuous along all of the reach shoreline. Natural beach and dune systems have been effective defenses against flooding and erosion forces, and almost no shore hardening erosion protection structures are present in the reach. Development and human uses, construction of beachfront homes and intensive beach use, including by recreational vehicles, has in some areas compromised the natural systems.
- How should the Town manage these coastal resources to maintain their integrity, especially if shoreline flooding and erosion threaten residences? What kind of erosion protection measures are appropriate on these dynamic high-energy shores?
- If a catastrophic storm causes widespread destruction of homes and businesses, as occurred in the 1938 Hurricane when the reach was far less developed, are there areas where reconstruction should not occur, and what standards (e.g. floodproofing and other hazard mitigation) should govern post-storm redevelopment?

(c) **Recommendations**

- Since beaches and the dune system provide the primary defense against storms and the elements, everything possible should be done to maintain these natural features and to discontinue practices that degrade them.
- Town maintained road-ends provide public access to the water, but conversely can also be significant flood corridors. The Town should consider redesigning and revegetating paved road-ends (which in Reach 10 include Navahoe Road, Dolphin Drive, Atlantic Drive, Napeague Lane, the east end of Marine Boulevard, Atlantic Avenue, and Indian Wells Highway) to restore the primary dune while continuing to provide parking, and visual, pedestrian and limited vehicular access. The Villagemaintained beach at Two Mile Hollow is a possible prototype (see *Road-end and Beach Access Modifications* in **Projects**).
- ORV use for fishing and recreation in Reach 10 has caused significant damage both to the dunes, at the east end of Marine Boulevard, and to the foredune area and beaches in Napeague State Park, where growth of vegetation has been retarded, especially after major storms. Flooding and erosion in this area will continue if beach vehicle traffic is not reduced or redirected. Vehicles should be prohibited within 20 ft. of the beach grass line, as is required at Fire Island National Seashore (see Analysis for Reach 10). Plant communities must be given time to naturally reestablish following major storm events, with temporary post-storm restrictions on beach vehicles until beach grass regenerates and the vegetation line is redefined. Note: In general, the Town Trustees do not agree with this assessment of the impacts of beach driving.
- Dynamic coastal conditions and potential negative impact of erosion protection structures require their prohibition in Reach 10, reflected in the Condition 1 designation on the Flooding and Erosion Protection Map V-2.
- Where property or residential structures are threatened by erosion or receding shorelines, it is essential to maintain the primary dune system with setbacks and soft solutions such as dune rebuilding and revegetation. However, it is important to remember this is a dynamic system and to allow for natural dune migration. Conservation recommendations for the Double Dunes area include selective use of snowfencing to close blowouts in the dune and trap sand, beach grass planting, consolidation of access paths to the beach, and annual evaluations of erosion conditions each spring (TNC, 1978).
- Although NYS CEHA regulates construction and other activities on both primary and secondary dunes, the extensive secondary dune system in Reach 10 have not been included on current CEHA photo maps. Inclusion is recommended in future mapping by New York State, and any adoption of local CEHA administration. Local

administration of CEHA will help to integrate State and local planning, and provide more rapid response in the wake of a storm.

Pre-storm planning to mitigate future flooding and erosion related damage in CEHA zones, NFIP V-zones, etc. should be instituted through the *Hurricane Damage Mitigation Plan* and/or *Hazard Mitigation Plan* (see **Projects**), or other planning mechanisms in cooperation with NYS and Federal NFIP authorities. The Town should also consult with private insurers and local insurance agents as well as the NFIP to set up a framework for rapid assessment and repair of property damage in the aftermath of a storm. To insure consistent coastal zone management, the Village of East Hampton should be encouraged to undertake its own LWRP, and to coordinate consistency review with the Town.

11. Reach 11 -- Wainscott

(a) Vulnerable areas

Flooding All shores of Georgica Pond, Wainscott Pond, the Atlantic shoreline and residences in the primary dune area, Montauk Highway at the head of Georgica Pond, low-lying area between Georgica Pond and Town Line Road.Erosion Atlantic Ocean shoreline including homes built near the primary dune.

(b) Issues

- Beach erosion and shoreline recession in Reach 11 are aggravated by downdrift scouring from the federal groins in the Village immediately to the east. Can appropriate measures be undertaken to mitigate the effects of these groins?
- Are hard erosion protection structures appropriate in the high-energy wavedominated environment of Reach 11's ocean beaches and dunes? Are soft solutions more benign and/or effective?
- In the low-energy environment of Georgica Pond, are hard shoreline structures necessary or effective for flooding or erosion protection, should new ones be permitted, and should existing structures be repaired or reconstructed?
- Stormwater from watersheds outside the coastal area, (from East Hampton Village for Georgica Pond, and from Southampton Town for Wainscott Pond) increases flooding in Reach 11's coastal ponds. Can these waters be otherwise diverted or impounded?

(c) **Recommendations:**

Wainscott is particularly vulnerable to flooding and erosion in hurricanes and severe winter storms because of the low dune system and the near sea-level barrier at Georgica Pond. There is no back dune system as in the double dunes of Reach 10, therefore flood waters breaching the pond, the dunes or road-ends could move inland unimpeded. Measures to mitigate flooding and erosion in the reach should also be addressed in the Town's existing emergency response plans and the proposed *Hurricane Damage Mitigation Plan* (**Projects**).

- The Federal groins in East Hampton Village to the east have increased erosion and shoreline recession rates on the Wainscott Beach. Potential remediation includes removal or, more probably, shortening of the groins to improve sand bypass and restore littoral drift. The Town should petition Congress, the ACOE and other involved agencies to fund mitigation or removal of the groins (see *Reduce Impacts of Federal Groins on Wainscott Beach* in **Projects**).
- As in the other highly dynamic ocean reaches of the Town, hard structures constitute an undesirable interference with coastal processes, wave dynamics, potential storm surge from hurricanes, and natural dune building and migration. Hard structures should not be permitted on the ocean beaches in Reach 11, and the Town should continue to encourage removal of the anomalous shore-parallel revetment in the reach, since the residence in question is within the CEHA zone, and has sufficient property to relocate further back from the dune.
- Relocation, dune rebuilding and enhancement, through sand-trapping with snowfencing or revegetation by beach grass planting, and other soft solutions should continue to be the erosion protection methods of choice in high-energy ocean shore situations.
- In the confines of Georgica Pond bulkheading and revetments interfere with the flood absorption capacity of wetlands and should not be permitted except under conditions of extreme hardship. All of Reach 11 is designated Condition 1 on Map V-2.
- Periodic high water and water quality problems in Georgica between pond openings can be partially mitigated by redirecting or otherwise impounding the stormwater runoff from Route 114 that empties into Georgica Cove, which would require a coordinated effort with the Village of East Hampton (see *Drainage Mitigation, Georgica Cove* in **Projects**).
- A number of the flooding and erosion related problems in Reach 11 originate in or are affected by conditions in the Village of East Hampton, for instance the Federal groins and the drainage inputs into Georgica Pond. The Town and other agencies should encourage East Hampton Village to undertake its own LWRP to complement Town efforts.
- Similarly, since some of the drainage and flooding problems affecting Wainscott Pond originate in Southampton Town, mitigation efforts should be undertaken in conjunction with Southampton Town and NYS DOT for the watershed (see *Cooperative Run-off Mitigation, Wainscott Pond* in **Projects**).

12. Reach 12 -- Gardiner's Island

(a) Vulnerable areas

FloodingEntire shoreline of the island, the coastal ponds and marina/boat basin.ErosionEntire shoreline, especially high bluffs along the eastern coastline.

(b) Issues

Gardiner's Island is a unique laboratory of coastal processes, delicate coastal habitats and natural coastal land forms, all of which would be adversely impacted by development. What planning measures can the Town take to help preserve the natural state of the island, given present private ownership? What procedures should be put in place to maintain natural coastal processes if development occurs in the future?

(c) **Recommendations**

Gardiner's Island contains more information about the land and heritage of East Hampton than any other single property in East Hampton. It retains features rated the highest quality in New York State, is unique in the country and is truly a rare place in the world, a place of national geographic prominence.

The combined designations of Significant Fish and Wildlife Habitat, Natural Protective Feature Areas and Coastal Erosion Hazard Areas by the State; and Coastal Barrier Resource Areas and Velocity and Flood Hazard Zones by the Federal government are indicative of the extreme environmental sensitivity and highly dynamic coastal conditions prevailing on Gardiner's Island. Severe constraints to development exist all along the fifteen miles of shore and around the ponds because of flooding and erosion. None of the V7, A8, B or C flood zones within the CBRA zones along the shore and surrounding Great Pond, Tobaccolot Pond, Bostwick Creek, Home Pond, Little Pond and Cherry Hill Pond would be eligible for Federal Flood Insurance.

The dynamic character and high energy environment of the shore, particularly of the north and east coasts, dictate maintaining the natural shore without human interference. Erosion control devices in this environment would likely be ineffective or disruptive to shoreline equilibrium, barrier beaches and habitat, and should not be permitted. The entire shoreline is designated Condition 1 on Flooding and Erosion Protection Map V-2.

While the Town can undertake limited measures through its planning and zoning powers, the extraordinary catalog of natural and historic features and habitats that characterize Gardiner's Island underscore the need to develop long-range plans for its preservation in a cooperative effort with the Gardiner heirs and relevant government agencies or private non-profit groups.

F. FLOODING AND EROSION CONTROL POLICIES # 11-17

POLICY 11 BUILDINGS AND OTHER STRUCTURES WILL BE SITED IN THE COASTAL AREA SO AS TO MINIMIZE DAMAGE TO PROPERTY AND THE ENDANGERING OF HUMAN LIVES CAUSED BY FLOODING AND EROSION.

Explanation of Policy:

Wherever possible, buildings and other structures in the coastal zone should be sited away from flooding and erosion hazard areas. Siting should also minimize flooding and erosion to neighboring property and natural protective features (see Policy 12) caused by the presence of the building(s) or structure(s). When it is not possible to site buildings or structures out of hazard areas or natural protective features, or when previously sited existing buildings or structures require modification, special attention must be given to hazard prevention and mitigation as required by the laws of the Town, State and Federal governments.

The NYS Coastal Erosion Task Force report states this policy succinctly: "... Development should not occur in locations with high risk of flooding or erosion damage, i.e., V-zones and Coastal Erosion Hazard Areas. Local governments and individuals have acknowledged that the first step in management of flooding and erosion hazards is prevention of new development in coastal hazard areas. Where appropriate, municipalities should improve their zoning regulations to provide for new development on larger lots with greater setbacks in such areas. However, increased area requirements will not resolve the problems of existing small lots or existing residences with limited setback. Acquisition of such properties may be the only viable alternative." To this end, adequate funding should be provided for the voluntary buy-outs and relocation and demolition provisions of the National Flood Insurance Program ... and similar programs." (NYS Coastal Erosion Task Force, 1994, Vol. II, p. 94) A local *Hazard Mitigation Program* should be designed to implement these provisions (see **Projects**).

This policy applies to structures within the Town's coastal zone, especially within Flood Hazard (A-Zone) and Coastal High Hazard (V-Zone) Areas of the Town, as designated by the National Flood Insurance Program on the Federal Insurance Rate Maps (FIRM's) for the Town, administered by the Federal Emergency Management Agency, and enabled locally through the Town Zoning Code § 153-3-40 to 45, Flood Hazard Overlay District.

It also applies to the hazard zones designated by the **Coastal Erosion Hazard Act (CEHA)**, presently administered in the Town by the NYS DEC, under **NYS Environmental Conservation Law, § 3-0301 & 34-0108**. The Town may in the future adopt enabling legislation to administer CEHA locally as recommended in the Inventory and Analysis.

Residents and prospective residents of the Town should be educated and informed of the risks of flooding and erosion. Disclosure of Flood Hazard Overlay District, Coastal Erosion Hazard Areas, and Coastal Barrier Resource Act designations with their accompanying restrictions should be

required in all real estate transactions in affected areas of the Town. Flood hazards as designated by the FIRM's and purchase of flood insurance under the NFIP are now required by mortgage lenders under the requirements of NFIP changes (Public Law 103-325) enacted in 1994. However, Town government lacks authority to enact broader disclosure requirements of State and locally designated hazards. The Town recommends such flooding and erosion hazard disclosure legislation be enacted by New York State.

The SLOSH (Sea Lake and Overland Surge from Hurricanes) model formulated by the ACOE has also been used to inventory areas of the Town prone to storm and hurricane flooding. In the future the Town expects to monitor erosion locally in the coastal zone (see **Projects**) and, where necessary, to designate local erosion hazard areas where additional conservation and flood-prevention measures may apply.

Flood Hazard (A-Zone) areas, Coastal High Hazard (V-Zone) areas, Coastal Erosion Hazard Areas, and SLOSH areas are noted for each reach under Flooding and Erosion Hazard Zones in the Inventory and Analysis. Flood Hazard areas are located throughout the Town's shoreline on the Atlantic Ocean and Peconic Estuary, including Gardiner's Bay, Block Island Sound and the Town's inner embayments, tidal creeks, harbors and coastal ponds. The A-zone is located within the 100-year floodplain, extending from the boundary of the V-zone to the limit of the 100-year flood hazard area. Coastal High Hazard Areas (V-zones) are located along much of the extent of the Town's outer shoreline. The V-zones extend from seaward of the shoreline landward to the A-zone. V-zones have special flood hazards associated with high-velocity waters from tidal surges accompanied by wind-driven waves.

Flood Hazard Overlay District

The East Hampton Town Code codifies the rules and regulations governing construction activities in NFIP Flood Hazard Zones in the **Flood Hazard Overlay District**, under **Chapter 153**, § **153-4-40 through -47**, as amended in 1998 to conform to changes in the National Flood Insurance Program regulations. The Town law includes standards for construction, elevation, and placement of structures and utilities, and prohibits alteration of natural features within hazard zones (see also §153-4-20, Natural Resources Special Permit).

Other Local Laws

Other sections of the Town Code in addition to § 153-3-40 to 45, Flood Hazard Overlay District, which govern siting of buildings and other structures in the coastal area are summarized as follows (for direct citations please consult the current edition of the East Hampton Town Code):

Chapter 43 -- Beaches and Parks

§ 43-4 Prohibited Conduct

Prohibits placing fill or any other material, or any structure including erosion control devices on the beach without authorization and proper permits from the Town Board or Town Trustees.

Chapter 131 -- Subdivision Law

§ 131-1.04 (also **§ 153-1-20 of Zoning**), in the definitions for Lot Area, removes from lot area computation "that portion of any lot which is underwater land or ... which is seaward of the bluff line or primary dune crest or which is beach, wetland or watercourse."

Chapter 153 -- Zoning

Section 153, Article IV, Protection of Natural Resources, in § **153-4-15** designates, "Wetlands, Watercourses, Tidal waters, Beaches, Beach grass, Dunes and Bluffs" as protected natural resources.

§ 153-4-20

Regulates and requires a Natural Resource Special Permit for any activities within specified distances from these features including those involving wetlands, beach grass, dunes or bluffs. Some of the activities specified that require permits include filling, construction, alteration of any kind, or siting of septic systems on or within 150 feet of any wetland, surface water body, or beach (septic systems require 200 feet distance). Additionally, beach grass may not be damaged or removed, nor any sand dune removed, cleared, graded, or otherwise altered without a Natural Resources Special Permit.

§ 153-4-25, Emergency and minor maintenance exceptions

No Natural Resources Special Permit is required for in place and in kind replacement of existing coastal erosion structures, docks or pilings which have been damaged or destroyed, provided that a building permit is first obtained, and materials are approved by the Natural Resources Department. Also allows minor maintenance work not exceeding 25% of a structure by area or extent. A 1992 amendment permits in place and in kind restoration of bluffs, dunes, beaches or other natural erosion protection features which have been damaged or destroyed.

§ 153-4-30 through 39, Setbacks

Provides for minimum setbacks from the bluff (dune crest) line (100' along the ocean, except 150' east of Montauk hamlet, 50' on bay on lots of 40,000 sq. ft. or less, 100' on lots of 40,000 sq. ft. or more, 150' on lots of 84,000 sq. ft. or greater); also wetland setbacks for structures, wastewater systems and landscaping.

§ 153-4-39

Contains an exception to the setbacks for coastal structures for which a natural resources special permit has been issued and for which all other necessary federal, state, county and local approvals have been obtained.

§ 153-5-50 of the Zoning Code sets standards for Natural Resources Special Permits for coastal structures. It requires that they not interfere with tidal flow, with marine life or habitat, or destroy other than minimal areas of existing wetland vegetation or beach grass. Structures are only eligible for a permit if refusal to permit the structure would make likely a rapid or sudden loss of the property to erosion, and there is an explicit determination that similar results are impossible using nonstructural controls. There is an exception for water-dependent facilities in Waterfront (WF) Districts or that are part of a lawful marina or recreational marina, which are held to lesser standards.

Coastal structures on Town Trustee owned beaches or bottomlands also require Town Trustee permits.

Federal Coastal Barrier Resource Act (CBRA) Zones

The Flood Insurance Rate Maps (FIRM's) for the Town also identify undeveloped coastal barriers designated under the federal Coastal Barrier Resources Act as areas where federal financial assistance is prohibited for new development. CBRA zones are present in Reach 1 including Cedar Point, Northwest Harbor and Northwest Creek; in Reach 2 at Three Mile Harbor including Sammy's Beach and Maidstone Park, and at the mouth of Hog Creek; in Reach 3 at Accabonac Harbor including parts of Gerard Park and Louse Point; in Reaches 4 and 10 extending from the mouth of Napeague Harbor to the ocean; in Reach 6, Big Reed Pond; in Reach 8, Oyster Pond and the north side of Montauk Point; Reach 10, in Amagansett through the Double Dunes from near Atlantic Avenue to west of Indian Wells Highway; in Reach 11 Georgica and Wainscott Ponds extending to the ocean; and Reach 12, the spits and coastal ponds of Gardiner's Island.

NYS Coastal Erosion Hazard Areas

Coastal Erosion Hazard Areas, as identified on the NYS Coastal Erosion Hazard Maps for the Town of East Hampton, are seaward of the Erosion Hazard Line and are described for each reach in the Inventory and Analysis. At present, siting of structures within Coastal Erosion Hazard Areas is governed by the Coastal Erosion Management Regulations (6 NYCRR Part 505, as amended March, 1988) administered by the NYS DEC, and requires a permit issued by NYS DEC. Incorporating Coastal Erosion Hazard Act provisions into Town Code and local administration of the regulations is recommended but has not yet occurred. Until such time as a local Coastal Erosion Hazards ordinance is adopted, the Town urges vigorous enforcement of the regulations by NYS DEC. The **Coastal Erosion Management Regulations** promulgated by NYS DEC are excerpted in **Appendix E.**

CEHA regulates activities in secondary dune systems; however, secondary dune systems such as the extensive double dune system in Reach 10, have not been delineated on the CEHA photo maps and NYS DEC has generally not required CEHA permits for activities in secondary dunes. The Town recommends these dune systems be included in future updates of CEHA mapping, and that activities in these areas be actively regulated under the requirements of the law.

Where proposed structures do not meet existing standards under National Flood Insurance Program regulations, NYS Coastal Erosion Hazard Act regulations or Town Code, property owners must obtain variances from the NYS DEC and/or the Town Zoning Board of Appeals. It is the policy of the Town to grant relief only in situations of exceptional hardship, where no reasonable alternative exists, and where siting of the structure will not cause damage to natural protective features such as dunes or beach vegetation, or cause erosion to neighboring property or public resources such as beaches. To date no variances from FEMA regulations have been applied for or granted (see also **Policies 12, 13, 13A, 14, 14A, 16, 17 and 17A**).

POLICY 12 ACTIVITIES OR DEVELOPMENT IN THE COASTAL AREA WILL BE UNDERTAKEN SO AS TO MINIMIZE DAMAGE TO NATURAL RESOURCES AND PROPERTY FROM FLOODING AND EROSION BY PROTECTING NATURAL PROTECTIVE FEATURES INCLUDING BEACHES, DUNES, BARRIER LAND FORMS AND BLUFFS. PRIMARY DUNES WILL BE PROTECTED FROM ALL ENCROACHMENTS THAT COULD IMPAIR THEIR NATURAL PROTECTIVE CAPACITY.

Explanation of Policy

In the Town of East Hampton, beaches, dunes, barrier land forms, bluffs, nearshore areas and underwater lands and wetlands help safeguard coastal lands and property from flooding and erosion damage, as well as reduce the danger to human life. Excavation of coastal features, improperly designed structures, inadequate site planning, or other similar actions which fail to recognize their fragile nature and high protective values, or lead to the weakening or destruction of these resources, must be avoided. Any development or other activity in proximity to natural protective features must be limited and steps taken to ensure that adverse effects are minimized.

It is the Town's intent in these policies and in the Town Code to preserve and protect these natural protective features, and where they have been damaged or destroyed by development or other activities to require wherever possible restoration of the resource and prevention of further degradation. See also **Public Access and Recreation Policies #9 & 19-22; Historic Resource and Visual Quality Policies #23-25; and Policy #44 (Tidal and Freshwater Wetlands) of the Water and Air Resources Policies, particularly standards 2) and 3) of Policy #44, which state in part that, "No structure shall be permitted which would unduly interfere with tidal flow, with marine life or habitat or which would destroy other than minimally practicable areas of existing wetland vegetation or beach grass."**

An exception to the policy of prohibiting excavation of coastal features is the Town Trustees' traditional opening of the gut to Georgica Pond in Reach 11. As long as the gut remains open only briefly it probably exerts little effect on the Wainscott beach, and does not damage the coastal resource. In general, the Town considers the opening of the gut an appropriate activity and a positive measure to enhance fishery productivity and flushing in the pond.

The natural protective features in each reach are identified and discussed in the Inventory and Analysis. Many features such as beaches are nearly ubiquitous throughout the Town's extensive coastal perimeter.

Federal Coastal Barrier Resources Act (CBRA) Zones

Natural protective features in certain designated areas of the Town are protected under the Federal Coastal Barrier Resources Act and are precluded from receiving federal financial assistance, including (effective 10/1/83) insurance under the National Flood Insurance Program. CBRA zones are designated in Reach 1 to include Cedar Point, Northwest Harbor and Northwest Creek; in Reach 2 at Three Mile Harbor including Sammy's Beach and Maidstone Park, and at the mouth of Hog Creek; in Reach 3 at Accabonac Harbor including parts of Gerard Park and Louse Point; in Reaches

4 and 10 extending from the mouth of Napeague Harbor to the ocean; in Reach 6, Big Reed Pond; in Reach 8, Oyster Pond and the north side of Montauk Point; Reach 10, in Amagansett through the Double Dunes from near Atlantic Avenue to west of Indian Wells Highway; in Reach 11 Georgica and Wainscott Ponds extending to the ocean; and Reach 12, the spits and coastal ponds of Gardiner's Island.

NYS Coastal Erosion Hazard Areas

The New York State Coastal Erosion Hazards Act (CEHA) also provides mechanisms to preserve natural protective features including nearshore areas, beaches, bluffs, primary dunes and secondary dunes within designated CEHA zones in the Town. These areas extend throughout most of the immediate coastline, are discussed and described in the Inventory and Analysis, and are delineated on aerial Photo Maps provided by the NYS DEC. CEHA regulation and permitting is presently administered in East Hampton Town by NYS DEC. NYS Coastal Erosion Management Regulations are excerpted in **Appendix E**.

Local Laws

The East Hampton Town Code additionally contains a number of provisions to protect natural features and to regulate activity near them. These sections are summarized as follows (for direct citations consult current edition of the East Hampton Town Code):

Chapter 43 -- Beaches and Parks

This section of the Code contains specific protections for beaches, dunes and vegetation, including the following:

§ 43-4 Prohibited Conduct

Prohibits placing fill or any other material, or any structure including erosion control devices on the beach without authorization and proper permits from the Town Board or Town Trustees.

§ 43-5 Vehicles on the beach.

Regulates beach vehicles, including requiring vehicles to stay at least fifty feet seaward of the beach grass line, if possible, and prohibits driving over dunes, bluffs, and vegetation.

§ 43-12 Temporary Closure

Allows the Trustees or Town Board to temporarily close or restrict any beach at any time if deemed appropriate and necessary. Either Board shall advise the other of its decision to order any closure.

Note that a cooperative arrangement between the Town Board and Town Trustees creates joint management responsibility for beach management. Coastal structures on Town Trustee owned beaches or bottomlands are regulated by and require Town Trustee permits as well as permits required under provisions of the Town Code.

Chapter 131 -- Subdivision Law

§ 131-1.04 (also **§ 153-1-20 of Zoning**), in the definitions for Lot Area, removes from lot area computation "that portion of any lot which is underwater land or ... which is seaward of the bluff line or primary dune crest or which is beach, wetland or watercourse."

§ 131-1.05, Subdivision Law General Policies,

Provides for protection of coastal features and all wetlands areas. Natural coastal features and systems, wetlands and habitats shall be identified and shall be protected by preservation in their natural state by conservation or by such other means as the Planning Board shall deem necessary.

In Flood Hazard areas states that protective measures shall be taken in flood hazard areas so as to minimize possible flood, storm and tide damage and pollution under the Special Tidal Flood Hazard Overlay District zones and definitions found in Chapter 153.

Chapter 153 -- Zoning

Section 153, Article IV, Protection of Natural Resources, in § 153-4-15 designates, "Wetlands, Watercourses, Tidal waters, Beaches, Beach grass, Dunes and Bluffs" as protected natural resources.

§ 153-4-20

Regulates and requires a Natural Resource Special Permit for any activities within specified distances from these features including those involving wetlands, beach grass, dunes or bluffs. Some of the activities specified that require permits include filling, construction, alteration of any kind, or siting of septic systems on or within 150 feet of any wetland, surface water body, or beach (septic systems require 200 feet distance). Additionally, beach grass may not be damaged or removed, nor any sand dune removed, cleared, graded, or otherwise altered without a Natural Resources Special Permit.

§ 153-4-20 (E)

Prohibits clearing, grading, construction or renovation of structures within 100' of the bluff line without a Natural Resources Special Permit.

§ 153-4-25, Emergency and minor maintenance exceptions

No Natural Resources Special Permit is required for in place and in kind replacement of existing coastal erosion structures, docks or pilings which have been damaged or destroyed, provided that a building permit is first obtained, and materials are approved by the Natural Resources Department. Also allows minor maintenance work not exceeding 25% of a structure by area or extent. A 1992 amendment permits in place and in kind restoration of bluffs, dunes, beaches or other natural erosion protection features which have been damaged or destroyed.

§ 153-4-30 through 39

Provides for minimum setbacks from the bluff (dune crest) line (100' along the ocean, except 150' east of Montauk hamlet, 50' on bay on lots of 40,000 sq. ft. or less, 100' on lots of 40,000 sq. ft. or more, 150' on lots of 84,000 sq. ft. or greater); also wetland setbacks for structures, wastewater systems and landscaping. **§ 153-4-39** contains an exception to the setbacks for coastal structures for

which a natural resources special permit has been issued and for which all other necessary federal, state, county and local approvals have been obtained.

§ 153-3-40 to 45, Flood Hazard Overlay District

This section of Town code, excerpted in **Policy #11** above, conforms to the National Flood Insurance Program regulations, which include standards for construction and elevation of structures and placement of utilities, and also prohibit alteration or grading of sand dunes. The sand dunes provision states: "There shall be no alteration of any sand dune in any special flood hazard area which cuts down the height of the dune at any point, undermines the dune or which would increase the potential for flood damage. A natural resource special permit, pursuant to **§153-4-20B and C** ... shall be obtained when required."

§ 153-5-50 of the Zoning Code sets standards for Natural Resources Special Permits for coastal structures. It requires that they not interfere with tidal flow, with marine life or habitat, or destroy other than minimal areas of existing wetland vegetation or beach grass. Structures are only eligible for a permit if refusal to permit the structure would make likely a rapid or sudden loss of the property to erosion, and there is an explicit determination that similar results are impossible using nonstructural controls. There is an exception for water-dependent facilities in Waterfront (WF) Districts or that are part of a lawful marina or recreational marina, which are held to lesser standards.

§ 153-4-85 references Town Trustee prerogatives over lands and waters under their ownership. Nothing in this LWRP or the Town Code should be construed to abrogate, dilute, limit or abridge any rights the Town Trustees may possess, now or in the future, to regulate and manage properties within their control.

POLICY 13 THE CONSTRUCTION OR RECONSTRUCTION OF EROSION PROTECTION STRUCTURES SHALL BE UNDERTAKEN ONLY IF THEY HAVE A REASONABLE PROBABILITY OF CONTROLLING EROSION FOR AT LEAST THIRTY YEARS AS DEMONSTRATED IN DESIGN AND CONSTRUCTION STANDARDS AND/OR ASSURED MAINTENANCE OR REPLACEMENT PROGRAMS.

POLICY 13A **EROSION PROTECTION STRUCTURES MUST BE MAINTAINED** BOTH WITH REGARD TO THE STRUCTURE AND TO ADJOINING NATURAL PROTECTIVE FEATURES. REOUIRED MAINTENANCE MAY INCLUDE BEACH NOURISHMENT AND MITIGATION OF EROSION TO NEARBY PROPERTY AND RESOURCES CAUSED BY CONSTRUCTION OR **RECONSTRUCTION OF THE EROSION PROTECTION** STRUCTURE.

Explanation of Policy:

These policies are designed to reinforce the Town's view that structural erosion protection solutions often have unpredictable impacts on adjoining or neighboring property or coastal resources, may disrupt coastal processes, and that mitigation of potential impacts must be incorporated into the construction and maintenance requirements for the thirty-year design lifetime of the structure specified by New York State. While effects on coastal processes and natural protective features can be subtle, far reaching and difficult to quantify, maintenance of fronting beaches and other natural protective features within defined parameters in the immediate vicinity of the structure itself will go a long way toward minimizing these impacts downstream or on neighboring property.

These provisions are required for permitting of new structures and modifications of existing erosion protection structures, and may at minimum include specifications for coverage of the structure and fronting beach profile, sediment size and composition, vegetative plantings, permitted sand sources, and a performance guarantee that maintenance will be carried out within a reasonable and regular interval while itself minimizing impacts to natural resources. See also **Policies #12 and #17-17A** for additional guidance on maintenance of natural protective features and non-structural solutions.

These policies apply to all areas of the Town's coastal zone where erosion control structures are present or may be permitted, including NYS designated CEHA zones and Flood Hazard Areas designated on the Flood Insurance Rate Maps (FIRM's) within the Town's Flood Hazard Overlay District. CEHA zones and Flood Hazard Areas are described for each reach in the Inventory and Analysis, and are located throughout the extent of the Town's coastline. NYS Coastal Erosion Management Regulations governing erosion protection structures in Coastal Erosion Hazard Areas are presently administered in the Town by the NYS DEC. The regulations are excerpted in **Appendix E**.

Erosion protection structures are also regulated by the East Hampton Town Code. The Town Code (§153-1-20, Definitions) defines COASTAL EROSION CONTROL STRUCTURE as "Every structure sited in or under any body of water, on on or near any shoreline, wetland, beach or bluff adjacent thereto, designed to limit, slow or prevent rain, wind, waves, or water currents from causing natural recession or advance of the shoreline, damage to, or loss of, one or more natural or man-made shoreline area features or silting or filling in of a natural or dredged harbor or channel. Boulders, bulkheads, gabions, jetties, revetments, riprap, seawalls, sta-pods and every other 'coastal erosion control structure' shall be included in this definition. Any such fabrication shall also constitute a coastal structure as defined herein."

In developing policy for erosion protection structures, the Town has attempted to look at sections of the coastline with similar overall conditions, examine the consequences of past development activity, and consider appropriate future responses given the present state of affairs. Along most of the Town's coast natural protective features provide the simplest, most effective and lowest cost flooding and erosion protection, with the least damage to the public resources of the shore. Wherever possible, therefore, the Town's policy is to maintain or enhance the system of natural protective features, and where practical to restore coastal systems to a natural state.

Where natural protective features are lacking, whether from natural or human activities, or where previous installation of erosion protection structures has already disrupted sections of coastline, the Town has attempted to address specific conditions in the area. Pre-existing (or unpermitted) erosion protection structures may in some cases be old, deteriorated, buried or invisible and their specific effects may no longer be readily apparent. Policies are therefore designed to address overall conditions for an area as they presently exist, and specific determinations are left to Town permitting and review procedures.

Erosion protection structures are designed to protect property or upland structures at specific locations. However, the coastal processes, storm events and rising sea level that precipitate flooding and erosion are regional or global rather than localized in nature. Erosionary forces are exerted over extended areas of coastline. Erosion protection structures by design interrupt these larger systems, and as a consequence also frequently affect downdrift or adjacent property and resources. Increased erosion, esthetic impairments, loss of important public recreational resources such as beaches, loss of habitats, and water quality degradation can result from hardening the shoreline. The cumulative impact of these structures is potentially large, and must be addressed in both policy and permitting procedures, as well as the impacts of individual structures.

Erosion and receding shorelines are chronic problems in East Hampton Town. While information on erosion rates along most shorelines in the Town remains anecdotal, the Town is making efforts to gain more quantitative information on these phenomena (see *Erosion Monitoring* and *Ditch Plains Erosion and Remediation Study* in **Projects**). As shorelines recede and more data accumulates the Town should periodically reevaluate erosion rates and flood conditions, and use the information to help determine permitting criteria and setback requirements in the coastal zone.

There is evidence that sea level is currently rising, and some theories predict that changes in global climate may accelerate the rate of future sea level rise and increase the frequency and severity of tropical storm (hurricane) activity (see Introduction). Accelerated sea level rise and more storm activity may increase shoreline recession and erosion, and frequency or extent of coastal flooding, and with them the risk of damage to coastal property. These risks should be factored into permitting and siting of erosion protection structures.

Structures may become ineffective and interfere with coastal processes in vulnerable areas of the Town's coast, particularly those that are low-lying, have rapidly receding bluffs, or highly dynamic shorelines where sediment may shift rapidly, as on the Atlantic Ocean beaches. Structures that interfere with coastal processes on dynamic shorelines have a greater risk of causing downdrift damage and of exacerbating erosion of public beaches because of higher wave energies. Structures such as rock revetments constructed of heavy materials are impractical to relocate or remove if isolated or submerged and may become navigational hazards if the shoreline recedes rapidly. These structures may also exacerbate flooding when overtopped in hurricanes or storm events by retaining floodwaters behind them and extending property damage when floodwaters recede.

Construction of erosion protection structures is expensive and often only partially effective over time, as well as posing a risk to nearby properties or natural resources. Historically in the Town of

East Hampton, attempts to preserve eroding shorelines with erosion control structures have resulted in damage to beaches and neighboring property. Along several sections of the Town's coastline extensive shore-hardening erosion control devices have resulted in loss of fronting or neighboring beaches, leaving properties with little or no natural protection. This is evident in the area east of Flaggy Hole Road (Reach 2), from Hog Creek to Gerard Drive (Reach 2-3), at Accabonac Cliff north of Barnes Landing (Reach 3), along Cross Highway north of Abraham's Landing Road (Reach 3), and at Sound View Drive in Montauk (Reach 6).

The *NYS Coastal Erosion Task Force Report* describes the shoreline dynamic: "The long-term trend of beaches along the marine coast of New York is to migrate landward. As beaches move landward and upward, they do so at the expense of bluffs and the upland area behind them. Littoral transport moves material from beaches in front of bluffs to adjacent barrier land forms, narrowed beaches then allow for further bluff erosion. Over the long-term, a dynamic equilibrium is reached where the amount of bluff erosion equals the amount of sediment necessary to maintain a beach of sufficient width to prevent further bluff erosion. Unlike beaches or dunes, bluffs cannot recover from sediment loss."

"Beaches will maintain themselves so long as there is a supply of sediment from bluffs. Efforts to stabilize the toe and face of the bluff will block natural resupply of sediment to beaches. ...if bulkheads are widely used, beaches are likely to erode rather than migrate." (NYS DOS, 1993, Vol. II, pp. 27-28)

Structures designed for erosion protection often perversely contribute to erosion problems both on and off the site due to poor design and siting and lack of downdrift remediation. These structures may reflect wave energy back onto the beach or interfere with the natural supply of sand to the beach from the littoral system or from the area behind the structure causing sand to be scoured away. Under these circumstances a beach often can only be maintained by adding sand through regular beach nourishment, which results in ever increasing costs to both the private and public sector.

There is great variety in the types of erosion protection structures present in the Town's coastal zone, ranging from homemade driftwood bulkheads to the massive rock revetment protecting Montauk Lighthouse. From observation and experience in the Town it is clear that shore-parallel structures such as bulkheads and revetments cause less disruption of littoral processes. At the same time, it is also clear that perpendicular structures such as groins and jetties cause substantially greater alteration of sediment flow and littoral patterns.

Where previous development has placed property at risk and hard erosion protection structures have greatly diminished or eliminated natural protection from beaches or bluffs, there is little choice but to acknowledge the past mistakes, try to learn from them by not compounding future problems, and deal with existing conditions in the best way possible. Therefore in areas with extensive existing armoring and where natural protection is lacking, the Town's policy is to permit maintenance and in-place in-kind replacement or reconstruction of shore-parallel structures. However, the Town will not permit new perpendicular structures, but phase out existing ones, and not permit their

maintenance or reconstruction, except in cases of dominant public interest, such as stabilization of inlets.

In some areas existing structures may not be functioning as designed, or may be disrupting coastal processes and damaging public resources, and therefore should be carefully evaluated when their reconstruction or replacement becomes necessary. In such areas structures should not receive emergency permits for replacement, but should be required to meet the full standards for a permit.

The inherent risks posed by shore-hardening erosion protection structures, experienced in East Hampton as disruption of littoral processes, loss of beaches and public resources, and damage to neighboring property, compel the Town to classify them as a solution of last resort. Because of these risks new structures are discouraged and Town policy is to permit them only after strenuous attempts to explore other alternatives, and then only when downdrift scouring and other adverse impacts can be mitigated, and where such mitigation can be continued for the life of the structure. Before a permit is granted to allow construction of erosion control structures, the need, purpose, function, impact, and alternatives to the project need to be carefully evaluated.

Proposed erosion protection structures must therefore include provisions for maintenance and to provide mitigation of any increased erosion to neighboring property or public resources such as beaches, for the same thirty year period of the design life or the actual life of the structure.

Policies #17/17A detail the Town's policy of giving preference to non-structural erosion protection solutions such as beach nourishment, dune building and beach grass planting, and not permitting new erosion protection structures in most of the high energy wave-dominated south shore Atlantic Ocean reaches. Other areas of the Town that are inappropriate for hard structures have been noted in the Inventory and Analysis and in **Policies #14/14A**. These include areas that predominantly do not contain existing shore-parallel hard structures, dynamic shorelines where structures would put public resources at risk, or sheltered inner harbors where erosionary forces are reduced and structures may damage or eliminate fragile beaches or wetland fringes. To help visualize overall conditions for the coastline, the areas where structural erosion control measures are not recommended, as well as recommendations for areas with existing structures have been outlined on Flooding and Erosion Protection Map V-2. In some cases, the non-structural areas may also include isolated structures which were either too insignificant to map, or whose replacement is not recommended. Each reach, however, has been examined with considerable care. Please refer to the Inventory and Analysis for discussions of specific conditions in each reach.

To organize policy for erosion protection structures each area of the Town's coastline has been designated with one of three categories reflecting coastal conditions and resultant policy recommendations. The recommendations are intended to apply to current conditions and for storm events within 30-year storm parameters. If a catastrophic storm event of this magnitude or greater occurs, then these recommendations should be reevaluated in light of a Town *Hurricane Damage Mitigation Plan* for redevelopment following a catastrophic storm (see **Projects**). These categories have been depicted on Flooding and Erosion Protection Map V-2, and as discussed in the Introduction, are described as follows:

Condition 1:	Area predominantly contains no shore-parallel hard structures.
Recommendation 1:	Do not allow new hard structures. Existing shore parallel structures are to be replaced only under conditions of exceptional hardship. Do not replace groins and other perpendicular structures, except where used to protect navigational channels.
Condition 2:	Area with existing hard structures which are isolated or discontinuous and where natural protective features could furnish erosion protection, or the structure is interfering with access to public beaches, or unduly interrupting coastal processes.
Recommendation 2:	Do not issue permits automatically for rebuilding or emergency replacement of structures. Analyze erosion protection function of structure versus natural or non-structural protection. Some shore- parallel structures should not be replaced. Do not replace groins and other perpendicular structures, except where used to protect navigational channels.
Condition 3:	Area with existing hard structures and minimal natural protection where structures provide the only remaining protection against flooding or erosion, provide public access, or preserve a public water dependent use.
Recommendation 3:	Structures may be rebuilt in-place in-kind under an emergency permit, or modified with full NRSP permit review, in order to mitigate adverse effects on neighboring property or resources. Do not permit expansion of structures into larger or more permanent types, e.g. from bulkheads to rock revetments; however, soft or non-structural solutions may be used to enhance protection or restore resources. Do not replace or permit groins and other perpendicular (shore-normal)

In areas of the Town (#2 or #3 above) where hard structures are preexisting, and in those instances where non-structural erosion protection solutions are not possible or in cases of exceptional hardship, through variance provisions, properly designed and constructed shore-parallel erosion protection structures may be permitted in some cases when likely to minimize or prevent damage or destruction to public or private property. Perpendicular structures will not be permitted, except in cases of overriding public interest such as inlet stabilization.

structures, except where used to protect navigational channels.

Where permitted the construction, modification, or reconstruction of shore-parallel erosion protection structures is subject to the following requirements:

- (1) All erosion protection structures must be designed and constructed according to generally accepted engineering principles and where there will be a strong likelihood of success in controlling long-term erosion. The protective measures must have a reasonable probability of controlling erosion on the immediate site for at least 30 years. Erosion protection structures shall not unreasonably interfere with public access to or use of public resources such as beaches.
- (2) All materials used in such structures must be non-toxic, durable and capable of withstanding inundation, wave impacts, icing, weathering, and other effects of meteorological and hydrographic conditions for a minimum of 30 years. Individual component materials may have a working life of less than 30 years only when a maintenance program ensures that they will be regularly maintained and replaced as necessary to attain the required 30 years or erosion protection.
- (3) A long-term maintenance program must be provided for the construction, modification, or restoration of an erosion protection structure for its 30-year design life. The maintenance program must include specifications for the normal maintenance of degradable materials, replacement of sand and vegetation covering and surrounding the structure, etc. and guarantee such maintenance by financial or other surety agreed to by the Town.
- (4) In permitting any erosion protection structure provision must be made for mitigation, including beach nourishment, of any erosion, increased bluff recession or damage to fronting beaches or other natural protective features, and other resources including affected neighboring sites. The owner of the structure is responsible for the mitigation program which must continue for the 30-year design life of the structure, with a guarantee backed by financial or other surety agreed to by the Town.
- (5) Provision must be made for the removal of the structure at the end of its 30-year design life if the shoreline has receded around the structure leaving it surrounded by open water, or if the structure has failed to halt erosion, or interferes unreasonably with access to or use of public resources such as beaches. Cost of removal is to be borne by the owner of the structure, and guaranteed by financial or other surety agreed to by the Town.

Provisions of the East Hampton Town Code governing the construction of erosion protection structures are summarized as follows (refer to East Hampton Town Code for precise language):

Chapter 43 -- Beaches and Parks

This section of the Code contains specific protections for beaches, dunes and vegetation, including the following:

§ 43-4 Prohibited Conduct

Prohibits placing fill or any other material, or any structure including erosion control devices on the beach without authorization and proper permits from the Town Board or Town Trustees.

Chapter 153 -- Zoning

Section 153, Article IV, Protection of Natural Resources, in § 153-4-15 designates, "Wetlands, Watercourses, Tidal waters, Beaches, Beach grass, Dunes and Bluffs" as protected natural resources.

§ 153-4-20

Regulates and requires a Natural Resource Special Permit for any activities within specified distances from these features including those involving wetlands, beach grass, dunes or bluffs. Some of the activities specified that require permits include filling, construction, alteration of any kind, or siting of septic systems on or within 150 feet of any wetland, surface water body, or beach (septic systems require 200 feet distance). Additionally, beach grass may not be damaged or removed, nor any sand dune removed, cleared, graded, or otherwise altered without a Natural Resources Special Permit.

§ 153-4-25, Emergency and minor maintenance exceptions

No Natural Resources Special Permit is required for in place and in kind replacement of existing coastal erosion structures, docks or pilings which have been damaged or destroyed, provided that a building permit is first obtained, and materials are approved by the Natural Resources Department. Also allows minor maintenance work not exceeding 25% of a structure by area or extent. A 1992 amendment permits in place and in kind restoration of bluffs, dunes, beaches or other natural erosion protection features which have been damaged or destroyed.

§ 153-4-39

Contains an exception to the setbacks for coastal structures for which a natural resources special permit has been issued and for which all other necessary federal, state, county and local approvals have been obtained.

§ 153-5-50 of the Zoning Code sets standards for Natural Resources Special Permits for coastal structures. It requires that they not interfere with tidal flow, with marine life or habitat, or destroy other than minimal areas of existing wetland vegetation or beach grass. Structures are only eligible for a permit if refusal to permit the structure would make likely a rapid or sudden loss of the property to erosion, and there is an explicit determination that similar results are impossible using nonstructural controls. There is an exception for water-dependent facilities in Waterfront (WF) Districts or that are part of a lawful marina or recreational marina, which are held to lesser standards.

§ 153-4-85 Town Trustee prerogatives. Coastal structures on Town Trustee owned beaches or bottomlands also require Town Trustee permits.

POLICY 14 ACTIVITIES AND DEVELOPMENT INCLUDING THE CONSTRUCTION OR RECONSTRUCTION OF EROSION PROTECTION STRUCTURES, SHALL BE UNDERTAKEN SO THAT THERE WILL BE NO MEASURABLE INCREASE IN EROSION OR FLOODING AT THE SITE OF SUCH ACTIVITIES OR DEVELOPMENT, OR AT OTHER LOCATIONS.

POLICY 14A MINIMIZE THE CONSTRUCTION OF EROSION PROTECTION STRUCTURES AND NEW DEVELOPMENT IN HAZARDOUS AREAS IN REACHES 1, 4, 5, 7, 8, 9, 10, 11, 12, AND PARTS OF REACHES 2, 3, AND 6.

Explanation of Policy:

Erosion and flooding are processes which occur naturally. However, human activity can increase the severity and adverse effects of those natural processes, causing loss of or damage to property, and endangering human lives. These actions may include placement of erosion protection structures such as groins or impermeable docks which block the littoral transport of sediment to adjacent shore lands, thus increasing their rate of recession; use of bulkheads which reflect wave energy or interfere with upland sediment supply, causing scouring of fronting beaches; or failure to observe proper drainage abatement and landscaping practices, increasing run-off and causing erosion of natural protective features such as bluffs.

Erosion protection structures eventually interfere with coastal processes and sediment transport, particularly under storm conditions, often accelerating erosion or exacerbating the effects of floodwaters. Downdrift effects of erosion protection structures on neighboring property have in several reaches of the Town precipitated a chain reaction of shoreline fortification. One structure is built to compensate for downdrift damage from another, until entire sections of the coastline are armored. The cumulative impact of these structures is demonstrated dramatically in these areas by drastic loss of beaches and shoreline habitat, not to speak of esthetic impairments and the loss of public recreational resources. Examples in the Town include the area along Runnymede Drive in Reach 2, from Hog Creek Point to Gerard Park in Reach 3, from Accabonac Cliff to Barnes Landing in Reach 3, along Cross Highway between Fresh Pond and Devon in Reach 3, and Sound View Drive on Block Island Sound in Montauk, Reach 6.

Aside from their effects on nearby resources and property, hard erosion protection structures are difficult to install and maintain. Access is often restricted or dependent on precarious weather and tidal conditions, or available only over fragile public beaches, bluffs, intertidal zones or shallow inshore flats. The work often cannot be reasonably accomplished without heavy equipment that damages beach, bluff or wetland vegetation and benthic habitat.

The problems associated with installation of erosion protection structures are magnified when considering long-term maintenance of the structure. One-time access over a fragile resource for construction may be granted. However, repeated access for heavy machinery needed for maintenance may cause unacceptable damage. Maintaining fronting or neighboring beaches is

problematic because of these access difficulties, unreliability of sand sources, and vagaries of tidal and storm conditions which may deposit or remove sand with great rapidity and seasonal irregularity.

Without maintenance, experience in East Hampton demonstrates that there is a high likelihood of adverse impacts on coastal resources from shore hardening structures (see **Policy #13/13A**).

Under these conditions it is difficult to create standards for erosion protection device permits that will protect both upland property and coastal resources without increasing potential flooding and erosion on and off-site. It is hard, for instance, to develop municipal permitting procedures and financial security mechanisms that will ensure long-term maintenance of erosion protection structures and beaches and mitigation of downdrift damage for the thirty-year design life of structures specified in **Policy #13**.

For these and other reasons detailed in the Inventory and Analysis and **Policies #11-13**, it is the Town's view that construction or reconstruction of erosion protection structures in some reaches of the Town cannot practicably be undertaken without increasing the risks of erosion and flooding and/or damage to public resources. These areas include Reaches 1, 4, 5, 7, 8, 9, 10, 11, 12 and parts of Reaches 2, 3, and 6. This policy applies particularly to perpendicular structures such as groins or jetties which interfere directly with littoral processes, and are therefore prohibited except when used to protect navigational channels.

Where existing hard structures are isolated or discontinuous, and where natural protective features could furnish erosion protection, or the structure is interfering with access to public beaches, or unduly interrupting coastal processes, permits will not be issued automatically for reconstruction or emergency replacement of the structure, but will be subject to analysis and full permit review, with the exception of those protecting the historic sites at Cedar Point Lighthouse in Reach 1 and the Montauk Lighthouse in Reach 7. Some shore parallel hard structures may not be permitted to be replaced. Groins and other perpendicular structures will not be permitted to be reconstructed or replaced, except where used to protect navigational channels.

Construction of new hard erosion protection structures is prohibited in Reaches 1, 4, 5, 7, 8, 9, 10, 11, 12, and in designated parts of Reaches 2, 3, and 6, except in cases of exceptional hardship, and soft solutions such as beach grass planting, dune building and beach nourishment will be encouraged, as noted in **Policy #17-17A**. No new flooding and erosion protection structures will be permitted on south-facing ocean shore beaches in Reaches 8, 9, 10, or 11 (see **Policy #17A**).

In those areas of Reaches 2, 3, and 6 with existing shore-parallel hard structures and minimal natural protection where structures provide the only remaining protection against against flooding or erosion, provide public access, or preserve a public water dependent use, structures may be reconstructed inplace in-kind under an emergency permit, or modified with full NRSP permit review, in order to mitigate adverse effects on neighboring property or resources. Existing structures may not be expanded into larger or more permanent types, e.g. from bulkheads to rock revetments; however, soft or non-structural solutions may be used to enhance protection or restore resources. Groins and other perpendicular structures may not be reconstructed or replaced, except where used to protect navigational channels.

The policies and the affected areas have been delineated in Flooding and Erosion Protection Map V-2.

As indicated in these policies, because of the potential for harm to neighboring property or resources, new hard erosion protection structures are prohibited except in cases of exceptional hardship. In no case will new perpendicular structures be permitted, except to stabilize or protect navigational channels. Before a structure is permitted, it will be incumbent on an applicant to demonstrate that a proposed structure:

- (1) Will not damage neighboring property or public resources, including the cumulative impact of the proposed structure with other structures in the area;
- (2) Will not interfere with littoral processes, including tidal flow, littoral drift, longshore transport and deposition of sand, dune building, and beach vegetation;
- (3) Will not interfere with receding floodwaters;
- (4) Will not cause loss of an identified habitat for wildlife or important native vegetation, including marine life or marine habitats, either by the structure itself or by the process of its installation;
- (5) Will not exacerbate flood damage by generating flood borne flotsam;
- (6) Is the only remedy available after examination of alternatives, including relocation of buildings (with relaxation of front/sideyard setbacks);
- (7) Will not change the character of the neighborhood, including natural coastline features such as Montauk's hoodoo bluffs, etc.;
- (8) Will be covered or planted so as not to deteriorate scenic or esthetic values for the area;
- (9) Is the only solution to an exceptional hardship that justifies construction or restoration of an existing structure;
- (10) Is of the minimum size, design, and physical extent needed to lessen the erosion rate to a rate comparable to that of similar shorefront properties in the vicinity without, at the same time, increasing the erosion rate or the risk of storm damage to nearby properties or public resources, while still meeting the 30-year construction standard in **Policy #13**.
- Will not degrade or cause loss of public access to the public resources of the shore or foreshore, as defined in Public Access and Recreational Resource Policies #9 & 19-22.

Construction of erosion protection structures in the Town is also subject to the policy considerations and standards cited in **Policies #11, 12 and 13** above. See also **Policy #44 (Tidal and Freshwater Wetlands)** of the **Water and Air Resources Policies**, standards 2) and 3), which state in part that, "No structure shall be permitted which would unduly interfere with tidal flow, with marine life or habitat or which would destroy other than minimally practicable areas of existing wetland vegetation

or beach grass." Activities and development in the coastal zone, including erosion protection structures, are regulated in the Town Code under the provisions summarized in **Policies #11-13**.

New York State regulates coastal activities causing flooding and erosion and erosion protection structures under the Tidal Wetlands Act and the Coastal Erosion Hazards Act. Regulations and permitting are administered by the NYS DEC. See excerpts of CEHA regulations in **Appendix E**.

POLICY 15 MINING, EXCAVATION OR DREDGING IN COASTAL WATERS SHALL NOT SIGNIFICANTLY INTERFERE WITH THE NATURAL COASTAL PROCESSES WHICH SUPPLY BEACH MATERIALS TO LAND ADJACENT TO SUCH WATERS AND SHALL BE UNDERTAKEN IN A MANNER WHICH WILL NOT CAUSE AN INCREASE IN EROSION OF SUCH LAND.

Explanation of Policy:

Any mining, excavation or dredging in Town coastal waters has the potential to significantly disrupt coastal and littoral processes, including the movement of beach materials, changing the supply of sediment and depriving beaches and shore lands of their natural regenerative powers. Mining, excavation and dredging should therefore be minimized, and where permitted, accomplished without causing a reduction of sediment supply or increasing erosion. Mining, excavation or dredging can also significantly affect surface water quality and inshore fisheries, especially shellfisheries. Please refer to Dredging and Dredge Spoil Disposal Policy #35, Public Access and Recreational Resources Policies #9 & 19-22, and Commercial Fishing Policy #10.

Mining, excavation or dredging in the Town's coastal waters is primarily for the purpose of channel, inlet or marina maintenance. Channels in the Town's two primary harbors, Lake Montauk and Three Mile Harbor, require periodic maintenance dredging, Lake Montauk to greater depths as a Federal channel, and Three Mile Harbor as a designated small boat harbor. To date most dredging permits have required spoil deposition in sites immediately adjacent to the work site. However, a secondary use of the dredge spoil is for beach nourishment, particularly for clean sandy spoil. Future permits should encourage use of clean dredge spoil from maintenance dredging in the following order of priorities:

- (1) to nourish public bathing beaches
- (2) to restore habitat, primarily for nesting shorebirds
- (3) to nourish other public trust lands and beaches
- (4) for erosion control, possibly through future erosion control districts, though none presently exist in the Town.

The Town maintains a working list of priority sites for dredge spoil, which should be consulted during the dredge permitting process on a case by case basis by private owners or contractors, or relevant public agencies such as the Suffolk County Department of Public Works or the ACOE. If

clean dredge spoil is not required or feasible for use on public lands at the time dredging occurs, the spoil may be stockpiled temporarily for future use, or used for private beach nourishment projects.

The Town does not presently permit excavation or dredging solely for beach nourishment. While it is the policy of the Town to permit maintenance dredging of existing inlets, channels and marinas, no other mining or excavation in coastal waters is practiced in Town coastal waters, none is proposed, and the Town prohibits excavating, grading, or mining in coastal waters except for: construction or maintenance of existing navigation channels, or reconstruction of historic channels; bypassing sand around natural and man-made obstructions; and improving habitat for shellfish, finfish and other wildlife. Where dredging is permitted, clean sand or gravel of an equivalent or slightly larger grain size is the only material which may be deposited within nearshore areas. Offshore mining is against Town policy because of inevitable alterations to bottom topography or nearshore areas that interfere with coastal processes and fisheries.

Inlets and channels within the Town requiring periodic dredging are noted for each reach in the Inventory and Analysis. Further details and recommendations regarding dredge sites, seasonal windows for dredging activity, and disposal of dredge spoil are contained in **Water Resources Policies #30-40 & 44**. **Dredging and Dredge Spoil Disposal Policy #35** contains guidelines and standards for dredging in the Town with depth and other recommendations for specific inlets and channels. **Table XII-6, Alternative Dredge Spoil Disposal Options**, contains sites and recommendations for spoil disposal. These standards shall apply to any dredging undertaken in the Town of East Hampton.

The Trustees of the Town of East Hampton own most of the bottomlands of the Town's shallow embayments, tidal creeks, harbors, coastal lagoons and salt ponds, with the exception of those east of the westerly boundary of Hither Hills in Montauk and on Gardiner's Island, and their permission is required for any mining, excavation or dredging in these water bodies. Town Natural Resource Special Permits are required for any dredging or related activity in the Town's coastal waters, and ACOE permits are also required for mining, excavation or dredging in coastal waters. The Town Trustees will retain ownership of any public trust or Trustee lands which become uplands due to fill or accretion resulting from beach nourishment or other erosion control projects on or adjacent to their holdings. The Town will retain ownership of any public trust which become uplands due to fill or accretion resulting from beach nourishment or other erosion control projects on or adjacent to Town holdings.

New York State also regulates mining, excavation or dredging in nearshore areas under the Coastal Erosion Hazard Areas Act. Permitting and regulations under CEHA are presently administered by the NYS DEC. Please refer to excerpts of the **Coastal Erosion Management Regulations** in **Policy #11**. Although State Regulations (viz. §505.8 (a) (1) Nearshore areas) allow permits to be issued for excavating, grading, mining, or dredging for artificial beach nourishment, Town policy is not to permit these activities solely for beach nourishment, and the Town may wish to adapt these regulations to reflect its policies should it adopt local administration of the CEHA regulations.

Sections of the Town Code regulating mining, excavation or dredging in coastal waters are summarized below. For direct citations please consult the current edition of the East Hampton Town Code.

Chapter 43 -- Beaches and Parks

This section of the Code contains specific protections for beaches, dunes and vegetation, including the following:

§ 43-4 Prohibited Conduct

Prohibits placing fill or any other material, or any structure including erosion control devices on the beach without authorization and proper permits from the Town Board or Town Trustees.

Chapter 153 -- Zoning

Section 153, Article IV, Protection of Natural Resources, in § 153-4-15 designates, "Wetlands, Watercourses, Tidal waters, Beaches, Beach grass, Dunes and Bluffs" as protected natural resources.

§ 153-4-20 Regulations

Regulates and requires a Natural Resource Special Permit for any activities within specified distances from these features including those involving wetlands, beach grass, dunes or bluffs. States that, without having first obtained a Natural Resources Special Permit, no person shall:

A. (2) "Clear, dig, dredge or in any other way add to, alter or remove any material, including natural products, from or within one hundred fifty (150) feet of any boundary of any wetland, watercourse, tidal water or beach."

§ 153-4-85 references Town Trustee prerogatives over lands and waters under their ownership, including Trustee-owned underwater lands.

POLICY 16 PUBLIC FUNDS SHALL ONLY BE USED FOR EROSION PROTECTIVE STRUCTURES WHERE NECESSARY TO PROTECT HUMAN LIFE, AND NEW DEVELOPMENT WHICH REQUIRES A LOCATION WITHIN OR ADJACENT TO AN EROSION HAZARD AREA TO BE ABLE TO FUNCTION, OR EXISTING DEVELOPMENT; AND ONLY WHERE THE PUBLIC BENEFITS OUTWEIGH THE LONG TERM MONETARY AND OTHER COSTS INCLUDING THE POTENTIAL FOR INCREASING EROSION AND ADVERSE EFFECTS ON NATURAL PROTECTIVE FEATURES.

Explanation of Policy:

Public funds are used for a variety of purposes on the State's shorelines. This policy recognizes the public need for the protection of human life and existing investment in development which requires a location in proximity to the coastal area or in adjacent waters to be able to function. However, it also recognizes the adverse impacts of activities and development on the rate of erosion and on

natural protective features and requires that careful analysis be made of benefits and long-term costs, including environmental degradation, increased erosion and loss of or damage to public resources, prior to expending public funds.

In the past public funds have been used for erosion protection structures in the Town of East Hampton only for maintenance of harbor inlets, as at the entrance jetties for Lake Montauk and Three Mile Harbor, and for protection of the Montauk and Cedar Point Lighthouses, structures of state and national historic significance. In the case of the Montauk Lighthouse, if future erosion undermines the structure in its present location after the substantial investment in protective structures, the costs and benefits of further armoring the Point should be carefully evaluated compared to those of moving the structure back.

Where structures constructed with public funds have contributed to erosion of beaches and private property, as in the Sound View Drive area west of the Lake Montauk jetties, provision should be made for mitigation or remediation, through sand bypassing or beach nourishment for the affected areas, as part of the periodic maintenance of the structures or the facility, such as maintenance dredging of the Federal channel to Lake Montauk (Montauk Harbor).

Where public resources and recreation facilities are at risk because of loss of natural protective features from erosion or storm inundation, and human life and property are also exposed, such as at Ditch Plains in Montauk, economic and environmental benefits may be sufficient to justify expenditure of public funds. Costs and benefits will be evaluated in the *Ditch Plains Erosion and Remediation Study* (**Projects**).

There are presently no other areas in the Town where application of public funds for erosion protection are necessary. However, if in the future rising sea level or increased storm frequency increases erosion, public funding may be required to protect vital infrastructure within the coastal zone, for example the low lying sections of NYS Route 27 in Napeague. At such time the costs and benefits of erosion protection should be evaluated according to the policy, and prospective sites should be evaluated and prioritized in a pre-storm *Hurricane Damage Mitigation Plan* (**Projects**). Part of this evaluation should include closing storm breaches in the coastal barrier that cause substantial impacts on natural protective features, infrastructure, habitat or water quality. Potential sites include Northwest Creek, Three Mile Harbor, Accabonac Harbor, Fort Pond, Montauk Harbor, Oyster Pond, Ditch Plains, the Montauk business district, Napeague, and Georgica Pond gut. This preliminary list is not meant to be inclusive.

The Town may also in the future consider such quasi-public funding mechanisms as erosion control tax districts for beach nourishment or other flooding or erosion control projects. While the Town and other government agencies that would undertake public funding of erosion structures are generally exempt from the provisions of the Town Code, it is the Town's policy to take lead agency status for SEQRA review of any such projects.

New York State regulates erosion protection structures through the Coastal Erosion Hazard Areas Act, presently administered in the Town by the NYS DEC. Please refer to excerpts from the Coastal Erosion Management Regulations in **Appendix E**.

POLICY 17 WHENEVER POSSIBLE, USE NON-STRUCTURAL MEASURES TO MINIMIZE DAMAGE TO NATURAL RESOURCES AND PROPERTY FROM FLOODING AND EROSION. SUCH MEASURES SHALL INCLUDE:

- (I) THE SETBACK OF BUILDINGS AND STRUCTURES;
- (II) THE PLANTING OF VEGETATION AND THE INSTALLATION OF SAND FENCING AND DRAINING;
- (III) THE RESHAPING OF BLUFFS; AND
- (IV) THE FLOOD-PROOFING OF BUILDINGS OF THEIR ELEVATION ABOVE THE BASE FLOOD LEVEL.

POLICY 17AALONG SOUTH SHORE OCEAN FACING REACHES 8, 9, 10, AND
11, ONLY NON-STRUCTURAL MEASURES ARE PERMITTED TO
MINIMIZE FLOODING AND EROSION

Explanation of Policy:

Policy #17 extends and elaborates on the policies and standards in Policies #11-16 of this section.

Policy #17A applies to Reaches 8, 9, 10 and 11 of the Town's south shore where, in the wavedominated high-energy environment of the Atlantic Ocean, flooding and erosion protection structures interfere unduly with coastal processes and have a high probability of adversely affecting public resources like beaches. These reaches, which predominantly do not contain existing shoreparallel hard structures, are areas where new hard structures should not be permitted for flooding or erosion protection. Any existing shore parallel structures are to be replaced only under conditions of exceptional hardship, and groins and other perpendicular structures should not be replaced, except where used to protect navigational channels, of which there are none on the Town's south shore. See Flooding and Erosion Protection Map V-2.

These policies recognize both the potential damage from flooding and erosion to development, and to natural protective features in the Town's coastal areas, as well as the substantial capital costs and adverse environmental impacts associated with shore-hardening coastal structures. The policies consider what measures are appropriate to protect existing structures and development and to preserve the natural protective features of the Town's coastal zone.

Erosion and flooding protection structures can change natural coastal processes, and are generally designed to counteract natural patterns of erosion and flooding by absorbing, diverting or reflecting wave energy and/or capturing littoral sediment, or by diverting floodwaters. Flooding and erosion protection structures can also increase local erosion rates; cause shifts in tidal activity and circulation; alter or destroy natural habitats; cause loss of beaches, backshores, and intertidal zones;

accelerate drowning of tidal wetlands due to rise in sea level; cause loss of public access to the shore; and other harmful impacts. These adverse impacts are particularly acute in the high-energy environment of the Atlantic Ocean where a single storm can produce extensive alterations of the coast. Therefore, non-structural measures are preferred, especially along the south shore.

Consistency with this policy requires exhausting non-structural flooding and erosion protection solutions before consideration of structural solutions. Flooding and erosion protection projects must conform to the other Flooding and Erosion Policies #11-16, Significant Habitats Policy #7, Public Access and Recreational Resources Policies #9 & 19-22, Historic Resource and Visual Quality Policies #23-25, and Tidal & Freshwater Wetlands Policy #44.

In addition, to ascertain consistency with this policy a determination must be made if non-structural measures will afford protection appropriate to a given site. If non-structural measures are found to provide adequate protection against flooding and erosion, then consistency with the policy would require the use of such non-structural measures in lieu of structural ones.

The use of erosion and flooding protection structures shall only be considered after such an evaluation of available non-structural measures, and requires a determination that the structure, by itself or cumulatively with other structures in the area, will not adversely affect nearby beaches or other protective features or habitat areas. This evaluation should be based on the coastal geomorphology, local erosion rate, weather exposure and marine energy environment, as well as site and engineering plans, topography, subsoil characteristics, existing development patterns and any other pertinent information required to allow an analysis of the site and alternative protection measures.

As part of this evaluation the Town's policy requires that, prior to permitting erosion protection structures:

- (1) Siting of new buildings and accessory structures be outside of Flood Hazard Zones and Coastal Erosion Hazard Areas wherever possible.
- (2) That existing buildings and accessory structures be relocated landward to remove them as far from Flood Zones and Coastal Erosion Hazard Areas as site constraints allow.
- Existing buildings and accessory structures be flood-proofed, consistent with Policy #11 and base flood elevation considerations, and taking into account the character of the neighborhood.

In the Town of East Hampton, non-structural measures shall include, but not be limited to:

- (a) Artificially nourishing bluffs, dunes, backshores and beaches with compatible grainsize sand above the mean high water (MHW) line,
- (b) Reshaping bluff faces to the angle of repose and terracing them, in situ, to the degree that the MHW line is not moved seaward,
- (c) Building of dunes, backshores and beaches by sand nourishment,

- (d) Sand entrapment with the help of plantings of native strand vegetation species (e.g., beach grass) and the installation of sand fencing on foredunes, backshores and bluff toes,
- (e) Stabilizing bluff, dune, backshore and beach formations with appropriate plantings of native strand vegetation including beach grass,
- (f) Limiting modes of access over private lands to maintain vegetation across dunes, bluffs or backshores,
- (g) Reinforcing bluff and dune toes with biodegradable organic materials including straw and seaweeds landward of existing MHW,
- (h) Installing drainage devices to control water flowing over bluffs and bluff faces.

The following provisions of Town Code govern use of non-structural measures for flooding and erosion, summarized as follows (for direct citations please consult the current edition of the East Hampton Town Code):

Chapter 131 -- Subdivision Law

§ 131-1.05, Subdivision Law General Policies,

Provides for protection of coastal features and all wetlands areas. Natural coastal features and systems, wetlands and habitats shall be identified and shall be protected by preservation in their natural state by conservation or by such other means as the Planning Board shall deem necessary. In Flood Hazard areas states that protective measures shall be taken in flood hazard areas so as to minimize possible flood, storm and tide damage and pollution under the Special Tidal Flood Hazard Overlay District zones and definitions found in Chapter 153.

Chapter 153 -- Zoning

§ 153-3-40 through -45, Flood Hazard Overlay District

Requires conforming to FEMA/ National Flood Insurance Program flood-proofing standards within flood hazard zones, implemented through local planning review and building codes.

§ 153, Article IV, Protection of Natural Resources, in **§ 153-4-15** designates, "Wetlands, Watercourses, Tidal waters, Beaches, Beach grass, Dunes and Bluffs" as protected natural resources.

§ 153-4-20

Regulates and requires a Natural Resource Special Permit for any activities within specified distances from these features including those involving wetlands, beach grass, dunes or bluffs. Some of the activities specified that require permits include filling, construction, alteration of any kind, or siting of septic systems on or within 150 feet of any wetland, surface water body, or beach (septic systems require 200 feet distance). Additionally, beach grass may not be damaged or removed, nor any sand dune removed, cleared, graded, or otherwise altered without a Natural Resources Special Permit.

§ 153-4-25, Emergency and minor maintenance exceptions

No Natural Resources Special Permit is required for in place and in kind replacement of existing coastal erosion structures, docks or pilings which have been damaged or destroyed, provided that a

building permit is first obtained, and materials are approved by the Natural Resources Department. Also allows minor maintenance work not exceeding 25% of a structure by area or extent. A 1992 amendment permits in place and in kind restoration of bluffs, dunes, beaches or other natural erosion protection features which have been damaged or destroyed.

§ 153-4-30 through 39

Provides for minimum setbacks from the bluff (dune crest) line (100' along the ocean, except 150' east of Montauk hamlet, 50' on bay on lots of 40,000 sq. ft. or less, 100' on lots of 40,000 sq. ft. or more, 150' on lots of 84,000 sq. ft. or greater); also wetland setbacks for structures, wastewater systems and landscaping.

§ 153-4-39

Contains an exception to setbacks for coastal structures for which a natural resources special permit has been issued and for which all other necessary federal, state, county and local approvals have been obtained.

§ 153-5-50 of the Zoning Code sets standards for Natural Resources Special Permits for coastal structures. It requires that they not interfere with tidal flow, with marine life or habitat, or destroy other than minimal areas of existing wetland vegetation or beach grass. Structures are only eligible for a permit if refusal to permit the structure would make likely a rapid or sudden loss of the property to erosion, and there is an explicit determination that similar results are impossible using nonstructural controls. There is an exception for water-dependent facilities in Waterfront (WF) Districts or that are part of a lawful marina or recreational marina, which are held to lesser standards.

Coastal structures on Town Trustee owned beaches or bottomlands also require Town Trustee permits. New York State regulates structural and non-structural erosion protection measures under CEHA, as administered by NYS DEC. See Coastal Erosion Management Regulations excerpts in **Appendix E**.

SECTION VI

GENERAL POLICY #18

GENERAL POLICY

POLICY #18 TO SAFEGUARD THE VITAL ECONOMIC, SOCIAL AND ENVIRONMENTAL INTERESTS OF THE STATE AND OF ITS CITIZENS, PROPOSED MAJOR ACTIONS IN THE COASTAL AREA MUST GIVE FULL CONSIDERATION TO THOSE INTERESTS, AND TO THE SAFEGUARDS WHICH THE STATE HAS ESTABLISHED TO PROTECT VALUABLE COASTAL RESOURCE AREAS.

Explanation of policy:

Proposed major actions may be undertaken in the Town's coastal area if they will not significantly impair valuable coastal waters and resources, thus frustrating the purpose of the safeguards which the State and Town have established to protect those waters and resources. Proposed actions must take into account the social, economic and environmental interests of the State and Town and their citizens in matters that affect natural resources, water quality, shoreline damage and recreation. No major action shall be undertaken that would have a significant impact on coastal resources or would significantly impair valuable coastal waters unless appropriate and accepted mitigative measures are implemented.

The vital economic, social and environmental interests of the citizens of New York State and East Hampton Town are closely linked to the resources of its coastal area because of the local resort economy, commercial fishing, and recreational pursuits such as boating, fishing, and swimming that contribute to the quality of life and enjoyment of residents. Economic and environmental concerns may at times appear to conflict. However, in the long-term the Town's coastal environment is its primary economic asset, and its ecological, historical and scenic qualities must be protected to insure future economic health.

New York State agencies are responsible for enforcement of the various State laws affecting coastal resources, such as the State Environmental Quality Review Act (SEQRA), Tidal Wetlands Act and the Coastal Erosion Hazard Act (CEHA), and these agencies should coordinate and cooperate with East Hampton Town agencies in evaluating proposed major actions in light of State regulations. In most cases the Town reserves lead agency status for such proposed major actions, and would evaluate them under SEQRA procedures and according to local environmental and planning laws and procedures. All agencies, State, County, and Town, should place protection of valuable coastal waters and resources as the top priority in their decision-making processes.

SECTION VII

PUBLIC ACCESS POLICIES #19-20

& RECREATION POLICIES #9, #21 & 22

A. INTRODUCTION

Public access to the water and the recreation activity it affords is critical to East Hampton Town's resort economy. The tourist, second home and real estate industries stem directly from the attractions of coastal recreation, which takes place on public beaches and in public waters. Fishing, boating and the myriad of other activities are supported by an array of local enterprises, marina and charter boat operations, boat rentals, fishing tackle and sporting goods shops, which depend on the ecology, natural bounty and scenic beauty of public coastal resources. Maintaining water quality, fisheries productivity, beaches, wetlands, etc. are vital not only for the intrinsic value of the resources, but also for their ripple effect through the economy. The value of public access and coastal recreation goes beyond their economic worth -- it is the primary incentive for visiting and living in East Hampton.

Coastal based recreation goes on in every reach of the Town's coastal zone, from passive, nonconsumptive pastimes like photography and nature walks, to active, consumptive uses like fishing and hunting. The coast is not only a setting for active recreation, the harmony of nature and vistas of open space are themselves re-creation and relaxation for the mind, healing balm for the frenetic pace of life. The sea and its proximity, the inlets, bays, beaches and marshes attract the eye with unbroken expanses, infusing the spirit. While this LWRP section examines public access and recreational infrastructure, it is important to recall the visual and scenic context of these facilities and their tangible benefits to quality of life. Scenic values and their preservation are addressed in the **Historic Resources and Visual Qualities Policies #23-25** and in the **Projects**.

Striking a balance between resource protection and recreation use is critical to maintain coastal resources for future generations. Public access and recreational enjoyment of the coast evoke the same concerns addressed in other LWRP policies, protecting habitat values and surface water quality, maintaining natural dune and beach defenses, and preserving scenic and historic landscapes. Environmental conditions that constrain public access and recreational use include shorebird nesting sites for species such as the piping plover and least tern, habitat such as salt marshes and dunelands, sensitive beach vegetation, and bluff erosion.

Public access is also vital to the Town baymen's traditional fishing and shellfishing. Just as nesting shorebirds are becoming endangered, the commercial fisherman and baymen of East Hampton are themselves becoming an endangered species. While their infrastructure needs are addressed in **Commercial Fishing Policies #10/10A**, public access to the water is critical to their continued survival. They are a stalwart tradition in the local economy and deserve special consideration for access with their vehicles and equipment.

An overview of available public access indicates it is abundant. Each reach has at least two access points to the water (Reach 7), and as many as 44 (Reach 2), with the exception of Reach 12, Gardiner's Island, which is privately owned. However, in a number of instances public access is unavailable for clamming, bathing, surfing or other purposes, and in certain areas access to the public has been restricted or closed off. Several traditional access points and access to publicly owned bottomlands and waterfront have been lost to private development in Wainscott, Napeague, and

along the Atlantic Ocean shoreline and Gardiners Bay. A prime example is Wainscott Pond, wholly owned by the Town Trustees, yet inaccessible to the public because it is surrounded by private lands.

B. OBJECTIVES

The Inventory and Analysis of public access and recreational resources examines public access to the water-related resources of the Town, including needs of recreational boating, fishing and swimming, and private sector roles in recreation. The inventory is designed to provide information and recommendations to enhance access and recreational opportunities in the coastal zone, consistent with other policies of the LWRP. At the core of the inventory is a database which will be useful to the Town in future coastal management and planning.

A set of Town-wide recommendations and guidance specific to individual accesses was developed from the inventory survey, local knowledge and field observation. The inventory also identifies existing and potential conflicts between uses, and between recreation and other concerns such as habitat values and environmental protection, and recommends solutions to minimize or eliminate these frictions in the future.

C. METHODOLOGY

As part of the Inventory and Analysis the Planning staff made an extensive survey of relevant sites and water bodies in the coastal zone. This information was also used to update the original Public Access Inventory, completed in October 1991, and a 1991 Boater Survey.

A checklist of recreational uses and access attributes was completed for each waterfront access site and water body within the Town. The types of recreational activity were characterized as: waterdependent (boating, swimming, fishing, etc.); and water-enhanced (pedestrian & bicycle trails, swimming pools, ballfields, golf and tennis, etc.). The checklist form also included multiple-use conflicts, environmental and other concerns, improvement opportunities, and recreational uses compatible with new private development. The checklist and associated criteria used in decision making are included in **Appendix F**. The information collected was entered into a computer database using Paradox 4.0 software for DOS, and has since been ported to an MS Access 97 database to interface with a Town Geographic Information System.

Information for the current inventory was compiled in the field and from existing sources including literature and statistics from the New York State Office of Parks, Recreation and Historic Preservation's (NYS OPRHP), New York State Department of Environmental Conservation (NYS DEC), Suffolk County Parks and Planning Departments, and The Nature Conservancy (TNC). Internal Town Planning Department documents and information from other Town departments were also used. A number of organizations and individuals with local recreational interests and knowledge were contacted by the planning staff.

Existing facilities and access points were extensively field-checked, and adjustments made in the course of the survey so that it conforms to observed conditions. However, it should be emphasized

that the inventory represents a snapshot in time of conditions in the Town's coastal zone, and it is anticipated that the public access and recreation database will be supplemented, updated and expanded in the future.

Transportation related recreation issues, such as limited availability of beach parking, are addressed in the Transportation Element of the Town Comprehensive Plan (1997), and are therefore only touched upon in this report to avoid duplication. In addition, many land use issues pertaining to recreation are addressed in the Town's Open Space Plan (1995), which includes specific recommendations for parcels critical to coastal recreational activities. These recommendations are listed in detail in **Development Policies #1-6**.

D. TOWNWIDE SUMMARY OF PUBLIC ACCESS AND RECREATIONAL RESOURCES

1. Public access

Townwide, 211 land sites were examined in the coastal zone inventory for public access and recreational resources, almost all of which provide some form of access to the water, whether for the general public, members of homeowner associations, private clubs, guests at motels, etc. Public access to the water was categorized in the inventory according to whether there was a paved launch ramp (16 sites), a boat access without a ramp (43), an off-road vehicle (ORV) access (84), a pedestrian walkway or stairway (74), a natural pedestrian access (180), visual access only (35), whether the access crossed private or non-public lands (100 were non-public, including privately owned preserves, and 108 were public), and an estimated number of parking spaces at the site, a total of 5563 townwide (spaces were counted where marked, otherwise an approximate number was calculated). Other site characteristics and facilities surveyed include whether the site is a designated Town Nature Preserve (23), a private beach club (10), whether ORV driving occurs at or near the site (108) and whether there are seasonal or other Town restrictions on ORV driving (17), whether there are bike racks (18), picnic grounds (36), campsites (560 individual camping spaces townwide), benches (39 sites), and whether there is seal watching at winter haulout sites (8).

In addition to the land sites, 31 waterbody sites including harbors, creeks and ponds were surveyed for public access and recreational resources, as well as a portion of the bay or ocean bordering each reach.

2. Boating facilities

102 of the 211 sites inventoried had some type of boating facilities including marinas, private yacht clubs, boat rentals, launch ramps or boat access without a ramp.

Townwide, there is slip capacity for 2139 boats, plus 5 moorings not at marinas and capacity for 284 moorings among the 31 waterbody sites inventoried. This is a total capacity of 2428 boats in the water, which appears ample for the present level of demand. In addition there were 101 private docks counted around the waterbody sites.

At present there are few dry rack boat storage operations in the Town, and they were not independently inventoried. Marine industry sources reported three marina operations in Three Mile Harbor with total dry rack capacity for 40-50 small boats, up to about 22'. The Town recognizes that dry rack storage can significantly increase the intensity of marina use, with increased numbers of boats, requirements for parking and sanitary facilities, and visual obstruction of water views. Dry rack storage, dockominiums, etc. should be examined in future *Harbor Management Plans* (see **Projects**). Landside winter storage and haulage has a capacity for 655 boats townwide, onsite at the various marina facilities. At least two winter boat storage sites are inland of the coastal zone, and were therefore not inventoried.

Of the Town's 33 marinas and 6 private yacht clubs, 9 have pumpout facilities, including 2 operated by the Town at Three Mile Harbor and Lake Montauk, and 17 have fueling facilities. As of 1998, two commercial pumpout boats were operating in Three Mile Harbor and Lake Montauk, and the Town Trustees had acquired a pumpout boat to operate in Three Mile Harbor. 51 sites overall have shoreside facilities, usually restrooms. There are 4 boat dealer/brokers amongst the marinas, and 4 sites where boat rentals are available.

Of the 31 waterbody sites, 8 are used occasionally for overnight anchorage, 22 for sailing or motor boating, 26 for canoeing, kayaking or rowing, 14 for wind-surfing (sail-boarding), 5 for water-scooters or jetskis, and 10 for water-skiing. Overnight anchorage is prohibited by the Town Trustees in Northwest Creek and Napeague Harbor, and is at times in demand in Three Mile Harbor and southern Lake Montauk. As a harbor management issue, transient mooring has implications for shellfish management and clean waters, and should be looked at more thoroughly in *Harbor Management Plans*. It is presently supervised by the Town Harbormaster and Town Trustees.

3. Fishing and hunting

There are 5 party boats available for fishing in addition to 82 charter boats, nearly all out of Montauk Harbor. Townwide there are 11 fishing piers, including docks or jetties in common use by local fishermen. 20 of the waterbody sites provided access to inshore saltwater fishing; 12 for offshore saltwater fishing; and there are 7 freshwater fishing spots. Shellfishing is available at 14 of the waterbody sites polled, with 6 containing shellfish beds stocked by the East Hampton Town hatchery. In addition 9 sites are used for other forms of fishing, e.g. crabbing in Georgica Pond. Surfcasting occurs at 107 of the sites surveyed, reflected by the ample public access recorded above, especially the 84 ORV access sites which are used by many surfcasters. There are 9 bait and tackle shops within the coastal zone, in addition to stores that carry bait and tackle within the Town proper. Fish cleaning sinks are available at 19 marinas.

According to hunters and NYS DEC, 47 sites throughout the Town's coastal zone are used for hunting, trapping or shooting, of which 13 are permit-restricted hunting grounds, i.e. requiring additional hunting permits from the Town, County or State, as for example, NYS DEC access permits required in addition to hunting licenses for deer hunting in State parklands. Duck hunting occurs at 24 of the 31 waterbody sites surveyed, 13 of them having seasonal duckblinds installed. In addition to a NYS hunting licenses permit requirements for hunting may include a Federal migratory bird stamp for duck hunting; an access permit to hunt on Town, County or State parklands;

and a Town Trustee or other permit for a duck blind in Trustee or other jurisdictions. Duck blinds are allowed on most waterbodies with the appropriate permission.

4. Beaches and swimming facilities

Most of the beaches in the Town, including approximately 19 miles of Atlantic Ocean shoreline, are in public ownership. The Town operates 8 municipal bathing beaches with lifeguards and comfort stations. In addition there are 79 non-designated bathing beaches used by the general public without facilities. There are also 10 private beach clubs, including homeowners association beaches operated for the benefit of their residents. There are 12 public swimming pools, located at private clubs, marinas and youth camps and available for the use of guests, except for Montauk Downs and Gurney's Inn which are open to the general public.

As noted parking at the 211 coastal recreation sites totals 5563 spaces. 51 of the sites have shoreside facilities (restrooms), 5 have volleyball nets, and large numbers offer other beach activities: beach walking or jogging (114), picnicking (129), sunbathing (107), beachcombing (113), or bird watching from the shore (168). 2 sites have sandcastle building contests.

Of the 31 waterbody sites surveyed 4 have ocean swimming, 15 have bay swimming, and 7 have freshwater or brackish pond swimming. 5 sites are favored for board surfing, 16 for snorkeling or scuba diving.

5. Other recreation activities

Other recreational activities in the coastal zone include water-enhanced uses such as golf, tennis, ball-playing, bicycling, hiking, riding, foraging for wild fruits and berries, and esthetic pursuits such as photography, sketching and painting. Of the 211 sites surveyed there are: 2 golf courses, a miniature golf course, 46 tennis courts (including schools and private facilities), 11 ballfields, horse rentals and riding at 2 sites in Montauk, and 8 children's camps. There are no bike rentals in the coastal zone. However, 8 sites coincided with proposed bike paths. 28 sites have periodic organized nature walks, 39 sites have existing trails or roads for hiking, of which 14 have trail maps available. 33 sites are sources for wild fruit or berry foraging.

6. Townwide recreation activities

Several recreational categories are so ubiquitous as to be impractical to tabulate reach by reach. One of these is esthetic, including photography, sketching and painting. Almost all of the sites surveyed, 197 out of 211, are suitable in some way for doing artwork. These pursuits can be practiced virtually anywhere there is access to the coast. The landscape and light of East Hampton's shoreline have attracted amateur and professional artists since the advent of Thomas Moran, Childe Hassam, and the members of the Tile Club in the 1880's, continuing into the present with numerous artists residing in the Town. A summer art institute, the Art Barge, is located on Napeague Harbor in Reach 4, and numerous scenic locations are used by artists. There is an active art community, represented by the East Hampton Artists Alliance.

Nature appreciation in general, and camping, hiking and birdwatching in particular are also activities that occur townwide. Campgrounds are located primarily in the County parks at Cedar Point and Montauk, at Hither Hills State Park, and a Boy Scout (Camp Norwesca) and Girl Scout (Camp Blue

Bay) camp in Reach 2. Third House, in the Montauk County Park at Deep Hollow also offers a small camping hostel for bicyclists.

A network of hiking trails extends through much of the parkland and preserved open space of the Town's coastal zone. The Town Planning Department and various park agencies have mapped trails in some areas, so noted in the recreation inventory database for specific sites. The Town has three area trail maps available in the Town Clerk's office, for Northwest Woods, Hither Hills/Hither Woods, and Montauk Point (from Lake Montauk east to the Point). Walking on the beach is another of the universally enjoyable pastimes in a waterfront community, for which East Hampton's coast is extraordinarily well endowed. The entire 19.12 mile expanse of Atlantic Ocean shore from Montauk Point to the Town line in Wainscott can be traversed continuously, one measure of accessibility to the natural riches of the Town's public beaches. The 35.53 mile northern bay shoreline is more discontinuous, interrupted by harbors and erosion protection structures, but still has many miles undisturbed.

Birdwatching is highly dependent on season and species for location. Several local environmental groups, The Nature Conservancy, Group for the South Fork, South Fork Natural History Society, and East Hampton Trails Preservation Society, offer walks timed to observing birds and other wildlife throughout the seasons. The long history of bird watching on the East End is exemplified by the Montauk Christmas Bird Count, a volunteer avian census of the area that records species annually and is now in its 66th year.

E. GOVERNMENT REGULATION OF PUBLIC ACCESS, RECREATIONAL ACTIVITIES AND FACILITIES

Various types of access and recreational activity fall under federal, state, county or town jurisdictions. Public access to a federal preserve, or to State, County or Town parklands are regulated respectively by the U.S. Fish and Wildlife Service (USFWS), NYS OPRHP, Suffolk County Parks Department, or the Town.

Consumptive uses such as fishing or hunting are, by and large, licensed and regulated by the NYS DEC, except for shellfishing in Town and Town Trustee waters, which requires a Town permit and is regulated by the Town's Shellfish Ordinance (Town Code §125-1 through -23). Saltwater fisheries do not require a recreational license, however, NYS DEC imposes catch limits on some species, and a commercial license is required for sales.

Hunting requires a State hunting license, is restricted by a hunting season set by NYS DEC, and in addition may require a permit to hunt on State, County or Town lands, or permission of an owner to hunt on private property. Waterfowl hunting, primarily for sea and pond ducks, is regulated by USFWS and enforced by NYS DEC with seasonal and bag limits for various species and shooting regulations requiring a 500' open line of fire, shotgun bore, ammunition requirements, etc.

Recreational boating offshore is regulated primarily by the U.S. Coast Guard, from the station on Star Island in Lake Montauk. The Coast Guard conducts a regular program of education, inspection

and enforcement of vessel safety requirements. The local Power Squadron, Coast Guard Auxiliary, and adult education programs offer periodic courses in navigation and water safety, as do the Harbormaster's and Parks Departments of the Town. The Town regulates boating within its waters under **Chapter 149** of the Town Code, Waterways and Boats. Within the Town's enclosed harbors, speed limits and other rules of navigation, local shellfish and mooring ordinances, as well as regulations of the Town Trustees, are enforced by the Town Harbormaster and Bay Constable staffs, who also maintain a close liaison with the Coast Guard for emergency purposes.

The Town also regulates waterskiing, diving and swimming, and the use of jetskis (water scooters), hovercraft and other personal watercraft (PWC's) in its waters in **§149-12** of the Town Code, which provides that such craft shall not be operated in harbors or at designated bathing beaches, and must be 500 feet offshore, except for launching from or landing on shore. There are two designated waterski areas, one in Three Mile Harbor and one in Lake Montauk.

Parking for beach access within the Town is at designated road-ends and parking lots at bathing beaches and non-designated beaches (i.e. without lifeguards or comfort stations). Between May 15th and September 15th, a Town parking permit is required at most Town-owned beaches, and a Village permit is required at beaches within the incorporated Village of East Hampton. Town permits are issued free to residents, or for a seasonal fee of \$125 to non-residents. Daily beach parking without a permit can be had for \$15 at the Atlantic Avenue beach in Amagansett. Parking at State-owned park facilities such as Hither Hills and Montauk State parks is by daily fee in season, and at County parks such as Cedar Point, by County permit.

Off-road vehicle (ORV) use on Town beaches is regulated by **§43-5** of Town Code, under a cooperative agreement between the Town Board and Town Trustees. A Town permit is required for beach driving, and is issued free to residents, or on payment of a \$200 fee to non-residents, with 50% discounts for disabled veterans. State and County ORV permits are required for beach driving within their respective parklands within the Town.

Development of new public access or recreational facilities, or improvement of existing facilities, comes under review by the Town in the process of site plan, subdivision, zoning, building permit, or SEQRA review, and/or Natural Resource Special Permit or Town Trustee permit requirements. Development in the coastal zone may also require NYS DEC Freshwater or Tidal Wetlands permits or Coastal Erosion Hazard permits if occurring in affected areas, and/or U.S. Army Corps of Engineers permits if impacting federally regulated wetlands or navigable waters.

For facilities on Town-owned public land, the Town Board initiates and approves capital projects, with advice of the Town Planning, Natural Resource, and Parks Departments staff and the Town Engineer. The Planning Board, with the aid of such planning documents as the Town's Comprehensive Plan, Open Space Plan, and this report, may provide guidance for such actions. Most Town-owned recreational facilities are maintained by the Town Parks Department.

Development of new recreational facilities or improvement of existing facilities on Federal, State or County lands in the Town's coastal zone are within the purview of appropriate agencies of those

governments, and as such may be exempt from review by the Town or from its planning and zoning procedures. Such development is, however, subject to SEQRA and to coastal consistency review using the policies of the approved LWRP.

F. CONCERNS, CONFLICTS, AND OPPORTUNITIES

An analysis of **use conflicts, environmental concerns, improvement opportunities, and uses compatible with new development** was undertaken concurrent with the inventory, to enhance public access where appropriate and improve management of coastal recreational resources.

Based on field inspections and empirical knowledge of the Town, existing and potential use conflicts were identified and categorized within the database or described in explanatory notes. Recurrent situations categorized in the inventory included: conflicts with natural resources, habitat, other recreational resources or other users, beach driving, and pedestrian overuse. Use conflicts at or near a site included those between: boating and swimming; fishing and swimming; jet skis (water scooters) and swimming; surfcasting and swimming; hunting and hiking or other passive uses; ORV's and habitat or natural resources; ORV use and passive human activities; and private property vs. public access. Wherever possible, solutions were noted by planners conducting the survey.

Environmental concerns and constraints researched and recorded for the inventory sites included: State and Locally designated Significant Coastal Fish and Wildlife Habitats (SCFWH), with numbers of protected plant and animal species and nesting shorebirds; potential water quality concerns; erosion problems that have affected recreational opportunities (e.g. beach loss); and potential flooding problems at road-ends caused by recreational activity.

Enhancement or expansion of public access or recreational facilities was recommended for a site or waterbody where existing conditions or projected future needs indicated, consistent with environmental concerns. Among recommended improvements cited were: acquisition or improvement of public access with suggestions for a launch ramp, ORV access, additional parking, pedestrian access, or scenic view; upgrading facilities by installation of a ballfield, basketball hoops, benches, bike racks, fishing pier, dock, garbage cans, toilets, interpretive signs, picnic tables, canoe/kayak campsite, roller blade area, tennis courts, or swimming pool; and environmental enhancements such as wetland restoration or trail development.

Where new or improved public access or recreational opportunities could be combined with future private development, recommendations were noted. Potential new recreation uses included: a dock to be used as a fishing pier; a dock marina/complex providing visual and/or pedestrian access to the water; a launch ramp providing access for the boating community; a pedestrian access to the water; ORV access; a place for swimming; and a trail or link to a larger trail system.

While addressed in other policy sections including **Fish and Wildlife Habitats #7-8, Flooding and Erosion #11-17, Scenic and Historical Resources #23-25, and Air and Water Resources #30-44**, there is a constant need to weigh conflicts with the Town's natural coastal resources against demand for waterfront access and recreation. Care must be taken that improvement or enhancement of public access and recreational resources does not conflict with conservation in other policies.

Such conflicts are documented in the inventory between resource uses. Where conflicts occur, either between competing recreational uses or between recreation activities and environmental values, a pro-active preventive approach is clearly preferable to attempting to resolve full blown user conflicts, or remediating environmental damage after the fact. This report attempts to identify existing and potential conflicts and recommend preventive measures wherever possible.

G. INVENTORY OF PUBLIC ACCESS AND RECREATIONAL RESOURCES BY REACH

Reach 1 - Northwest Harbor

1. Public access

Reach 1 includes six principal access areas, Northwest Harbor County Park including Northwest Creek and Northwest Landing Road-end, Cedar Point County Park, Barcelona Neck, Mile Hill Roadend, the Town-owned Grace Estate property, and Alewive Brook Road-end. Access facilities include the launch ramp at Northwest Creek, four boating access points without paved ramps, twenty ORV access points, eleven points of pedestrian access with an additional six places where visual access affords views of the water. There are 110 parking spaces and 190 campsites, plus three picnic grounds in the reach.

Public access opportunities could be improved by several measures in the reach - additional parking at Cedar Point Park, bike racks at Barcelona Neck and Northwest Landing Road-end, bike racks and improved pedestrian access at the Mile Hill Road-end, and repairing the launch ramp now fallen into disuse at the Alewive Brook Road-end. In some areas access should be seasonally restricted to protect nesting shorebirds, beach vegetation or other resources, in particular ORV access to the spit at Northwest Creek, to the beaches of the Grace Estate, and to the spit at Cedar Point County Park.

2. Boating facilities

Northwest Creek contains a maximum of 23 moorings on the Trustee bottomlands inside the Creek entrance. The County dock/bulkhead is also used to tie up boats, primarily small commercial fishing boats, which may also use it for unloading. Another few small boats are kept moored off the Alewive Brook Road-end in Northwest Harbor. Both Northwest Creek and Northwest Harbor are sporadically used for overnight anchorage, as is Gardiner's Bay east of Cedar Point. Only one private dock is in use in the reach, just south of the County dock in Northwest Creek. An abandoned marina site (SCTM #72-1-2), a little to the north of Northwest Creek, long ago fell into disuse, and should be returned to a natural state (see **Development Policies #1-6**).

A variety of boating and related recreational activities occur in Northwest Harbor, Northwest Creek, and Gardiners Bay including sailing and motorboating, windsurfing, canoeing, kayaking and rowing. Cedar Point County Park has a rowboat rental facility in Alewife Pond, the only boat rental in the reach. The Town Parks Department conducts summer sailing classes at the Mile Hill Road-end.

Northwest Creek/Harbor parklands are recommended as a potential site for a canoe/kayak campsite, as part of a future waterway trail and network of marine parks along the north shore and through east end bays (see Townwide recommendations, and **Projects**).

3. Fishing and hunting

Fishing is actively pursued in all waters of Reach 1, and shellfishing as well, particularly scalloping in Northwest Harbor in better years, traditionally one of the best bay scallop fisheries on Long Island. The Town and New York State have participated in cooperative reseeding programs with Sea Grant, local baymen and the Town Trustees to stimulate bay scallop production in Northwest Harbor. The Town Shellfish Hatchery in cooperation with the Town Trustees seeds hard clams in Northwest Creek. The County dock on Northwest Creek receives some seasonal use as a fishing pier for spring flounder and fall snapper blues. Beach sites throughout the reach are used for surfcasting from shore, particularly the inlet to the Creek. Scoy Pond is a freshwater fishing spot for pickerel and large mouth bass.

Duck hunting is popular at several locations in the reach, with blinds set up seasonally at Northwest Creek and Cedar Point Park. The large tracts of open space in the reach provide some of the best hunting grounds remaining in the Town. Deer and small game hunting is regulated by the NYS DEC and requires a State license, as well as an access permit for State lands such as Barcelona Neck. A daily permit is also needed to hunt in the County parks, and a Town permit, generally issued by lottery for specific periods, is required to hunt on Town lands such as the Grace Estate.

4. Beaches and swimming

While there are no designated Town bathing beaches with facilities within Reach 1, half a dozen sites with public access and limited parking offer bay swimming. The County Park on Northwest Creek at the end of Northwest Landing Road has about 50 parking spaces, Cedar Point Park about 15 in the upland area, Barcelona Neck 25 at the Golf Course, and Mile Hill Road and Alewive Brook Road-ends about 10 each, a total of 110 spaces at the six sites.

Other seasonal beach pastimes like picnicking, sunbathing, beach walking and beachcombing, and birdwatching from the shore are regularly pursued along the shoreline of Reach 1.

5. Other recreation activities

The NYS DEC preserve at Barcelona Neck retains a low maintenance nine-hole golf course which is operated by a concessionaire and is open to the public in season.

Cedar Point County Park has 190 camp sites for County resident use by permit, also a small store, basketball and volleyball courts, and a ball field for use by campers. In the summer season the Park shows outdoor movies on Saturday night for camping families. Snorkeling and scuba diving are practiced on both the Northwest Harbor and Gardiners Bay sides of the Cedar Point sand spit.

Nature walks are popular at all of the parklands in the reach. Extensive trail systems and trail maps are available for the Northwest Harbor area and Cedar Point County Parks, the Town-owned Grace Estate, and for Town Trustee roads in New York State-owned Barcelona Neck. Bicycling is popular

on the winding rural roads of the reach. Photography, sketching and painting are practiced from scenic vantages and foraging for wild berries is possible at many locations.

6. Use conflicts and possible solutions

Four of the six sites in Reach 1 have existing or potential conflicts related to ORV's. Driving on the beaches may affect nesting shorebirds, natural resources and habitat such as beach vegetation, and/or passive recreational uses such as beach walking or nature appreciation. Existing problems were noted at several sites including Cedar Point County Park, Grace Estate, the baymouth spit at Northwest Creek, and Barcelona Neck along Northwest Harbor. Shorebird nesting areas on Cedar Point have been disturbed by pedestrian and ORV traffic, and restrictions are recommended for the nesting season from April 1- August 15. In reaction to a plover chick death from ORV traffic in 1996, County Park authorities subsequently closed the Cedar Point spit to ORV traffic for the 1997 nesting season, and may continue to do so.

ORV's also pose potential conflicts with passive human activities such as beach walking, sunbathing, etc. (Note: In general, the Town Trustees do not agree with this assessment.) The adequacy of the Town's beach vehicle ordinance to forestall conflicts is discussed in Townwide Recommendations.

Conflicts could emerge in areas of the reach that are traditionally used for seasonal waterfowl or game hunting, as opposed to passive enjoyment by increasing numbers of hikers, photographers, birdwatchers and other users. Potential problems can best be precluded by rigorous enforcement of hunting safety, extensive posting of hunting regulations, and ongoing education as part of the hunting license and daily permit requirements. Responsible agencies such as NYS DEC should also publicize hunting season dates and safety tips to keep hikers out of the line of fire. Potential conflicts between hunters and passive users are identified for deer season at Barcelona Neck and the Grace Estate, and duck hunting in Northwest Creek.

A conflict between private property and public access exists in the Grace Estate between the developed subdivision lots and the water. Along the shore owners of private residential lots have cleared conservation easements to improve their water views, in the process exposing trails for hiking along the shore. As a result hikers are impinging on homeowners and vice versa, hikers losing the scenic and natural isolation and homeowners losing the privacy of their waterfront yards. The easements should be revegetated.

7. Environmental concerns

Reach 1 has some of the highest habitat values in the Town, with State and Locally designated Significant Coastal Fish and Wildlife Habitats at Cedar Point Park, the Grace Estate and Northwest Creek. Protected plant or animal species were documented at every site surveyed except the Mile Hill Road-end. For instance, Alewife Pond in Cedar Point Park is noted as one of the few spawning areas known for alewives. Northwest Creek is identified as a feeding area for terns, ospreys, herons, egrets, water fowl, diamondback terrapin and sea turtles. Nesting shorebirds are present along all of the water bodies. Recreational use of these sensitive areas must be carefully balanced with habitat protection.

The golf course at Barcelona Neck is in close proximity to Little Northwest Creek, and has already led to habitat fragmentation and impacts on the wetlands which are being invaded by phragmites. Substantial state funds and years of effort were expended to preserve this as a natural area, and habitat management is a concern. The Town Trustees own a number of roads crossing through the golf course and extending along the easterly and westerly sides of Barcelona Neck, as well as the beaches at the north end.

Human impacts on nesting shorebirds are a concern throughout much of the reach, especially at Cedar Point Park and the spit at Northwest Creek. The road-ends at Mile Hill Road and Alewive Brook Road are potential flood corridors for hurricane storm surge, and because of the lack of a vegetative buffer to filter pollutants, also transport road run-off directly into surface waters. Prototype plans to reconfigure road-ends like this are a priority (see **Projects**).

Water quality related to shellfish closures remains a concern for Northwest Creek and Alewife Pond, which are closed seasonally (see **Water and Air Resources Policies #30-44**). Recent introduction of an Open Marsh Water Management (OMWM) system for the Northwest Creek saltmarsh should continue to reduce pollutants and to improve coliform bacteria counts.

In some cases, existing impacts need to be reduced or mitigated through new regulations or enforcement of existing regulations. At Northwest Creek and Cedar Point, ORV access points should be clearly marked and access should be restricted from the spits when nesting shorebirds are a concern.

8. Improvement opportunities

Wetland restoration should be incorporated into park management practices at several sites where phragmites have invaded, including Northwest Creek, Barcelona Neck along the golf course driveway and Little Northwest Creek, Alewife Pond, and the Grace Estate south of Alewife Brook Road.

Rip rap near the launch ramp at Northwest Creek adjacent to the County dock should be removed and the deteriorated ramp reconstructed or relocated. Baymen and other users are forced to drive across the beach across the mooring basin to launch. Benches, bike racks, picnic tables, a possible canoe/kayak campsite, interpretive signs, and a better laid out parking area would enhance the amenities of this park site at relatively low cost. The County dock/filled bulkhead is larger than required for present use and should be reconfigured when it requires maintenance (see **Flooding & Erosion Policies #11-17**).

Additional public parking is needed at Cedar Point Park, bike racks are needed at Barcelona Neck and Mile Hill Road-end, and the boat launch at the Alewife Brook Road-end needs improvement. Better pedestrian access at the Mile Hill Road-end would improve safety and ease of use.

9. Public access and recreational uses compatible with new development

No additional development in the reach is expected because of the large amount of preserved open space.

10. Analysis

Because of its open space, Reach 1 has extensive public access and accommodates a wide range of recreational activities. Adverse impacts on the extraordinary catalog of flora, fauna, and relatively unspoiled shoreline habitats must be avoided. For example, ORV driving and pets on the beach should be curtailed during shorebird nesting season. Relatively small improvements at road-ends and access points can enhance recreation opportunities without damaging resources, for example, refurbishing deteriorated launch ramps at Northwest Creek and Alewive Brook Road.

Reach 2 - Three Mile Harbor/Hog Creek

1. Public access

A total of 46 sites with recreational resources were surveyed in Reach 2, 42 with access to the water, and some of those with multiple access points or kinds of access. Two sites with recreational uses in the coastal zone did not have direct access to the water, the Camp Norwesca Boy Scout campground, and the Boys Harbor camp which receives harbor access via the neighboring Duke property.

Six launch ramps are located within the reach, with an additional six sites providing boat access without paved ramps. ORV access is possible at 25 sites. ORV use is prohibited along the beach at Maidstone Park, although the ban is violated with some frequency. 19 sites have pedestrian walkways or stairways, an additional 25 have natural pedestrian paths of one kind or another, and five are purely visual access points. 19 of the 46 sites surveyed cross public lands or road-ends, the rest over non-public lands, including property owners' association parcels, marinas and other quasipublic sites. Five sites are designated Town Nature Preserves, two sites are private beach clubs, and one is the Camp Blue Bay Girl Scout camp with 49 campsites. 11 sites have benches, only two have bike racks, 11 have picnic tables, and there are 1225 parking spaces throughout.

While public access to the water is available along most of the reach, the west side of Three Mile Harbor and all of Hog Creek are relatively inaccessible for the general public. Additional public access is needed in these areas. A pedestrian access to Gardiners Bay over a Town right-of-way off Hedges Bank Drive is recommended, with designated parking. The inventory survey points to the Duke Drive road-end and Springy Banks Road as two places on Three Mile Harbor's west side where access should be acquired, at least for pedestrians. On the east side of the harbor redevelopment of the old fishing station is recommended (see **Development Policy #1**, and **Projects**), along with improving pedestrian access at the Harbor View Lane road-end.

2. Boating facilities

Three Mile Harbor, along with Lake Montauk in Reach 6, is the most intensively utilized recreational boating harbor in the Town, and has a variety of boating facilities and activities, including marinas, moorings and dockside amenities such as restaurants, pools and chandleries. The Town Trustees maintain a summer mooring grid in Three Mile Harbor with 153 moorings for overnight and long term anchorage. Thirteen marinas concentrated along the east side of Three Mile Harbor, in addition to three community dock areas run by homeowners' associations, provide a total of 875 slips. This figure includes the Town Dock at the head of the harbor, where 67 recreational

slips rent annually to residents, and the Town Commercial Dock at Gann Road, which supplies 18 slips for commercial boats. One marina, Three Mile Harbor Marina, offers boat rentals, and East Hampton Point Marina shelters one fishing charter boat. Larger sailboats, such as the Aliento, are sometimes available for day charters and longer excursions.

There are a total of six launch ramps through the reach and an additional six where small boats can be launched without paved ramps. In addition to the marinas, 68 private docks provide places for recreational boats to tie up. Virtually all of the marinas provide shoreside facilities of various types, four have fueling stations, two also function as boat dealers or yacht brokers, and together they have capacity for hauling, storing, and repairing 445 boats in the off-season. Several of the marinas have high capacity lifts for launching and hauling large boats. There are six pump-out facilities in the reach, the busiest of which is the Town maintained facility at Commercial Dock, Gann Road near the harbor mouth.

All of the Reach 2 waterbodies, Three Mile Harbor, its tributary cove of Hands Creek, Hog Creek, and Gardiners Bay are used for boating. The shallow inner harbor areas and the creeks are used primarily for low impact activities such as canoeing, kayaking, rowing, small sailboats and wind surfing. Larger boats ply the dredged channel of Three Mile Harbor and the deeper waters of Gardiners Bay. Water skiing is permitted in an area marked off on the northwest side of Three Mile Harbor, and on the bay. Jetskis are permitted only in the open waters of the bay, and then only at a 500' distance from shore, except for launching and landing, to minimize disturbance and danger to swimmers. Both the Girl Scouts' Camp Blue Bay and the Boys Harbor camp keep numbers of small craft for use by their campers. Wind surfers also venture into open water in Three Mile Harbor and Gardiners Bay.

3. Fishing and hunting

Fishing is common throughout the reach, primarily in the waters of Gardiners Bay, but also inshore in the enclosed waters of Three Mile Harbor during seasonal runs of spring flounder, fall snappers, etc. The east jetty at Three Mile Harbor entrance frequently serves as a fishing pier for surfcasters working the deep waters of the channel. Shellfishing is also popular, and the Town and Town Trustees have endeavored to maintain productivity of shellfish beds by seeding hard clams and oysters. The Town shellfish hatchery has conducted seeding programs in Three Mile Harbor and Hog Creek. There are three bait and tackle shops within the reach.

Hunting, shooting and trapping are practiced to a lesser degree because of limited open space in Reach 2; of the 46 sites only fourteen have hunting and shooting occurring, and there are no permit-restricted hunting grounds within the reach, where additional access permits are required to hunt. Ducks and other waterfowl are hunted in season on Three Mile Harbor and Gardiners Bay, and seasonal duckblinds are mounted in at least one place on Three Mile Harbor.

4. Beaches and swimming

Maidstone Park is the Town's only municipal bathing beach in Reach 2, and has a variety of facilities including picnic tables, a comfort station and a porta-potty, lifeguards, and about 100 parking spaces. Opportunities for expansion of parking and other facilities at Maidstone Park should be explored,

possibly in conjunction with re-use of the old fishing station, as long as they remain set back from the dunes and remain within the park use required by the original conveyance to the Town.

Several homeowners' associations maintain residential bathing beaches within Reach 2, including Hampton Waters, Clearwater Beach and Lion Head. Some receive considerable use, e.g. the Clearwater Beach Association has approximately 50 parking spaces, Lion Head about the same. Camp Blue Bay Girl Scout Camp also maintains their own beach. In addition, Town road-ends provide limited parking for non-designated public bathing beaches, at Old House Landing, Sammy's Beach, Hands Creek and Flaggy Hole Road. Sammy's Beach is the more active of these.

Three swimming pools are open to the public in Reach 2, though only to campers or guests of private institutions: Boys Harbor Camp, East Hampton Point Marina, and Maidstone Harbor Marina.

With a variety of shoreline terrain ranging from the bluffs along Hedges Bank and east of Flaggy Hole Road, to the sandy stretches of Sammy's Beach, and the wetlands and marsh surrounding Three Mile Harbor, Reach 2 provides ample opportunities for beach activities such as walking and jogging, beachcombing, picnicking, sunbathing, birding, photography, sketching and painting. Snorkeling and scuba diving are also practiced to a limited extent in the waters of Gardiners Bay and Three Mile Harbor.

5. Other recreation activities

A variety of other recreation opportunities present themselves in Reach 2, including tennis courts at East Hampton Point and Sunset marinas, ballfields at Maidstone Park and Boys Harbor, and the children's camps at Boys Harbor, the Girl Scouts' Camp Blue Bay and the Boy Scouts' rustic campground at Camp Norweska. Sandy dune areas such as Sammy's Beach, Maidstone Park, Clearwater Beach Association and several other locations provide forage for wild fruits such as beach plums. Nature walks and trails make for interesting hikes with water views through areas such as Sammy's Beach, Maidstone Park and the camps. Bicycling is popular throughout the reach; Maidstone Park appears to be one location where a separate bike path could be explored.

6. Use conflicts and solutions

Maidstone Park has become less attractive for bathing because of erosion and deposition of gravelly dredge spoil. People park on the bay side, but may swim inside the harbor jetty where the narrow beach is sandy and sheltered from winds off the bay. However, this is a dangerous site, with boat traffic and a sharp dropoff to turbulent currents in the channel, especially at the full force of flood or ebb tide. Warning signs and fencing as well as improvements to attract people to the Maidstone Park bay beach will help alleviate potential safety problems. A similar potential problem exists where the 14' deep boat channel passes close to shore on the east side of Three Mile Harbor near the Breeze Hill Road-end, which is occasionally used for swimming. Again, signage will help avoid mishaps.

ORV driving over saltmarsh vegetation on the fringes of Three Mile Harbor and on narrow bay beaches conflicts at several reach locations with resource protection and habitat values, as well as existing prohibitions against driving over beach vegetation or near nesting shorebirds, and also with

passive human activities such as beach walking and sunbathing. Except for commercial shellfishing, vehicle access along the inner harbor shore is inappropriate and unnecessary. Summer ORV traffic on Sammy's Beach is damaging dune, marsh and beach vegetation and disturbing nesting shorebirds during a critical time in the annual cycle. Interior dunes of Sammy's Beach are also being damaged by ORV's during winter, damaging dune vegetation. On the harbor side south of Sammy's Beach tire tracks have been found in the saltmarsh, a particularly inappropriate place to be driving. This is purportedly because of insufficient access to shellfishing areas. A possible diversion that would skirt the saltmarsh may be possible over Town-owned land adjacent to Sammy's Beach Road-end (SCTM # 56-2-33.1 & -33.2). The Town should look into improving this access to avoid future problems. The Town Code prohibits ORV driving over or upon any dune, bluff or vegetation [**§43**-**5**(**C**)(**2**)]. The Town Trustees believe that increased and consistent enforcement of existing town code provisions will reduce the conflicts cited, while still protecting the public's right to use and enjoy our beaches.

At several places in Reach 2, private property impedes the public's ability to reach the water or enjoy public coastal resources. Although the Town owns an access path at Hedges Bank to the top of the bluff through a parcel along Hedges Banks Drive (SCTM #35-1-1.15), limited parking is not conducive to public access. A second parcel, Reserve Area "E" (SCTM #35-5-4) belonging to the North Hollow homeowners' association, guarantees as a condition of the subdivision a 50' pedestrian right-of-way to Town residents which offers better access to the non-designated bathing beach. The site needs bike racks, additional on-street parking and improvement of pedestrian access. The beach at the Clearwater Beach Association. Acquisition of additional public access is recommended on the west side of Three Mile Harbor and at the north end of Hog Creek.

The Town Commercial Dock at Gann Road is used by sunset gazers and recreational fishermen besides the commercial fishermen for whom it is intended. During the runs of spring flounder and the fall migration of snapper bluefish into the harbor, there is often a line of fishermen casting from the dock. Although there have been requests for benches, etc., any improvements in the recreational facilities should be minimized to prevent interference with the commercial fishermen. They require space to spread gear and nets on the dock, and to offload their catch.

7. Environmental concerns

Potential water quality concerns affect all of the enclosed waterbodies in Reach 2, Three Mile Harbor, Hands Creek and Hog Creek. Extensive closures of bottomlands to shellfishing already occur in these waters (see **Water and Air Resources Policies #30-44**). Habitat degradation is similarly an urgent consideration, especially in the areas designated as NYS and Locally Significant Coastal Fish and Wildlife Habitats.

Nesting shorebirds have been documented at five sites, including Sammy's Beach, identified by **Significant Habitat Policy #7** as home to piping plover, osprey, and least, common and roseate terns. The harbor side of Sammy's Beach Road-end is sometimes used as a boat launch, but the harbor is very shallow there and the site is inappropriate because of extensive wetlands. As noted

above, there is also concern about damage to the wetlands, beach and dune system at Sammy's Beach from ORV's.

A washout at the Old House Landing Road-end has long eliminated the site for boat landing and launching. The erosion appears to have been caused by a combination of ORV traffic and road runoff, and invasive Japanese knotweed (polygonum) has infiltrated the beach grass growing there. The swimming beach at Lion Head has also suffered erosion from downdrift scouring effects of the bulkhead and jetty stabilizing the Hog Creek inlet. Dredge spoil from periodic maintenance of this channel should in future be placed on the Lion Head side. A fish cleaning sink at the Lion Head property owners' marina disposes of fish waste directly into the water and must be redirected.

Several road-ends providing recreational access are potential flood corridors in a major hurricane, given predicted storm surge and terrain at the location. These include Old House Landing, Hands Creek Road, Gardiner Cove, Breeze Hill Road, and Will Curl Highway. They should be redesigned (see **Projects**).

8. Improvement opportunities

Given the large number of sites (44 + 3 water bodies) surveyed in Reach 2, there are a great number of opportunities for recreation and public access improvements. The Duke Drive road-end is recommended for a public access which could serve as a launch area to replace lost baymen's access at Dominy's Point, and an access is proposed from Springy Banks Road to the harbor on a parcel formerly in the Treescape subdivision. These access points will help to address a lack of public access to the water on the west side of Three Mile Harbor. An existing Town pedestrian right-of-way at Woods Landing on Hedges Bank should have some parking and benches provided to make it more readily accessible.

Several sites were recommended for multiple upgrades in basic facilities: bike racks, interpretive signs and a trail at Hands Creek; interpretive signs, picnic tables, scenic viewpoints, a trail and wetland restoration at the Marina Lane spoil site and environs; benches, bike racks, and garbage cans at Gann Road; bike racks and interpretive signs at Sammy's Beach; and at Maidstone Park, bike racks, garbage cans, better parking, a rollerblading area, scenic viewing points, tennis courts, and a trail.

The old fishing station acquired by the Town near the mouth of Three Mile Harbor provides an opportunity for redevelopment. A small number of moorings may also work in conjunction with it. Potential uses include a shellfish growout facility for the Town Shellfish Hatchery, or a fishing pier and launch ramp, with benches, garbage cans, and scenic viewpoints. If a proposed canoe/kayak operation were instituted the craft should launch from Maidstone Park beach on the bay, rather than from the fishing station, because of dangerous currents in the Three Mile Harbor channel (see **Projects**).

Public access in Hog Creek is presently inadequate, and a navigable access should be obtained near the mouth of the creek. The only existing public access at the south end is too shallow for launching

boats. The Town Trustees are working to improve public access at Hog Creek through renegotiation of leases with the respective property owner associations.

9. Public access and recreational uses compatible with new development

There are few private undeveloped sites of any size in the reach. However, the east side of Three Mile Harbor contains a significant portion of the Town's marina industry in Waterfront (WF) Districts, which also provide access to the water and the underpinning for recreational boating and fishing. As the industry evolves with changing market demands, the Town should work with owners to insure that new recreational opportunities are pursued that also benefit the public and that existing scenic vistas and public access are not diminished or abridged when facilities are upgraded or redeveloped. For instance, if a marina shifts to dry rack storage, site plan review should insure that scenic vistas are not interrupted and that superstructures do not intrude in the landscape.

The Town also has opportunities to work with publicly owned sites such as the Marina Lane spoil site and the old fishing station (see **Projects**). At the Town access at Wood Landing on Hedges Bank Drive, modest road widening to provide parking and a viewing bench would be appropriate to improve public access to this beach. Road widening to provide on-street parking is also recommended at the County owned access on Hedges Bank Drive.

10. Analysis

The marinas on the east side of Three Mile Harbor, plus the municipal bathing beach at Maidstone Park combine to form one of the Town's most active recreation areas. Other parts, such as Sammy's Beach and its extensive wetlands and the wetland fringes throughout the harbor, are sensitive ecologies supplying vital habitats for birds and plants, and a fish nursery that is a vital link in the marine food chain. Balancing these recreational and environmental values, and devising ways to expand recreational opportunities without increasing impacts are the planning challenges in Reach 2. The proposal to revitalize the old fishing station near Maidstone Park for environmental education will help put these issues before the public (see **Projects**).

Improving public access through modest parking facilities, so townspeople other than subdivision residents can use a Town right-of-way to the beach on Hedges Bank also makes sense. This can be accomplished by simply widening the road and altering parking restrictions in a small area. At Old House Landing a restoration of the road-end, including removal of the invasive Japanese knotweed is called for (see *Road-end and Beach Access Modifications* in **Projects**), both to improve access and to forestall further erosion and pollutant runoff. Additional public access is needed at the north end of Hog Creek to this Trustee-owned water body, and should be pursued in conjunction with the Trustees.

Any improvements at the Town's commercial dock at Gann Road must take into account its primary purpose, to provide a support base for the Town's inshore commercial fishermen. Fishermen using the dock should be consulted in detail as to their needs before any improvements are carried out.

Maintenance and improvement of water quality in all of the reach's water bodies is a fundamental goal of the LWRP, both to enhance recreational values generally and to reopen closed shellfish beds

for recreational and commercial harvest. Responsibility for this effort falls on everyone: the Town to reduce road runoff; homeowners to reduce pollution from fertilizers, pesticides and septic effluent; and the recreational boating industry to reduce discharges and fuel spillage. These issues are further examined in **Water and Air Resources Policies #30-44**. The Town should explore incentives to homeowners, and to marina operators for installation of pumpouts, etc. The Town may also wish to explore incentives with marina owners for providing significant new public access and public recreation opportunities.

Reach 3 - Accabonac

1. Public access

A total of 24 sites were surveyed within Reach 3, including three paved launch ramps on Accabonac Harbor at Louse Point, Landing Lane and Shipyard Lane; 11 other sites where boats can be launched without paved ramps; a substantial number of ORV access points, most at Louse Point and a couple on Gerard Drive; three sites with pedestrian walkways or stairways; 16 with a natural pedestrian access or footpath; and six with views of the water but no other access. Of the 24 sites, 15 utilized public lands or road-ends, and nine were over non-public lands including homeowners association parcels. Two sites in the Reach 3 coastal zone, Springs School and Ashawagh Hall, have recreational resources but are not on the water.

Public access to the water in Reach 3 is generally adequate, except on the west side of Accabonac Harbor where land should be acquired or an easement obtained to allow vehicular access to the upland edge of the salt meadow, with pedestrian access the rest of the way to the water for clamming. ORV driving on Reach 3 beaches is unrestricted except for the inner harbor beach at Louse Point, continuing around to 300' south of the point on the Gardiners Bay side, where beach driving is prohibited year round.

Amenities at public accesses to the water in Reach 3 are relatively minimal. Among the 22 sites surveyed that are on the water, there are a combined total of 364 parking spaces, plus an additional 75 at Springs School and 15 at Ashawagh Hall. Bike racks are present at Louse Point and at Springs School. There are picnic tables at Fresh Pond Park and Little Albert's Landing, and benches at five water view sites, one of which is private property. Recent improvements at Pussy's Pond Park include a footbridge installed by the East Hampton Chapter of Waterfowlers USA. Many facilities can be improved at fairly minimal expense. See *Public Access and Recreation Improvements* in **Projects** for site recommendations.

2. Boating facilities

Boating on Gardiners Bay and in Accabonac Harbor is a popular pastime in the reach, with activity centered in Accabonac Harbor. The Louse Point launch ramp receives regular use and the Town Trustees permit 56 seasonal moorings. The harbor is occasionally used for overnight anchorage by transients, though infrequently because of insufficient depths and no shoreside facilities. There are no marinas within Reach 3, only the three launch ramps listed above. The launch ramp at Landing Lane has deteriorated and should be removed and regraded for low intensity use. Boaters also launch

from eleven sites without ramps, over sandy or cobbly beaches, for example along sections of Gerard Drive.

There is one dock on the bay, a private dock at the Bell Estate which has filled in with sand to the point where it is part of the shore and not usable for boating. There are seven small residential docks in Accabonac Harbor. A few small boats are kept anchored off residences in the bay or within Accabonac Harbor, and a number are pulled up on the beach at Louse Point, and a few at the Barnes Landing Association beach. These are mostly Sunfish-type small sailboats.

Canoes, kayaks and the occasional rower are regularly observed in Accabonac Harbor, and to a lesser extent in Fresh Pond and on Gardiners Bay, as are occasional windsurfers. The windsurfers usually launch directly from the beach. Jetskis are also in occasional use on the bay, as are waterskiers. Transient boaters occasionally anchor up overnight in the bay.

3. Fishing and hunting

Surfcasting is practiced from a dozen spots along the reach shore, most notably at Louse Point. Accabonac Harbor provides a base for recreational fishing taking place all over Gardiners Bay, and remains one of the more prolific hardclamming grounds in the Town, supported by seeding by the Town hatchery and Trustees. In former years it was also a primary source of blue-eyed bay scallops, but in recent times the scallop fishery collapsed with the advent of the brown tide algae and a die-off of eelgrass, the primary habitat for juvenile "bug" scallops. Some shellfishing also takes place in Gardiners Bay, which formerly supported a robust commercial oyster industry. Fresh Pond, unfortunately, is closed year round to shellfishing because of water quality (coliform) problems.

Duck hunting in the creeks and on the bay is a traditional fall pastime, and duckblinds are usually set up seasonally in Accabonac Harbor and Fresh Pond. Hunters generally take access from Town parks and road-ends. Duck hunting for sea ducks also occurs during the mandated season on Gardiners Bay. A NYS hunting license and a migratory bird stamp are required, as is a Trustee permit for a duck blind on Trustee lands.

There are no permit-restricted hunting grounds in the reach, requiring additional access permits, for deer hunting or other game.

4. Beaches and swimming facilities

Alberts Landing is the only designated public bathing beach in the reach with lifeguards and a comfort station. Nearby Fresh Pond Park also has a toilet facility. Alberts Landing has approximately 60 parking spaces, and the beach is excellent for children because of its shallow sandy bottom and usually calm waters. Just to the south, Little Alberts Landing has a more rustic setting that backs onto Fresh Pond, including picnic tables set back from the water. On the south side of Fresh Pond the Town park has a well-used picnic area, with a popular family beach incorporating the inlet to Fresh Pond, a brackish shallow stream with warm waters. Fresh Pond is the only site in the reach that offers any kind of freshwater swimming.

Nine additional sites including road-ends and access points along Gerard Drive provide nondesignated bathing beaches, with varying amounts of parking. The bathing beach at Louse Point is one of the more popular bay beaches, with 55 parking spaces, and cars are often parked alongside the road leading to the spit. Swimmers use both the shoal bay side and the deeper waters of the boat channel on the inside, occasionally leading to close encounters between swimmers and boaters. The Barnes Landing and Bell Estate property owners associations maintain beaches for their residents on either side of the Barnes Landing Road-end, a municipal beach.

People use the beach for other than swimming in Reach 3, among them residents who enjoy beach walking, jogging, picnicking, or beachcombing on a regular basis. The continuity of the beach is unfortunately interrupted by erosion protection structures on a number of stretches, particularly from Hog Creek Point to Gerard Drive, along Gerard Drive until past the second causeway, and from Louse Point south to Barnes Landing along Accabonac Cliff.

5. Other recreation activities

Three tennis courts at the Springs School provide facilities for local residents. There is also a ballfield and playground at the school, and a second, less defined ballfield at Fresh Pond Park, which also has a volleyball net. Nature walks on trails are available at two sites including TNC's Merrill Lake Preserve (access by permission only) and Fresh Pond Park. There are also trails through the Bell Estate, including a Town designated trail named for a former Planning Board Chairman, George Sid Miller. Several sites provide foraging for indigenous fruits and berries like beachplum and blueberry, including sandy areas of Gerard Park and the dunes south of Barnes Landing. Photography, sketching and painting can be practiced at any of the waterfront sites in the reach, but photographers and artists are attracted to Accabonac Harbor, and Louse Point retains one of the Town's spectacular sunset views.

6. Use conflicts and solutions

Most conflicts in Reach 3 relate to ORV use on beaches interfering with habitat, damaging beach or salt marsh vegetation, and conflicting with passive human activities such as sunbathing or beach walking. Although ORV use has been restricted on the inner harbor shore of Louse Point and to 300' south of the point on the bay side, ORV's continue to damage other bay beaches and saltmarsh in the reach, which remain unrestricted. Note: The Town Trustees do not support further restrictions on beach vehicle use. In general, the Town Trustees, unanimously (1999), do not agree with this assessment of the impacts of responsible beach driving. The Town Trustees believe that increased and consistent enforcement of existing town code provisions for irresponsible beach driving will reduce the problems cited, while still protecting the public's right to use and enjoy our beaches.

Another use conflict occurs when people who swim in the channel at Accabonac Harbor create safety hazards for boats. Better signage and enforcement are needed to keep swimmers out of the narrow channel.

An access to the water at Kings Point Road which provides a view of Gardiner's Island across the bay crosses over private property and does not permit public access. An agreement to allow

pedestrian public access over this path should be devised since there is little access to the public beach in the Clearwater-Hog Creek Point area.

7. Environmental concerns

Habitat values, flooding and erosion problems, and water quality are the principal environmental concerns in Reach 3.

Virtually all of Accabonac Harbor and its shoreline is designated as both NYS and Local Significant Coastal Fish and Wildlife Habitats, with numbers of nesting ospreys and other protected plant and animal species present (see **Significant Habitats Policy #7**). Pussy's Pond Park is also included within these designations. The undeveloped shoreline, salt marsh and spits of Accabonac Harbor are also designated as a Coastal Barrier Resource System unit (#F08B) under the federal Coastal Barrier Resources Act, which precludes federally funded development or insurance, and is indicative of the fragile nature of the area. The bay shores of the Gerard Drive and Louse Point spits provide nesting habitat for substantial colonies of nesting shorebirds, including protected species of least and roseate terns and federally endangered piping plovers. Fresh Pond Park, designated as a Locally Significant Coastal Fish and Wildlife Habitat, is listed in **Significant Habitats Policy #7** as home to the red-tailed hawk, black duck, chuckwill's widow, red-bellied woodpecker, spotted salamander, green heron, snowy egret, black-crowned night heron, and other waterfowl and waterbirds. Any future development and recreation activity in these areas should be required to avoid impacts on the protected species and the habitat.

At several locations in Reach 3 erosion and the effects of erosion protection structures have reduced public access or recreation opportunities. Sites that have been affected include beaches at the Lion Head Rock Road-end, the beach paralleling Kings Point Road toward Hog Creek Point, Fireplace Road-end, the second causeway on Gerard Drive, Captains Walk road-end and the property owners' association reserved area in Barnes Landing, and Fresh Pond Park and road-end. In addition, several sites pose potential storm flooding problems, including Shipyard Lane road-end, Landing Lane road-end, Caroline Gerard Park (bay side), Gerard Point, Louse Point, Barnes Landing Road-end, and Abraham's Landing Road-end. In most cases road-ends that are potential flood corridors for storm surge are also significant sources of stormwater runoff from the land. The Road-end and Beach Access Modifications project will provide prototype designs for road-ends to alleviate these and other problems (see **Projects** section). Other recommendations regarding beach erosion and erosion protection structures are contained in the **Flooding and Erosion Policies #11-17**.

Water quality is a concern in all of Reach 3's enclosed waterbodies, Accabonac Harbor, Pussy's Pond and Fresh Pond. Accabonac Harbor has significant portions of the east harbor seasonally closed to shellfishing, and Fresh Pond is closed year round. The Town Harbor Protection Overlay District (HPOD) is intended to mitigate these problems, although over the long term more stringent measures may be needed (see also **Water and Air Resources Policies #30-44**). At Fresh Pond, a Town proposal to shorten or remove the inlet jetty and open the pond to increased flushing should improve water quality.

8. Improvement opportunities

At Accabonac Harbor improvements were recommended for a number of sites, as follows:

• Landing Lane - benches, interpretive signs, scenic viewpoints, and wetland restoration are recommended, plus removal of the deteriorated concrete launch ramp to make a natural access for canoes, kayaks, etc.

• Comber Park (undeveloped Town parcel on the harbor at the intersection of Louse Point Road and Old Stone Highway) - trail and scenic viewpoints, and wetland restoration to eliminate the invasive phragmites

• Caroline Gerard and Gerard Parks - benches, bike racks, interpretive signs and scenic viewpoints

• Louse Point - benches, better parking facilities, and a scenic viewpoint at this favorite sunset view; wetland restoration on the spit adjoining the launch ramp, removing phragmites, restoring native vegetation and consolidating access points used by baymen; shore up the spit itself with sand to stabilize it

• Pussy's Pond - benches, bike racks, interpretive signs, parking, a trail, and further wetland restoration to remove phragmites; construction of a bridge by the East Hampton Chapter of Waterfowlers USA has enhanced access

Acquisition of land or an easement for additional public access along the west side of Accabonac Harbor is recommended, primarily for shellfishing. This access should allow vehicles to the landward edge of the meadow, with only pedestrian access to the shore itself.

On Gardiners Bay, other improvement recommendations include:

- Fireplace Road-end bike racks, interpretive signs about the site and its historic relation to Gardiner's Island
- Barnes Landing road-end benches, bike racks, and garbage cans
- Alberts and Abrahams Landing road-ends bike racks
- Fresh Pond interpretive signs, scenic viewpoints and wetland restoration

These road-ends should also be modified to contain runoff and provide vegetative buffers to filter pollutants per the *Road-end and Beach Access Modifications* **Project**.

9. Public access and recreational uses compatible with new development

No new development is likely on the shore of Reach 3 on a scale to accommodate significant new recreational uses, since it is already largely occupied by existing single-family homes. Public lands in the reach have been acquired for conservation purposes. However, the 26.5 acre Ward Bennett property (SCTM #80-2-11.1), if donated to the Town, may have some low-impact uses associated with the dwelling, and its boardwalk may provide visual access to the water over the salt marsh.

10. Analysis

Relatively minor improvements to some sites in Reach 3 that offer access to the water could significantly enhance their enjoyment by the public. At Louse Point, expansion of parking facilities will improve access to this popular bathing site. However, expansion of the bathing beach must

carefully balance safety considerations to keep swimmers from interfering with boating in the channel, and to maintain undisturbed habitat for nesting shorebirds that favor the dredge spoil areas. Expansion of the bathing use should exclude pet, pedestrian and ORV access from nesting areas, and include emphatic signage (e.g. "**Danger, Do Not Swim in the Channel !**") to prevent conflicts between swimmers and boaters. Damage to natural resources, beach and wetlands habitat by ORV's should be addressed by public education and restrictions on access to sensitive areas, discussed further in the townwide issues section below.

At Fresh Pond, shortening or removal of the inlet jetty and opening the gut to increased flushing aims to improve water quality and eventually recertify the pond for recreational shellfishing. This project is being undertaken by the Town Natural Resources Department in cooperation with the Town Trustees (see *Fresh Pond Channel Erosion Stabilization and Widening* in **Projects**).

Beach erosion and the effects of erosion protection structures have drastically reduced the amount of public beach available for recreation over long stretches of this reach, from Hog Creek Point to beyond the second causeway on Gerard Drive, from Louse Point to Barnes Landing, and from Fresh Pond Landing to Abrahams Landing. To some extent beach loss may also have resulted from recreational overuse, especially by ORV's driving on the fragile bay beaches. (Note: In general, the Town Trustees do not agree with this assessment of the impacts of responsible beach driving.) The erosion problems are discussed in detail in **Flooding and Erosion Policies #11-17**.

Reach 4 - Napeague North

1. Public Access

13 access sites were surveyed in Reach 4, including two paved launch ramps, at Lazy Point and Crassen Boulevard, and nine places where small boats are also launched but are unpaved. However, between Devon Yacht Club and Bay View Avenue there is no public access to the beach.

Several sites, at Abraham's Landing Road, Lazy Point, Crassen Boulevard, the Art Barge, Napeague Harbor Road, and Hither Hills State Park (Fresh Pond) provide access for ORV's to the beach. ORV driving occurs at eight of the sites, and there are no restrictions on ORV driving other than required permits and limited closures of some sensitive areas within State parklands.

Although Bay View Avenue's sign says, "Private Road", it serves a Town-owned waterfront parcel which could be used for public access, thereby allowing public use of the road. Two houses at the end of Mulford Lane whose land has eroded are now located out on the beach almost completely blocking public access at that point.

There are very few facilities or amenities at access sites in the reach, much of which is preserved open space. Most pedestrian access points cross natural sand paths to the beach. Devon is the only site with benches that look out over the water. The access at the road-end of Mulford Lane near Lazy Point crosses private property; the remainder of the access points traverse public lands. Among all sites in Reach 4 there are a total of only 126 parking spaces.

2. Boating facilities

Devon Yacht Club is a private membership club with 43 boat slips in a dredged boat basin south of the clubhouse. The marina has its own fueling facility, and the club also maintains a pier extending into the bay. Devon conducts a sailing school and children's camp for members, and also holds periodic sailboat races on a course marked out in Gardiners Bay. The club's member facilities include a dining area, swimming beach and tennis courts.

The other focus of boating activity in the reach is the mooring area and launch ramp at Lazy Point in Napeague Harbor where the Town Trustees permit 20 moorings. Overnight anchorage is not permitted in the harbor, except in an emergency, because of habitat and water quality concerns, and lack of facilities.

Napeague Harbor is the most popular and intensively used windsurfing location in the Town. In summer parked cars often line both sides of Lazy Point Road leading down to the harbor. The Town sets up porta-potties to provide for the numbers of people using the site in season. Canoeing, rowing and kayaking also occur in Napeague Harbor.

The sheltered waters of Gardiners Bay and more open exposure of Napeague Bay bordering the reach receive extensive boating use of all types, including sailing and motor boating, canoeing, kayaking and rowing, windsurfing, waterskiing and jetskis. Transient boats occasionally anchor up overnight in the bay, particularly around July 4th when Devon Yacht Club sponsors a fireworks display.

3. Fishing and hunting

The large tracts of parkland and protected open space in Reach 4 provide ample opportunities for fishing and hunting activities, though largely without physical facilities or amenities. Fishermen cast from shores throughout the reach, and the anchorage and launch ramp in Napeague Harbor at Lazy Point serve as a local hub for fishing by boat. Goff Point on the east side of Napeague Harbor is a favored spot for surfcasters. Fresh Pond in the Hither Hills State Park has some of the better freshwater fishing in Town, and is periodically stocked with large mouth bass and yellow perch by NYS DEC. A NYS freshwater fishing license is required.

Napeague Harbor is a popular shellfishing ground for hard clams and bay scallops in season, and is the site for a current experiment in oyster mariculture. Soft clams are harvested from along the shore and nearshore areas. The Town Hatchery regularly seeds hard clams and oysters in Napeague, as it remains one of the Town's cleanest waterbodies. A Town shellfishing permit is required.

Hunting and shooting go on at seven of the reach's twelve sites, and there are four permit-restricted hunting grounds monitored by NYS DEC within the State parklands. Duck blinds are erected and used seasonally along the meadows and shore of Napeague Harbor, Napeague Bay and Fresh Pond, subject to Town Trustee permit.

The dock at Devon Yacht Club, while private, has potential as a fishing pier and probably functions as such for members.

4. Beaches and swimming facilities

There are no beach facilities or designated bathing beaches in Reach 4. The reach has excellent bay beaches, though as noted public access is largely unavailable between Devon Yacht Club and Bay View Avenue at Promised Land. Ten sites are used regularly for swimming without shore facilities or supervision. Other beach-related activities, beach walking, sunbathing, beachcombing, picnicking, and birding also go on in the reach. Perhaps because of the difficulty of access, the beaches remain in a largely natural state. The beach along Shore Road at Lazy Point receives considerable use by local residents during summer months although it has no facilities. The interior beaches of Napeague Harbor are used largely by walkers, and on the east side, by hikers and ORV drivers to get to the Walking Dunes and Hither Hills State Park areas, as well as for clamming and windsurfing in Napeague Harbor. Snorkeling and scuba diving occur in the harbor and on Napeague Bay.

5. Other recreation activities

There are two places to play tennis in the reach, Devon Yacht Club which has eight courts for members, and the Napeague Tennis Club at the intersection of NYS Route 27 and Napeague Harbor Road, with five courts open to the public.

Five areas in the reach have trail systems of varying extent including Napeague State Park, Town Trustee lands at Lazy Point, Hither Hills State Park (Walking Dunes, Fresh Pond and Goff Point areas), Napeague Harbor Road-end (Walking Dunes), and a Town-owned parcel on the east side of Napeague Harbor Road. Organized nature walks are led periodically in Hither Hills and Napeague State Parks. Trail maps are available from the Town for the Walking Dunes area from the Napeague Harbor Road-end and extending into Hither Hills. The Walking Dunes and Napeague State Park lands are popular foraging spots for native berries in summer and early autumn when blueberries, beachplums and cranberries ripen. Unfortunately, some people also illegally dig up protected and endangered plant species such as the orchids and insectivorous sundews inhabiting the boggy areas.

Photographers and other visual artists often make use of the coastal scenery for subject matter. The Art Barge (D'Amico Institute of Art), located on an out parcel of Napeague State Park on the south shore of Napeague Harbor, conducts summer studio courses taught by professional artists for adults and children that make extensive use of their scenic environs. The curriculum includes an environmental photography course.

Reach 4 is a popular biking area, because of its gentle terrain and scenic bay and ocean views. A bike trail, paralleling Montauk Highway, has been proposed through State lands in the reach including sections within Napeague and Hither Hills State Park.

6. Use conflicts and recommended solutions

ORV conflicts are cited at eight of ten water access areas in Reach 4. ORV driving on the eastern fringe of Napeague Harbor and along the south shore near the Art Barge damages salt marsh vegetation and disturbs shorebird habitat. (Note: In general, the Town Trustees do not agree with this assessment of the impacts of responsible beach driving. The Town Trustees believe that increased and consistent enforcement of existing town code provisions for irresponsible beach

driving will reduce the problems cited, while still protecting the public's right to use and enjoy our beaches.)

At Bay View Avenue, access to the Town-owned waterfront parcel (SCTM #84-1-1) should be established, and a berm at the road-end should be modified to permit pedestrian passage and limited parking.

On the end of Mulford Lane, which is a private road, two houses are located out on the beach because of erosion, effectively blocking passage along the public beach. Besides interfering with beach use, these structures pose health and safety problems, and should be removed (see **Flooding and Erosion Policies #11-17**). Breaks in the intertidal marsh at the Crassen Boulevard road-end on the west shore of Napeague Harbor are used to launch boats, damaging protected tidal wetlands.

Conflicts between jetskis and swimmers are a potential problem in Napeague State Park along Napeague Bay, and in the waters along the residential area along Shore Road leading to Lazy Point. The popularity of windsurfing has created a significant problem at the road-end of Lazy Point Road on Napeague Harbor. Parking along the right-of-way threatens the freshwater wetlands in Napeague State Park that surround the road. The Town has responded to potential sanitary problems by installing porta-potties in the summer. However, the impacts on natural resources in this fragile area and potential conflicts with other users such as clammers have yet to be adequately addressed. Because of the overlapping jurisdictions of the Town over the road, adjacent Town Trustee lands, and Napeague State Park over surrounding wetlands, a cooperative management plan should be developed (see **Projects**).

In Hither Hills State Park permit-restricted hunting is allowed in season, raising potential firearm safety concerns for hikers, etc. As suggested, conflicts can be avoided with rigorous hunter safety education.

7. Environmental concerns

Napeague and Hither Hills State Parks host a variety of protected and endangered plant species including orchids and insectivorous plants such as the thread-leafed sundew (see **Significant Habitats Policy #7**). Removal of plants by collectors and hobbyists seriously threatens populations in some of the more accessible areas. Better monitoring, stringent enforcement and prosecution and fines to the full extent of the law should be implemented to eliminate these incursions.

Erosion has reduced recreation opportunities at seven of the 11 access sites on the shore of Reach 4. The Bay View Avenue and Mulford Lane road-ends on Napeague Bay are exposed to nor'east storms, and as noted two houses at the end of Mulford Lane are actually situated out on the beach as a result of erosion, and recreational access to the beach has consequently been lost. Flooding at these road-ends is also a concern in major storms and hurricanes.

Erosion has affected other parts of the Lazy Point area along Shore Road, where erosion protection structures have increased erosion of the beach (see **Flooding and Erosion Policies #11-17**); at Crassen Boulevard; and along Napeague Harbor Road on the east side, where erosion has reduced

the launching of boats from the road-end, and narrowed the beach which has been damaged by ORV traffic. Crassen Boulevard is also an area of concern for flooding from the harbor.

8. Improvement opportunities

Much of the coastline in Reach 4 is preserved public open space. Because of the fragile ecology suggested improvements should be on a modest scale to preserve habitat values. Additional public access to the shore is needed along Cranberry Hole Road (possibly in the Edwards subdivision on SCTM #128-1-32 next to the fish factory site, or over SCTM #128-1-7.1) because none is available from Devon Yacht Club to past Cherry Point. Conservation concerns dictate this should be a pedestrian access only.

The old fish factory site in Napeague State Park has been recommended for a fishing pier with accompanying parking. The fish factory site is also recommended as a possible site for a primitive canoe/kayak campsite. The Town is concerned that this location not become an access for greatly increased jetski use on Gardiners and Napeague Bays, therefore a launch ramp is not recommended. Because the site is on State property, the Town would not be able to regulate the type of access provided. The Town is also concerned that future park development not have a negative impact on the wetlands, protected plants, primary and secondary dune systems, and nesting shorebird areas. Conflicts should be resolved through multi-jurisdictional planning between NYS OPRHP and the Town. The Town has received assurances from NYS OPRHP that it will be involved in any planning process involving Napeague State Park.

Pedestrian public access should be restored at Bay View Avenue on Lazy Point with limited parking at the road-end. This site should be available as a non-designated bathing beach. The houses on the beach at the end of Mulford Lane should be condemned and removed as they occupy public lands and constitute both a health hazard and an obstacle to public access on this beach. Rock rip-rap placed at the end of Lazy Point past the launch ramp serves little purpose and should be removed to allow natural restoration of the area.

The intensive windsurfing use at the Lazy Point Road-end site needs a multi-jurisdictional planning effort by Town and NYS OPRHP to resolve health, safety and environmental issues. Addition of toilet facilities and benches should be considered to make the site more functional. A management plan should reduce impacts and allow windsurfing to remain without undue regulation, which will require substantial cooperation from the users themselves.

At the Crassen Boulevard road-end just to the south, wetland restoration should be undertaken to repair damage from ORV's, and the road-end should be relandscaped to emphasize its scenic view. At the Napeague Harbor Road-end on the east side of the harbor the eroded pavement should be improved to provide a launch ramp. Some of the ORV traffic over the narrow beach to Goff Point is for boat launching, and a launch site at the road end would provide access for baymen and obviate some of the need to drive over this fragile beach. Also on the east side of Napeague Harbor Road, a Town-owned 3.2 acre parcel could be provided with a trail and interpretive signs about the harbor and Walking Dunes.

At the Hither Hills State Park overlook on NYS Route 27 above the Walking Dunes, improvements such as bike racks, benches, picnic tables and garbage cans would make this site more amenable. Existing interpretive signs placed there by NYS OPRHP are attractive and informative, and could be supplemented by additional signs along the trail to the beach. Although LI State Parks presently permits only day use, the environs of Fresh Pond along the shore of the reach are another potential spot for a primitive canoe/kayak campsite. These campsites are envisioned as a series forming a water trail stretching from Northwest Harbor to Montauk Point (see **Projects**).

9. Public access and recreational uses compatible with new development

Development opportunities in Reach 4 are limited. The old fish factory site in Napeague State Park offers a good opportunity for revitalization. However, the site is constrained by its fragile dune ecology, and the Town is concerned that any new uses not contribute to noise, pollution or additional safety hazards on the bay, especially from jetskis. Any intensive large scale use of the site would be incompatible with the important habitat, sensitive ecology and limited infrastructure of the area. See also **Development Policies #1-6** for a discussion of ferry proposals at this site.

The northerly portion of Hither Hills State Park, extending from the eastern shore of Napeague Harbor to the western boundaries of the Town's Hither Woods Preserve and the Montauk County Preserve, contains important habitat areas and ecological communities including the Walking Dunes. While this area supports a variety of passive recreation uses such as hiking, sketching, etc., and low-impact active uses such as hunting and fishing, additional development for active large scale recreation uses such as golf courses would be detrimental to Hither Woods' ecology, to existing recreational use, and to the Town's open space objectives.

10. Analysis

Reach 4 has a large amount of preserved open space with limited public access. The Town and NYS OPRHP authorities can and should do more to educate the public about preserving these resources to ensure their maintenance for future generations. Destructive activities such as illegal removal of rare and endangered plants, ORV driving over salt marsh, and excessive traffic over fragile dune and wetland vegetation should be met by rigorous enforcement and prosecution of offenders by the Town and NYS OPRHP. Existing regulations should be complemented by additional area restrictions on ORV's, increased enforcement and restoration plans where necessary.

Revitalization of a disused area such as the old fish factory can be a benefit, providing it does not negatively impact the ecology of the area, or act as an impetus to increased noise, traffic, pollution or safety hazards typified by intensive uses such as jetskis or a ferry.

Barriers to the Town-owned property at the Bay View Avenue road-end should be removed and public access reestablished. At the end of Mulford Lane erosion has progressed to the point where two exposed houses are restricting beach access and creating a public health hazard. These houses should be condemned and removed.

Cooperative planning between the Town and NYS OPRHP is needed to coordinate policy objectives at the fish factory and to resolve problems at the windsurfing site at the end of Lazy Point Road.

Joint planning will also help prevent potential conflicts between hunting and passive uses such as hiking during the hunting season in State parklands, or potentially inappropriate uses of Hither Hills State Park such as a golf course or other large scale use.

Reach 5 - Hither Woods/Fort Pond Bay

1. Public access

17 access sites were surveyed in Reach 5. Four were not on the water, including Montauk County Preserve and the Town Recycling Center in Hither Woods, a reserved area west of Flamingo Road, and Montauk Mountain, a preserve owned by TNC on the northwest side of Fort Pond. As much of the reach consists of large tracts of preserved open space, public access to the water is concentrated in the east end of the reach at Fort Pond and Fort Pond Bay in association with road infrastructure. There is only one improved boat launch ramp, operated by NYS DEC on Fort Pond in the unused right-of-way for Montauk Point State Boulevard (NY Route 27). Other sites provide boat launching access without a paved ramp: one at the Town Hatchery on Fort Pond Bay that is used by the hatchery; sand roads on the east and west sides of the Town beach on Navy Road; on Fort Pond at South Elroy Street; and an access in the MTA right-of-way at the north end of Fort Pond.

Other access to the shore in Reach 5 is predominantly pedestrian, with natural paths to the water in a variety of locations such as Hither Woods, Kirk Park, the Benson Point dock, the Town beach at Navy Road, and Culloden Point. Constructed walkways and stairways add pedestrian access at the Puff 'N Putt on the south shore of Fort Pond, near the Town beach at Navy Road, and at the Roughriders condominium on Fort Pond Bay.

ORV access to the beaches is possible at only a few points in the reach. However, there is ORV driving occurring on much of the reach shore, along the Hither Woods shore from Quincetree Landing east most of the way to Rocky Point, and along the shore of Fort Pond Bay from south of the Benson Dock to near Duryea's fishpacking business. Vehicle access to the Hither Woods beach originates at Fresh Pond Landing in Reach 4, and to the shore of Fort Pond Bay via two trails over private property east and west of the Town's Navy Road parcel.

Several sites in Reach 5 provide water views without physical access, including Second House, parts of Montauk County Preserve in Hither Woods, the Montauk Recycling Center, and The Nature Conservancy Preserve at Montauk Mountain.

There are 91 parking spaces spread throughout the reach sites, although 25 at the Montauk Recycling Center and 20 at the Town Hatchery have no immediate water access or recreation function. There are no bike racks at surveyed sites in Reach 5, and no camp sites. There is a picnic ground at the site of Second House, and benches at the Kirk Park and Puff N' Putt sites on the south shore of Fort Pond.

2. Boating facilities

There are no marinas or mooring facilities in Reach 5. A single launch ramp services Fort Pond at the NYS DEC site in the Montauk State Park Boulevard right-of-way. Boat rentals of sunfish

sailboats and other small craft are available at the Puff 'N Putt on Fort Pond which has a small dock and shoreside facilities for customers. In addition there are three residential docks on Fort Pond. NYS DEC regulations do not permit gasoline engines on the pond.

A large timber dock remains at the Roughriders condominium on Fort Pond Bay, but it is disused and falling into disrepair. There is also a relic timber pier at the Benson Point site dating from its former use as a sand and gravel mine, and a private commercial pier at Duryea's fishpacking and lobster business along the eastern shore of Fort Pond Bay. There are six private docks on the shore of Fort Pond Bay. Tuthill Pond, just inland of Duryea's, has two small private docks for recreation.

Fort Pond gets a substantial amount of boating activity from small sailing craft, windsurfers, rowboats, canoes and kayakers. Fort Pond Bay has a greater level of boating activity, with jetski users, waterskiers, recreational boaters and fishermen using it fairly intensively.

3. Fishing and hunting

The large contiguous tracts of Town, County and New York State open space of Hither Hills and Hither Woods provide one of the largest permit-restricted hunting grounds in the Town. The undeveloped NYS right-of-way for Montauk Point State Boulevard near the south end of Fort Pond is a second area where permit-restricted hunting is also allowed. Both require NYS DEC permits to hunt.

Freshwater fishing is lively in Fort Pond, with two docks at the south end at Kirk Park and the Puff 'N Putt providing a place to cast from the shore. In the past NYS DEC has stocked the pond with small and large mouth bass, perch, hybrid striped bass, and bluegill. A NYS freshwater license is required. Freshwater angling also occurs in Tuthill Pond.

Surfcasting is active along all of the shores of Hither Woods and Fort Pond Bay, especially for bluefish and striped bass in season. Some shellfishing takes place in Fort Pond Bay, and the Town Shellfish Hatchery shares a building with the Blue Lobster Project, using Fort Pond Bay's pristine waters for aquaculture.

Duck hunting goes on in the fall in both Fort Pond and Fort Pond Bay, and duck blinds are found during the season in Fort Pond.

4. Beaches and swimming facilities

Public swimming facilities are few and far between in Reach 5 due to the large amount of undeveloped open space. There are no official Town bathing beaches, although there are several undesignated bathing beaches along the shore of Fort Pond Bay. The most active of these is the Town-owned parcel on Navy Road, which though undeveloped provides access to a good swimming beach. The area is also used to launch jetskis and for other water sports like windsurfing and waterskiing. Snorkeling and scuba diving are favored activities in Fort Pond Bay because of the excellent water quality and abundance of old Navy artifacts on the bay floor. Other beach pursuits, walking and jogging, beachcombing, picnicking and sunbathing go on informally along this bay shore.

Public swimming pools for campers and guests are present in the reach at Pathfinder Day Camp on Fort Pond, Ruschmeyers, Port Royal Motel and the Roughriders condominium.

Because of its relatively unspoiled character, Fort Pond Bay is usually a good birding area. In winter, sea ducks may raft up in the relative shelter of the Culloden shore. Seals can also be seen hauled out in winter on the rocky shores of Hither Woods, Benson Point and Culloden Point.

5. Other recreation activities

Puff 'N Putt on the south shore of Fort Pond has the only miniature golf course in the Town. All of the sites on Fort Pond provide interesting views and scenery and are used by photographers, sketchers and painters. The Town park within the Montauk Point State Boulevard right-of-way has a number of active municipal recreation facilities, and more are planned. The present configuration includes a ball-field, used for softball and soccer, two basketball courts, and three tennis courts, all for use by Town residents. A new soccer field is in the planning stages, and other improvements, such as a children's playground, basketball and volleyball courts, a second baseball diamond, roller blading circuit, bike path, and comfort station have been proposed. Other locations in the reach with tennis include five courts at the Roughriders condominium, one at Shepherd's Neck Motel, one at Camp Pathfinder, and one at the Port Royal Motel on Fort Pond Bay. There is also a playing field and baseball diamond at the Montauk School overlooking Fort Pond.

Hither Woods, including the Montauk County Preserve and Montauk Recycling Center, is a large natural area with an extensive network of hiking trails, for which a Town trail map is available. NYS DEC has used Hither Woods as a site for experimental reintroduction of native wild turkeys, an effort which appears to be having some success.

Montauk Mountain Preserve also has a well developed trail loop, and a map is available from TNC in their Preserve Guide. Permission is required for entry. Guided nature walks are conducted periodically at these sites, and all provide exceptional views and environments for photography, sketching, painting, birding, and other passive pursuits.

6. Use conflicts and recommended solutions

Although access to the shore is limited in Reach 5 by the dearth of roads in large tracts of preserved open space, ORV driving impacts the beaches along Hither Woods. ORV access emanates from Fresh Pond Landing in Reach 4. In addition, illegal use by 4-wheel all-terrain vehicles (ATV's) and off-road "scrambler" motorcycles, taking access from near the Benson Point dock on Fort Pond Bay, may potentially damage trails and other resources in Hither Woods. While such use is illegal, and fall under a townwide restriction on ATV's, the parklands are minimally patrolled and the restriction is difficult to enforce. The Benson Point subdivision, while private, provides a connecting link from Navy Road to the public trails and shoreline of Hither Woods, and, if possible, access should be preserved in some form as the property is developed.

The non-designated Town beach at Navy Road on Fort Pond Bay is a well-used local swimming spot, which at the same time receives intensive use as a launch point for jetskis, and is a good surfcasting locale when blues and striped bass school at the end of summer. Fort Pond Bay is also

popular with scuba divers. Potential conflicts between jetskis, swimmers and divers need to be carefully monitored. Existing restrictions on jetski use in proximity to swimmers need to be rigorously enforced. The number of pedestrian paths through the low dune is excessive, and the Town should consolidate them and consider making a single ORV access to deter ORV's crossing over neighboring private parcels.

Culloden Point also enjoys considerable surfcasting use, potentially a conflict with swimmers though it is a relatively isolated beach. Hunters may also conflict with passive users such as hikers and birders; Emerging conflicts should be carefully monitored as the property is developed under the recently approved subdivision and associated management plan. Public access should be maintained to the shore, in the form of pedestrian access. ORV access should be prohibited to prevent damage to protected plant species and a virtually pristine shoreline.

7. Environmental concerns

The combination of Hither Hills State Park, the Montauk County Preserve, and the Town's Hither Woods Preserve provides a large tract of unfragmented hardwood forest and other habitat important to many species. In Hither Woods, for example, **Significant Habitats Policy #7** identifies seven protected plant species and six protected animal species, and the shoreline is a confirmed breeding area for protected least terns and endangered piping plovers. Any future improvements such as additional access, trails or campgrounds should target areas of past disturbance to avoid forest fragmentation and impacts on "downs" or wetland areas. Any large scale active recreational use of this area would cause commensurately large adverse impacts on the habitat and would be inappropriate. The entire area should be incorporated into an updated cooperative management plan that will include fire management and ATV use.

Potential flooding along the shore of Fort Pond and Fort Pond Bay and water quality concerns in Fort Pond are discussed with proposed mitigation measures, in **Flooding and Erosion Policies #11-17 and Water and Air Resources Policies #30-44**.

Culloden Point is a State designated Significant Coastal Fish and Wildlife Habitat with protected plant and animal species, including the northern harrier and blue-spotted salamander. It is considered one of the best winter birding locations on the east coast. Several of the protected plant species are present in the beach/bluff community directly fronting the shore, which makes them particularly vulnerable to forces of flooding and erosion, and to ORV traffic on this narrow steep beach.

8. Improvement opportunities

Recreation opportunities can be enhanced in Hither Woods which encompasses parts of Hither Hills State Park, the Montauk County Preserve, the former Montauk Landfill, and the Town-owned Hither Woods parcel. An integrated inter-agency management plan should be prepared for the whole area. The present survey recommends improvements in facilities at several of the locations, including:

• Napeague overlook in Hither Hills (see Reach 4) - bike racks, benches, picnic tables and garbage cans

- Former Montauk Landfill a ballfield, basketball courts, benches, bike racks, garbage cans, ORV access, parking, picnic tables, rollerblading, scenic viewpoints, a swimming pool, toilet facilities and a trail as possible uses in a redevelopment plan (see **Projects**)
- Hither Woods benches, bike racks, garbage cans, interpretive signs, scenic viewpoints, a trail, and a possible canoe/kayak campsite

LI State Parks has installed an historical and hiking trail map kiosk at the Napeague overlook which exemplifies creative public education. Other low impact and passive recreation uses should be emphasized within Hither Hills/Hither Woods/Montauk County Preserve. At present, the north side of Hither Hills is for day use only, and a canoe/kayak campsite at Fresh Pond is not under active consideration. Any large scale active use such as a golf course would conflict with present use and cause unacceptable impacts to the habitat. Such uses should be excluded in plans by all management agencies having jurisdiction. The Town has an existing management plan in place for its Hither Woods parcel. However, an updated cooperative management plan is clearly desirable that would include fire management.

An upgrade of facilities at the Town beach on Navy Road is needed to accommodate increasing use. In should include benches, bike racks, garbage cans, better parking arrangements, and scenic viewpoints. The site requires some cleanup, and the Town should consider acquiring additional land there for future public access.

The Town Shellfish Hatchery on Fort Pond Bay is a working site with minimal public access to the water. However, the hatchery receives regular visits from schoolchildren and their appreciation of the site, its history, and the work being done there could be enhanced by interpretive signs and scenic viewpoints.

Culloden Point will be subject to a management plan formulated by the Town to include low intensity use as a park. Potential improvements include bike racks, garbage cans, parking, scenic viewpoints, pedestrian access, a possible primitive campsite for canoe/kayak users, diving access, trails and interpretive signs.

At Second House on Fort Pond restoration of the wetland would enhance the view of the pond and retard further incursions by phragmites. Other improvements suggested for Second House include benches, bike racks, garbage cans, interpretive signs, picnic tables, and a foot trail to the pond interconnecting with Kirk Park.

At the east side of southern Fort Pond the Town is considering expanding the recreational facilities surrounding Lions Field. Potential improvements include a comfort station, playground, bleachers, expanded parking, soccer field, volleyball court, three basketball courts, a roller hockey rink and rollerblade track. Additional suggestions from this report include benches, garbage cans, toilet facilities, pedestrian access to the pond, picnic tables and scenic viewpoints. This is an excellent location for water enhanced recreation facilities.

9. Public access and recreational uses compatible with new development

Several sites in the reach have potential for new or expanded access or recreation opportunities in relation to new development. The dock at the proposed Benson Point subdivision could be used as a boating facility and fishing pier if restored. This would also be a good location for a launch ramp and a pedestrian access to the water.

The dock at Rough Riders Landing remains sturdy though somewhat in disrepair. Though private this dock is an excellent fishing pier and boat dock facility at a good location on Fort Pond Bay, and should be rehabilitated if at all possible. Limited pedestrian public access should be sought to the dock.

There are opportunities for improved pedestrian public access to the beach at Culloden Point. As subdivision plans and a management plan for the Town-acquired land are instituted, an undesignated public swimming beach, and trails with interpretive signs relating information about historic and natural resources could be incorporated.

A reserved area on the west side of Flamingo Road has potential for trails and scenic views.

10. Analysis

Integrated and coordinated management efforts for the extraordinary expanse of preserved natural area from Hither Hills on Napeague Harbor to Rocky Point on Fort Pond Bay would be a positive advantage to the State, County and Town, all of which have an interest in it. Habitat restoration, fire management, trail systems, and wildlife management, should all be addressed on an area-wide basis. Integration of future plans for redevelopment of the former Montauk landfill should also be incorporated (see Reclamation and Park Design for Former Montauk Landfill in **Projects** section). However, any large scale active use of the natural area, e.g. a golf course, should be precluded to avoid impacts to the important habitat and water recharge characteristics of the tract.

Fort Pond Bay has historically been an active harbor but is now little used. It was the site of the Montauk fishing village prior to the 1938 hurricane, after which activity shifted to Lake Montauk. Although present development is primarily residential, future development of the shore with associated water use of the bay should be addressed in a *Harbor Management Plan* (see **Projects**). This should include revitalization of the docks and the former landfill, which represent significant recreation opportunities for Montauk.

Improving recreation facilities and opportunities around Fort Pond must be balanced with concerns for maintenance and improvement of water quality in the pond. Wetland restoration and phragmites removal at Second House, Kirk Park and the Montauk State Park Boulevard will help to enhance views of the pond and maintain its diversity. Water quality in the pond needs to be addressed from several perspectives, including non-point inputs from road runoff and surrounding development (see **Water & Air Resources Policies #30-44** and *Stormwater Abatement* in **Projects**). Potential toxic pollutants, entering Fort Pond in a storm surge that overwashes commercial sites on adjoining Industrial Road, are discussed in **Flooding and Erosion Policies #11-17**.

Reach 6 -- Montauk North Side

1. Public access

40 access sites and four waterbodies were surveyed in Reach 6, two of which, Montauk Downs State Park, and Indian Field Park, are not directly on the water. Three boat launch ramps are in use, at the Town's West Lake launch ramp on Duryea Avenue, at Montauk Yacht Club, and at Gone Fishing Marina on East Lake Drive. A fourth is proposed on a Town-owned parcel on East Lake Drive, but has not yet been constructed. On the south side of Star Island causeway a boat access is in common use over private property. Another five sites have boating access without a paved ramp, at South Lake Drive, and four unnamed sites along East Lake Drive. Four ORV accesses to the beach are noted, two in Montauk County Park, and one each at the Town's east and west jetty beaches. These are also the primary places where beach driving takes place. There are no Town restrictions on beach driving in the reach.

In the Coonsfoot Cove and northern East Lake Drive sectors of the reach, pedestrian and visual access is largely over the docks and marinas that line the shore of the harbor. Although only a few of the docks link naturally to form a continuous thoroughfare, a linked walkway in Coonsfoot Cove is proposed (see Revitalization of Montauk Harbor in **Projects**). This would greatly facilitate safe access to this working waterfront for tourists, fishermen and other users.

At Montauk County Park, there is natural pedestrian access to the Block Island Sound beach. Another three natural paths provide access to the adjacent Town beach at the end of East Lake Drive. Water views are the predominant form of access at seven sites, including Gosman's Dock, Osbourne's Island, a Town road at Little Reed Pond dreen on East Lake Drive, and the Indian Field park off East Lake.

Only one site, the private Montauk Yacht Club, presently has bike racks. There are picnic tables at a number of sites including some of the West Lake Drive and Star Island marinas, the Coast Guard Station on Star Island, and Gone Fishing Marina on East Lake. Montauk County Park has 150 campsites for County residents with permits, not including ORV camping permitted on Gin Beach. Parking capacity ranges from 300 spaces in the County Park to 20 at the smaller marinas, with a total of 1626 parking spaces in the reach.

2. Boating facilities

Montauk Harbor in Reach 6 is the Town's most populous recreational boating hub. Seventeen recreational marinas and the several commercial docks have a total of 1186 slips in Lake Montauk. Slip capacity at the recreational marinas ranges from 235 slips at the Montauk Resort and Marina (Montauk Yacht Club) on Star Island to less than thirty at the smaller establishments. Approximately fifteen moorings are present in various parts of the Lake, and transient boats frequently anchor up overnight, usually south of the end of the channel at Star Island. Overnight anchorage is permitted in the southern part of the Lake. The Town has instituted a mooring grid, in use for the first time in the 1997 season, to prevent numbers of boats in the south Lake from becoming excessive and to forestall other use conflicts.

Twelve marinas have onsite fueling facilities, and four have pumpout stations, including a free municipal pumpout at the Town dock on Star Island. Fourteen sites have shoreside facilities such as showers and toilets. Many of the marinas also provide haulage and winter maintenance services, with a total capacity for 210 boats. The two Town docks, at Star Island and West Lake Drive, are primarily for commercial fishing boats, with a capacity for 20 commercial and 10 recreational boats at Star Island and 18 commercial slips at West Lake Drive. Also on Star Island, the U.S. Coast Guard Station has dock space for its 82', 44' & 41' cutters, and provides dockage for the Town Harbormasters' two craft as well.

Gone Fishing Marina and Star Island Yacht Club also act as boat dealers and yacht brokers. Boat rentals for inshore forays in the Lake and offshore ventures are available through Uihlein's on Coonsfoot Cove. In the summer season, Uihlein's also rents jetskis from a raft anchored outside the west harbor jetty.

In addition to the marinas, there are ten private docks on the Lake shore, most of modest size, some dilapidated. The south end of the Lake receives considerable use from small recreational craft, sailboats and windsurfers, canoes, kayaks and rowboats, and waterskiers, for which a ski area is reserved.

Block Island Sound and the outer shores of the reach also see much boating activity ranging from sailing and motorboating to canoeing, kayaking and windsurfing, as well as jetskis and waterskiing.

3. Fishing and hunting

Montauk Harbor bills itself as the "Fishing Capital of the World". The harbor currently boasts 81 full-time charter fishing boats, five party boats, and hundreds of private recreational fishing boats. The charter and party boats are concentrated in the Coonsfoot Cove and Star Island complex of marinas, plus six boats working out of Gone Fishing Marina on East Lake Drive. Many of the recreational marinas offer gear and bait supplies for fishermen, with bait and tackle shops at six sites: Johnny Marlin's Dock, Montauk Marine Basin, Captains Cove, West Lake Fishing Lodge, Star Island Yacht Club and Gone Fishing Marina. Almost all of the marinas also have fish cleaning sinks installed for returning sportsmen.

Casting for bluefish and striped bass is popular on all the outer beaches of the reach, and within Lake Montauk for spring and winter flounder. Several sites do double duty as fishing piers: the Town commercial dock on West Lake Drive, Town dock on Star Island, and the stone jetties on either side of the harbor inlet. Other sites offer boat access to fishermen including the Town launch ramp on West Lake Drive, a Town right-of-way off West Lake Drive near the intersection with Star Island Drive, the South Lake Drive road-end, an unnamed road near the south end of East Lake Drive, a Town road off East Lake Drive, a Town-owned parcel (SCTM #6-2-13.5) to be improved with a launch ramp on East Lake Drive, and Montauk County Park, which attracts dedicated surf fishermen from all over Suffolk County. See also the ORV accesses noted above where fishermen can drive onto the beach. Big Reed Pond in the County Park is a freshwater fishery for large mouth bass.

Lake Montauk has long been one of the Town's prolific shellfish harvesting areas, though coliform pollution and marina closure zones related to National Shellfish Sanitation Program (NSSP) criteria have caused the NYS DEC to close significant areas of the Lake to shellfishing (see also **Commercial Fishing Policy #10/10A** and **Water and Air Resources Policies #30-44**). However, the Lake continues to attract many recreational shellfishermen and is seeded by the Town Shellfish Hatchery. Traditionally one of the Town's better sources for bay scallops, the Lake scallop harvest has also declined in recent years. Shellfishing in Town waters requires a Town shellfish permit.

The County Park is the only permit-restricted hunting ground in the reach. Duck hunting is active in most of the waterbodies in the reach including Lake Montauk, Big Reed Pond in the County Park, Block Island Sound and Steven's Pond in Culloden. Duck blinds are erected seasonally in Big Reed Pond and Lake Montauk. All hunting activity requires a State license, and in addition hunting within the County Park requires a permit from the County.

4. Beaches and swimming facilities

Reach 6 has one designated public beach at the end of East Lake Drive fronting on Block Island Sound. This ample beach has a well laid out parking area with 100 parking spaces, and a new comfort station completed in 1996. There is also a non-designated swimming beach adjacent to the west jetty, with a 60 space parking area, in addition to parking across the street for the neighboring restaurant/retail complex at Gosman's Dock. Swimmers also use Montauk County Park beach on Block Island Sound, which has parking for 300 cars. The Town maintains a less used beach at the south end of Lake Montauk, the South Lake Drive road-end with parking for fifteen cars. Snorkeling and scuba diving are widely practiced in Block Island Sound, and occasionally in the more turbid waters of Lake Montauk. The west jetty beach is one of the few bay beaches where one may find board surfers catching a wave when a northwesterly wind kicks up rollers on Block Island Sound.

Montauk Downs State Park has one of the only large outdoor swimming pools open to the general public in the town. Parking, shared with golfers, is available for 150 cars. Other pools are open to patrons and guests of various marinas and resorts in the Coonsfoot Cove/Star Island area including The Landings, Snug Harbor, Star Island Yacht Club, Montauk Yacht Club and Captains Marina on East Lake Drive. A number of marinas also have benches for picnicking, as does the County Park. Snug Harbor has a volley ball net as well.

The interior beach of Lake Montauk offers opportunities for beach walking and birding from access points along East Lake Drive, as do the Block Island Sound beaches stretching to Shagwong Point through the County Park from the East Lake Drive road-end. This is popular for beachcombing, sunbathing, and other beach-related activities.

5. Other recreation activities

Montauk Downs State Park is a first rate public golf course designed by Robert Trent Jones, where any State resident can play for the cost of a modest greens fee and sometimes a substantial wait in line. The course is heavily used in the summer months. It also has nine public tennis courts, and as noted above, a public swimming pool. Montauk Yacht Club also has six tennis courts for guests.

Montauk County Park offers a variety of activities, including a children's camp, nature walks, and mapped hiking trails. Along with more than thirty of the other access sites in the reach its seascapes offer opportunities for photography, sketching and painting. In fall there is foraging for native fruits and berries, and winter brings a chance to see seals haul out on the rockier beaches. Horseback riding is available on rental horses from a concession at Deep Hollow Ranch near Third House. A second stable, Rita Foster's Ranch, just east of the intersection of West Lake Drive and Montauk State Parkway, is a riding academy and also boards horses. Also along East Lake Drive, Indian Field park offers a view of the Lake, nature walks and an experience of local pre-history.

6. Use conflicts and proposed solutions

Within Coonsfoot Cove and northern Lake Montauk where marinas and boating are the predominant use there are few conflicts with other uses. In the rest of Lake Montauk boating activity has an impact on the natural resources and other users. In the shallow waters of the Lake a 25 MPH speed limit, up to 45 MPH for boats towing water-skiers (§149.31B & §149.8A of Town Code), increases turbidity and heightens danger to swimmers. The increased turbidity affects sub-aquatic vegetation such as eelgrass, which requires clear waters and light, and is critical to the State designated Significant Coastal Fish and Wildlife Habitat in the Lake. Speed limits in Lake Montauk should be reduced to conform with the Town's other enclosed water bodies.

Conflicts remain in Montauk County Park, where ORV's on the Block Island Sound beach and in the vicinity of Big Reed Pond impact natural resources or interfere with other users. Potential conflicts between hunters and hikers are also a concern, which may be alleviated by public education and safety training as part of hunting license procedures. Different user groups may be in the park at the same time, and the potential for conflicts will remain.

Two areas have conflicts or potential conflicts between public access and private property: a narrow Town-owned right-of-way from West Lake Drive just south of the Star Island Causeway, which lies between two residential parcels; and Stepping Stones Pond, which fronts on Old West Lake Drive but is private property. Both of these are best left undeveloped, though pedestrian public access from West Lake Drive should be preserved, even minimally, as should public access to Stepping Stones Pond in its entirety.

7. Environmental concerns

Environmental concerns in Reach 6 are impacts on Lake Montauk's water quality of stormwater runoff, residential development, and the numerous marinas. Potential pollutants from boats include marine head waste, boat cleaners, petroleum from fueling and bilges, and fish waste from recreational fishing. Recreational impacts include year round shellfish closures over the Coonsfoot Cove area and closures of other bottomland acreage on a seasonal basis. Runoff concerns extend to Montauk Downs State Park Golf Course because of its hydrological proximity to the Lake. Fertilizer and pesticide runoff may have had adverse impacts on the Lake, especially drainage through Peters Run, a stream that empties directly into Lake Montauk. Integrated Pest Management (IPM) has substantially reduced fertilizer and pesticide use on the course. See also **Water and Air Resources Policies #30-44** and *Stormwater Abatement* in **Projects**.

Besides its attraction to golfers, Montauk Downs is also the home of three identified Natural Heritage plants, including the sandplain gerardia, and one Heritage community (maritime grassland). Little and Big Reed Ponds in Montauk County Park, and Stepping Stones Pond on the west side of the Lake are also within State designated Significant Coastal Fish and Wildlife Habitats, as is much of the Lake itself (see **Significant Habitats Policy #7**). NYS OPRHP maintains a Biological Resource Protection Advisory Agreement with The Nature Conservancy to inventory and monitor such plants and plant communities on the State protected list.

Chronic erosion at the west jetty beach next to the harbor entrance erosion has diminished its use as a bathing and surfing beach, this in spite of periodic deposits of dredge spoil from the harbor channel. To the west along Sound View Drive erosion caused by the downdrift effects of the jetties and by erosion protection structures has resulted in the loss of the recreational beach. See **Flooding and Erosion Policies #11-17**.

8. Improvement opportunities

The primary improvement suggested for Reach 6 is a linked pedestrian walkway that would provide continuous access to the Coonsfoot Cove waterfront all the way from Gosman's at the harbor mouth to the Coast Guard Station on Star Island. The walkway would enhance pedestrian and visual access to the harbor for tourists and boat users, reduce short-haul vehicle traffic and improve economic use of the waterfront zone (see *Revitalization of Montauk Harbor* in **Projects**).

Improved public access is recommended at several sites. At Stepping Stones Pond and along East Lake Drive on Lake Montauk acquisition of additional public access is recommended. A new launch ramp is needed along East Lake Drive to replace a previous one. The Town has acquired a site (SCTM #6-2-13.5) but has not yet made the necessary improvements. A trail at Montauk Downs State Park would permit hikers to enjoy the excellent water views without interfering with golfers. At the Town-owned right-of-way on West Lake Drive a pedestrian trail for access is recommended. At the harbor mouth, recommended improvements include bike racks at the west jetty beach, and benches and picnic tables at the east jetty beach.

The scenic views and recreational birdwatching around Lake Montauk have been affected at several locations by invasion of phragmites. Wetland restoration is recommended at Stepping Stones Pond, Big Reed Pond, and the Lake fringes along West Lake Drive and at Ditch Plains. This may include removal of phragmites, restoration of saltmarsh and redirecting ditches that convey nutrients and contaminants into the Lake (see *Wetland Restoration, Open Marsh Water Management* and *Stormwater Abatement* in **Projects**). The Town is also planning a marsh impoundment and filtration project at the south end of the Lake (Oceanside Drain Project). While these initiatives will improve the recreational resources, the main goals are to reduce pollutant inputs and minimize potential flooding.

9. Public access and recreational uses compatible with new development

The Reach 6 waterfront is substantially developed, and remaining open space is either in public parkland or of high environmental sensitivity. Extensive new development in the reach is unlikely and the need for new recreation opportunities is limited. Scenic views and a remaining wetland just

north of the Town launch ramp on West Lake Drive should be preserved in a natural state for a variety of reasons, including recreation-related water quality and visual enjoyment, as should remaining undeveloped wetlands on Star Island (see **Development Policies #1-6**).

10. Analysis

The concentration of recreational marinas in the north end of Lake Montauk coexists with the shallow environmentally sensitive southern part of the Lake, with Star Island effectively dividing them into two waterbodies. If the entire Lake is to remain both ecologically healthy and attractive for boaters, fishermen, shellfishermen, and tourists, protecting and enhancing its water quality is a foremost concern. LWRP initiatives and implementation measures to accomplish this are discussed in **Water and Air Resources Policies #30-44**, and **Projects**. Some recommendations have already been acted upon, for instance the *Harbor Protection Overlay District* enacted in 1995. Others, such as *No-Discharge Zones* and the *Boater Education* project, will be put into effect in the foreseeable future.

Some existing regulations, such as the 25 MPH boat speed limit (45 MPH with water-skiers in tow) in Lake Montauk, should be brought into line with other Town harbor areas. Establishment of a demarcated transient mooring area will help to forestall conflicts between different recreational uses. A trial mooring grid put in place for the 1996 and 1997 boating seasons should be finalized.

The linked walkway proposal for Coonsfoot Cove (*Montauk Harbor Revitalization* in **Projects**) will have a positive effect on scenic, recreational and economic values for the area and should be pursued. Additional access for boat launching on the east side of the Lake is needed and the proposed new Town launch ramp should be completed.

Reach 7 - Oyster Pond/North Montauk Point

1. Public access

Two sites provide access to the coast in this reach which is entirely within Montauk State Park. One is from the Montauk Lighthouse area which has five points for pedestrian access and two viewing platforms at the upper parking field and the veranda of the refreshment concession. Views to Block Island and Connecticut can be had on clear days, with coin operated binoculars provided for telescopic observations. Sea birds often raft up on the north side of the point in winter, when seals can frequently be seen fishing in the surf or hauled out on the rocks. Bike racks, picnic tables and benches are available near the concession building. There are 320 parking spaces in the Lighthouse complex.

West of the Montauk Light is an ORV access for surf fishermen to drive onto the beach, where the Park authorities allow limited overnight camping by bona fide surfcasters. A small parking area on the side of Montauk State Park Boulevard marks a trail leading to Oyster Pond and the nearby shore of Block Island Sound. This is another good vantage for winter birding and seal watching. A seal watching blind has been maintained for some years on the bluff above the beach about halfway between the Light and Oyster Pond.

2. Boating facilities

There are no boating facilities in the reach, although a great deal of boating activity occurs on neighboring Block Island Sound.

3. Fishing and hunting

Montauk Point is the most favored surfcasting spot in the Town, particularly during the late summer and fall striped bass and bluefish runs. Sportsfishermen come from all over the Island and New York State, some with ORV's and 4-wheel drive campers, which require a State permit.

Permit-restricted deer hunting and duck hunting occur in Montauk State Park and adjacent waters in season, although hunting is prohibited around the environs of the Lighthouse because of the constant influx of visitors. Deer hunting requires a NYS DEC access permit in addition to the NYS hunting license. Duck blinds are not permitted in Oyster Pond.

4. Beaches and swimming facilities

There is no designated bathing beach in Reach 7, and although people swim in Block Island Sound it is not a popular bathing area due to the open exposure and its generally rocky beach. Scuba diving is one swimming activity that does occur, also some board surfing, although it is prohibited in the Lighthouse area because of conflicts with fishermen and dangerous rocks, rip currents and surf conditions.

5. Other recreation activities

Beach walking, nature walks and trails provide other kinds of recreation in Reach 7, including opportunities for photography, sketching and painting along the rocky beaches and around the environs of Oyster Pond. Shad bushes blooming in the spring are one of the unforgettable sights of Montauk Point, and bird and seal watching from the shore is rewarding in the fall and winter.

Montauk Lighthouse is one of the most popular and scenic tourist destinations in the area, if not the state. The Lighthouse is run by the Montauk Historical Society, which maintains a lively museum in the former lighthouse keeper's building. Visitors can traverse the massive rock revetment protecting the Point from erosion via a leveled pedestrian platform over the rocks.

6. Use conflicts and possible solutions

As Reach 7 is entirely parkland, the only conflicts are between different recreational uses of these lands and facilities. Beach driving on the north shore of Montauk State Park conflicts with natural resource values and passive uses such as beach walking, bird and seal watching. State Park management has indicated that vehicle activities are adequately monitored, numbers are constrained and driving impacts by fishermen are insignificant (former Park Manager, personal communication, 1996). However, the status of beach driving in the State Park should be carefully monitored, particularly since there are large numbers of beach drivers in the neighboring County parklands. A better system to limit numbers and provide cautionary environmental information for beach drivers may help to reduce impacts on the natural resources of the beach.

Permit-restricted hunting is allowed in season on State parklands in the reach, except around Montauk Lighthouse, so as not to conflict with tourism. Public education and hunter safety training help prevent hunting accidents.

7. Environmental concerns

Foremost among the environmental concerns for the reach are preserving the habitat values in the parklands. Oyster Pond is a State designated Significant Coastal Fish and Wildlife Habitat; the remainder of the reach sector of Montauk State Park is a Locally designated Significant Coastal Fish and Wildlife Habitat. Both State and Local habitat areas have protected plant and animal species. There are also water quality concerns related to Oyster Pond, presently closed year round to shellfishing. The pond should be tested for contaminants stemming from former Camp Hero draining into it from the south.

Erosion along the northeastern exposure of Block Island Sound is a constant process, which may at times limit recreational activity. Breaches in the spit to Oyster Pond caused by storm surge are an additional concern, particularly if the pond were to be breached for an extended period.

8. Improvement opportunities

Montauk State Park would be enhanced by provision of bike racks, garbage cans and interpretive signs near the trail to Oyster Pond, and at the ORV access. Phragmites should be prevented from invading the wetlands surrounding Oyster Pond to maintain views from hiking trails, and habitat for what is probably the greatest variety of endangered and protected plant species in the Town (see **Significant Habitats Policy #7**).

Development of additional scenic viewpoints along the Montauk Point State Park Boulevard should also be considered.

9. Public access and recreational uses compatible with new development

The reach is composed entirely of State parklands. As far as the Town knows, no new development is contemplated. The Town should be notified and consulted by NYS OPRHP regarding any future development plans for these areas.

10. Analysis

A clearly defined environmental inventory and management plan for the State parklands should be formulated and implemented. Montauk Lighthouse and Montauk Point State Park make up one of the major scenic and recreation sites in the Town and New York State. While the majority of recreation activity is tourist-oriented and scenic, it is also a popular surfcasting spot, and is frequented by winter nature lovers as a seal haulout site and for concentrations of migratory ducks and seabirds. Oyster Pond is a remnant of the natural north shore coastal ponds that once included Lake Montauk and Three Mile Harbor. Many of the plants persisting in its brackish shoreline environment are rare and endangered. Any remaining contaminant problems originating from Camp Hero should be cleaned up and resolved. Concerns to be addressed in a management plan include habitat protection, ORV impacts, erosion, water quality in Oyster Pond, and potential breaches of the pond in hurricanes or nor'easters.

Reach 8 - Montauk Bluffs

1. Public access

Seven sites were inventoried in Reach 8, three of which, Deep Hollow, the Camp Hero ballfield, and the Montauk Sanctuary parcel, do not give access to the water but have recreational resources within the coastal zone. The other sites provide access to the water at Turtle Cove just west of Montauk Lighthouse, at Camp Hero in Montauk State Park, and The Nature Conservancy's Andy Warhol Preserve south of Deep Hollow. Only one site provides ORV access, five others having trails or other pedestrian access to the water. Two of the sites, Deep Hollow Ranch and the Warhol Preserve, are privately owned. Parking is limited to only 26 spaces in the reach overall, 20 of them at the Camp Hero ballfield, and ORV driving is restricted within the State parklands and requires a State permit. There is continual demand for additional public access for sport fishermen and surfers to get to the water along the shores of Camp Hero.

2. Boating facilities

There are none within the reach.

3. Fishing and hunting

The Atlantic Ocean shore of the reach is popular for surfcasting, with access for fishermen primarily from the Town-owned parcel at Turtle Cove, and secondarily through Camp Hero. There are no permit-restricted hunting grounds in the reach. Duck hunting is permitted on the ocean but virtually nonexistent, since it is usually confined to the calmer waters of the bays, enclosed harbors and coastal ponds.

4. Beaches and swimming facilities

There are no bathing facilities in the reach and no parking with public access to the water. Surfers favor the wave action in the rocky coves of the reach, even though access to the shore is difficult and generally restricted to paths over private property. Ocean swimming is otherwise minimal because of rocky boulder strewn beaches and the limited public access. Scuba diving is an occasional pastime, though mostly from dive boats offshore. Beach walking to enjoy the scenic boulder covered shore and hoodoo bluffs is a popular pastime, with parking and access from the Montauk Lighthouse.

5. Other recreation activities

Inland trails abound in the reach, with maps available for the State Park. The Nature Conservancy's Andy Warhol Preserve also has a trail network, but requires permission for entry. Part of the mission for this preserve involves art education and it is used several times a year for school groups, photography and sketching by various community institutions. Other sites such as Turtle Cove and the ocean shore offer unusual scenic resources for photographers and artists.

Other recreational uses in the reach include the ballfield at Camp Hero, which receives frequent community use for soccer and softball, and the riding stables at Deep Hollow Ranch for breeding and boarding horses, part of the oldest cattle ranch in North America. The ranch was also the venue for an annual outdoor concert for five or six years, hosting 10,000 people and benefitting

preservation of the Montauk Lighthouse and other community causes such as The Nature Conservancy, etc.

6. Use conflicts and proposed solutions

Much of the shoreline in Reach 8 is relatively inaccessible for recreation, with limited access to the water through either the public parklands of Montauk Point State Park or over privately held parcels to the west. Use conflicts are consequently few, although the present passive use conflicts with demand for more public access.

There is an existing access conflict at a Town-owned parcel offering access to Turtle Cove and the contiguous beach just west of Montauk Point, a spot favored by sport fishermen and surfers. The Turtle Cove site has been disturbed by heavy equipment during recent construction of the lighthouse revetment. Since ORV driving on the beach from this point is limited by the Lighthouse revetment to the east and boulder strewn beaches to the west, vehicular access onto this beach should be eliminated once revetment construction is completed.

There is more demand for surfcasting and other waterfront recreation within the reach than is available. This is particularly true along Camp Hero's shoreline, which remains largely inaccessible. Private waterfront property within the reach consists of exclusive estate homes along the bluffs, with restricted entry from Old Montauk Highway, where parking is prohibited. This is the only public road providing proximate entry to the bluff area. At the west end of the reach access is also restricted by the private driveways of the Montauk Association and the Montauk Shores condominium trailer park. A redevelopment plan for Camp Hero which incorporates low intensity recreational uses and access to the shore for fishermen and surfers would help to alleviate this public access deficiency. The Town's position is that additional low impact public access can be accommodated without compromising habitat values, however, safety issues posed by the abandoned military structures on the site need to be resolved.

7. Environmental concerns

Erosion forces at the Montauk Lighthouse and Point and in the high energy environment of the Atlantic ocean shore of Reach 8 are a constant concern. At Turtle Cove, degradation of the low bluff area by construction equipment for the Point revetment and ORV use have increased flood and erosion vulnerability, which should be addressed, at least in part, by restoration of the construction site following project completion, and closing off the access to beach vehicles.

West of Turtle Cove, the clay "hoodoo" bluffs are an unusual natural land form unparalleled on the east coast except for two related formations in the Long Island Archipelago at Block Island and at Gay Head on Martha's Vineyard. Because of the spectacular scenic and recreational qualities of this shoreline, there is a concern that human responses to bluff erosion and efforts to stabilize them may degrade this unique natural system. For further discussion of the erosion issues see **Flooding and Erosion Policies #11-17**.

Both bluff and upland areas of the reach are Locally designated Significant Coastal Fish and Wildlife Habitats, hosting a varied community of protected plant and animal species. Extensive deposits of

clay soils, perched ponds and wetland systems, freshwater springs, streams and coastal ponds contribute to a unique moorland ecosystem. Small forests of shad, pockets of cinnamon fern, and protected plants such as dragon's mouth, Emon's sedge and weak stellare sedge, and birds such as bank swallows and the harrier hawk are among species inhabiting the moorlands. See **Significant Habitats Policy #7** for further discussion.

8. Improvement opportunities

More public access to the shore in response to demand for fishing and surfing in Camp Hero in Montauk State Park should be incorporated into a management plan for reuse of the site. Defined trails with interpretive signs will contribute to recreation opportunities for hikers and other passive users, and help to direct human use away from fragile habitat. One such new trail was inaugurated in 1997.

Public access is inadequate along the Montauk Bluffs and the area of Deep Hollow Ranch, and additional access should be sought where possible.

The Sanctuary parcel just east of the ranch, the last large tract of private open space remaining in the reach, was purchased by New York State in 1997. Because of its significant habitat and environmental constraints it should be utilized for low intensity recreational uses such as hiking, birding, other passive uses and conservation, complementing the uses recommended for adjoining Camp Hero. Improvement recommendations include interpretive signs for the existing trail network, some new trails, parking, garbage cans, and pedestrian access.

9. Public access and recreational uses compatible with new development

Recreation in Reach 8 depends on the natural resource base of the Montauk moorlands ecosystem, characterized by extensive freshwater wetlands, impermeable lenses of Montauk clay with unusual hydrology, important habitats for protected or endangered plant communities, and dramatic "hoodoo" clay bluffs fronting the ocean shore. Because of the fragile environment development in the moorlands should be avoided. The highest and best use for the area is preserved open space.

Future NYS OPRHP development plans for the two large State-owned parcels in the reach, Camp Hero and the recently acquired Sanctuary parcel, are uncertain. Both share similar ecological constraints as part of the Montauk moorlands ecosystem, though the Sanctuary lacks the shoreline.

A recent proposal for a golf course at Camp Hero being considered by NYS OPRHP would conflict with the stated ecological and habitat objectives for the property, and would violate the original conservation agreement under which the parcel was acquired by New York State from the Federal government. From a Town planning standpoint the golf course proposal is inconsistent with the goals of the LWRP, and should be rejected by the Town, New York State, and Federal agencies.

Camp Hero has had considerable significance in the military history of the country, most recently as one of the defensive coastal batteries for New York City during World War II and as a part of the Nike defensive missile network in the post-war period. Incorporating this military history and other historic resources in a military theme park or museum, and restoring one of the existing buildings

to house it, would be an appropriate use of the site in combination with low intensity recreational uses. Cleanup or removal of deteriorated structures and toxic remnants of military activities may be required before redevelopment can occur.

The Sanctuary parcel is a natural complement to the parklands at Camp Hero and the rest of Montauk Point State Park and should incorporate trails and other amenities for passive recreation and access as part of a management plan.

10. Analysis

The extraordinary combination of habitat for rare and protected species, sensitive hoodoo bluff and moorlands systems, spectacular shoreline and open space require a strategy of preservation and passive or low intensity uses for public access and recreation in Reach 8. A management plan addressing both ecological and recreation values for the former Camp Hero should be implemented based on the original contract for the parcel, limiting new development and emphasizing habitat preservation and passive recreation such as trails, nature appreciation, historic resources, etc. Additional pedestrian public access for fishermen and other users should be instituted at Camp Hero, and safety issues resolved for the old military structures. There is considerable demand for surfing access in this reach, as there is to other State parklands in Reach 10. Trails through the Sanctuary parcel should be integrated into the management plan. See also *Camp Hero Revitalization and Redevelopment* in **Projects**, and in discussion for Reach 8 in **Development Policies #1-6**.

Reach 9 - Hamlet of Montauk

1. Public access

The many motels and resorts in the Montauk business area accommodate large numbers of visitors who take access from them to the ocean. Road-ends at Ditch Plains [east], South Essex Street, South Edison Street, South Edgemere Street, South Embassy Road, South Emery Road, and South Eton Street provide ORV access to the ocean beach. A wooden walkway at the Town's Kirk Park and 39 other natural trail access points provide further pedestrian access to the beach. Among the fifteen sites surveyed in the reach there are 406 parking spaces throughout, though some are for patrons of private businesses such as Gurney's Inn. There is also a much-used Town overlook that provides a handsome vista of the ocean along with a trail to the beach, located on Old Montauk Highway opposite the Surfside Inn. None of the sites have picnic tables, but there are benches at the Montauk Property Owners' Association parcel and benches and bike racks at Gurney's Inn.

2. Boating facilities

There are none in the reach.

3. Fishing and hunting

This section of Montauk is one of the most popular ocean beaches for surfcasting in the Town, with numerous pedestrian paths and ORV access points for fishermen with 4-wheel drives. Johnny's Bait & Tackle shop on Montauk Highway provides equipment, bait and tips for anglers.

There are no permit-restricted hunting grounds within the reach where additional access permits are required to hunt. Some hunting is said to occur on the Shadmoor property.

4. Beaches and swimming facilities

There are two designated Town bathing beaches with lifeguards and comfort stations in the reach, at Ditch Plains and at Kirk Park in the business area of "downtown" Montauk. The Ditch Plains beach has 60 parking spaces plus 15 at the nearby Otis Avenue road-end and approximately 30 at an unimproved access just to the east. Kirk Park has 110 spaces in the public lot adjoining the pedestrian boardwalk which spans the dunes to the beach. Although the Ditch Plains beach has suffered from erosion in recent years, beaches to the west extending through the business area to Hither Hills are generally broad and sandy, ideal for bathing and recreation, although they may fluctuate greatly in width with storm and wave activity. These are some of the most popular and heavily used bathing beaches in the Town.

The other sites in the reach also serve as non-designated public bathing beaches, except for Gurney's Inn, Panoramic View and other hotels along the Old Montauk Highway where access, practically speaking, is confined to guests. Gurney's also has a large indoor saltwater pool, which is open year round to the public (for a fee), the only such facility in the Town. Many of the motels in the Montauk business area also have outdoor pools for guests.

Ditch Plains beach is the most popular surfing spot in the Town, and has on occasion been the site for east coast surfing competitions. Large numbers of people also enjoy more passive pursuits on the beach such as walking, jogging, sunbathing and picnicking, beachcombing and birdwatching.

5. Other recreation activities

Rheinstein Park and the neighboring private parcel of Shadmoor have trail systems widely enjoyed for hiking. Shadmoor and an area along Old Montauk Highway owned by the Montauk Property Owner's Association have stands of native berries for foraging.

6. Use conflicts and recommended solutions

ORV beach driving is prevalent at every site with beach access surveyed in the reach. Beach driving conflicts with beach ecology and habitat and with human activities such as swimming, sunbathing, and beach walking. Surfcasting and swimming potentially could conflict along the ocean beaches, although common sense, courtesy and safety precautions should preclude dangerous proximity.

Private property restrictions along substantial stretches of shore prevent public access to the water, notably on the private Shadmoor parcel, within the Benson Reservation, and at Gurney's Inn. The Town should acquire some form of public access in these areas.

7. Environmental concerns

Storm erosion in 1996-97 significantly reduced recreational use of the Ditch Plains and Rheinstein Park beaches a year after the Town had completed a new comfort station and newly paved parking area. Severe erosion just west of the Otis Avenue groin resulted in beach loss and made ORV access impossible with a large drop off from the road. In response, the Town is conducting a study of

erosion conditions and possible solutions at Ditch Plains (see **Flooding and Erosion Policies #11-17** and *Ditch Plains Erosion and Remediation Study* in **Projects**).

Erosion has also affected recreational resources at Shadmoor, the municipal Kirk Park beach in downtown Montauk, and at Gurney's Inn. At Kirk Park, where the wooden boardwalk crosses the dune, excessive pedestrian traffic has devegetated the ocean side, increasing the likelihood of a blowout in the dune and its vulnerability to a storm surge. At Gurney's Inn, the resort facilities have encroached onto the beach and unrestricted pedestrian traffic has denuded beach vegetation in front of the hotel, rendering it more vulnerable to flooding and erosion. The intensive development of the Gurney's Inn site has also increased stormwater runoff onto the beach.

ORV traffic has contributed to dune erosion and has denuded beach vegetation at most of the roadend access points through the Montauk business area and at Ditch Plains. This has left the road-ends more vulnerable to flooding in storm tides. See **Flooding and Erosion Policies #11-17** and **Projects** for further discussion of erosion problems.

The Shadmoor parcel and Rheinstein Park just west of Ditch Plains are Locally designated Significant Coastal Fish and Wildlife Habitats, supporting substantial populations of protected plants, including rare and endangered species. The natural and historical resources of this site are unique and deserving of preservation and the Town strongly recommends this parcel be publicly acquired for conservation and open space.

8. Improvement opportunities

If Shadmoor can be acquired, a future management plan should incorporate scenic viewpoints, trails, and a system of pedestrian access to both protect the habitat, historic and natural resources of the site and provide recreational access.

Kirk Park in the Montauk business area should be improved with bike racks and the cross-dune boardwalk modified to eliminate pedestrian traffic over dune and upper beach vegetation. The existing indentation in the dune grass line should be protected with snow fence barriers and revegetated with beach grass.

A number of the road-ends now providing ORV access in Reach 9 should be redesigned to prevent additional flooding and erosion. The volume of ORV traffic should be limited, especially in winter when storms narrow the beach, heightening damage to upper beach vegetation, which may be dormant for the season.

The Town should acquire a public pedestrian access through the Benson Reservation which provides scenic views from Old Montauk Highway. Further west at the Town overlook on Old Montauk Highway, benches would enhance enjoyment of this favorite vantage for ocean viewing. Coin operated binoculars could be provided at this site. Parking, garbage cans, and interpretive signs should be placed at the scenic viewpoints. There is no public access to the beach over a long stretch of Old Montauk Highway between the Town overlook and Hither Hills State Park, and one should be obtained, if possible, somewhere in the vicinity of Gurney's Inn.

9. Public access and recreational uses compatible with new development

Most of the Reach 9 coastline consists of land that is intensively developed, or of open space that will likely remain undeveloped. The number of recreational uses and amount of activity already present at the developed sites makes it unlikely that significant new development will provide additional recreation facilities. However, if new development or renovation of existing development occurs, additional public access to the shore should be vigorously sought wherever there is an opportunity.

The future of the Shadmoor parcel remains uncertain at this time. If the parcel is developed for residential use rather than acquired as recommended, recreation oriented goals that should be incorporated in the development include maintaining pedestrian public access to the trails system, and preservation of the natural and historic resources.

10. Analysis

Reach 9 is one of the most active reaches in the Town in terms of recreation activity, to the extent that some resources are suffering from the impacts of overuse. The potential dune blowout at Kirk Park, road-ends damage, ORV conflicts on the beach, and development encroaching on the beach at Gurney's Inn are examples of overuse. These excesses must be repaired and use patterns reformed before more extensive damage occurs. Public education and stringent enforcement of existing natural resource protections are both necessary ingredients in this effort.

The Shadmoor parcel is a significant remnant of the unique Montauk moorlands that is worthy of preservation and public acquisition. It's historic significance, accessibility of trails to the shore, and ecological attributes are integral to the character of the reach and important to the recreation resources of the Town as a whole.

Additional access is recommended for the long stretches of ocean shore in the reach where the ability to get to the public beach is obstructed by private property. Public access from the Old Montauk Highway at the Benson Reservation and in the vicinity of Gurney's Inn, if only providing a narrow footpath to the beach, especially for surfers, would enhance enjoyment of a resource that is owned in common but at present enjoyed only by a few. See *Public Access Improvements* in **Projects**.

Reach 10 - Napeague South/Amagansett

1. Public access

Reach 10 includes the ocean side of Hither Hills State Park and some of the Town's most preferred bathing beaches on the longest stretch of Atlantic Ocean shore of any reach. It receives the most ORV use. There are a total of 12 ORV access points spread through the reach, 14 pedestrian walkways or stairways, 44 natural or unimproved pedestrian accesses, and three visual access vantages.

There are 768 parking spaces through the reach, 290 at Hither Hills State Park, 225 at the popular Town bathing beach at Atlantic Avenue in Amagansett, and 145 at the Indian Wells Highway beach reserved for residents. The neighboring Amagansett Beach Association, a private beach club, has

60 parking spaces; the rest are at road-ends with 18 at Atlantic Drive in Napeague (White Sands) and 20 at Napeague Lane. Eight sites have bike racks as well, and there are benches at Atlantic Avenue, Indian Wells Highway, and the homeowners' access at Mako Lane.

Hither Hills State Park has picnic grounds, and 168 campsites just behind the ocean dunes which are usually fully occupied throughout the summer season.

2. Boating facilities

There are no boating facilities in the reach. Sea kayaks and jetskis are occasionally launched from the ocean beach.

3. Fishing and hunting

The ocean beaches of Napeague and Amagansett through Reach 10 are, with Montauk, some of the most popular for surfcasting through the fall bluefish and striped bass seasons. Fishermen gain access at the same locations as other beach users and follow the feeding birds and fish schools with ORV's and CB radios.

There are no permit-restricted hunting grounds in the reach, although some small game hunting is presumably allowed. In general deer or other big game hunting is not permitted in the State parklands south of Montauk Highway.

4. Beaches and swimming facilities

The beach at Hither Hills State Park has lifeguards and comfort facilities, and the Town operates municipal bathing beaches at Atlantic Avenue and Indian Wells Highway with similar facilities. Parking at the Town beaches is free for residents with parking permits. Other facilities at these beaches include a snack bar in the old Coast Guard station building at Atlantic Avenue, and beach volley ball nets at both sites.

Virtually all of the other beach sites in the reach also function as undesignated bathing beaches, although at a number of them beach access is limited to property owners, pedestrians, or ORV's, because street parking is unavailable. The motels, condominiums and resorts along the Napeague stretch, and the Ocean Dunes condo in Amagansett offer beach amenities for guests, with lifeguards and pools at one or two.

Atlantic Avenue Beach has been the annual venue for a sandcastle contest, organized by the local Clamshell Foundation, which lures artists and architects as well as families and children. Hither Hills State Park also holds regular sandcastle contests on a smaller scale for campers and park users.

Residents and visitors in great numbers use the Reach 10 beaches for sunbathing, beach walking and jogging, picnicking, beachcombing, bird watching from the shore, and esthetic enjoyment. On a given day even in the coldest winter weather there are always half a dozen cars parked at ocean roadends with local workers enjoying lunch or a break from routine, absorbing the view. Besides swimming, water sports such as board and body surfing, surf kayaking, and jetskiing are actively pursued in summer.

5. Other recreation activities

Hither Hills State Park has a ballfield and extensive playground facilities. Extensive trails traverse the dune areas of Napeague State Park, there is a trail through a Town reserved area at Beach Plum Court, and several trails through the Double Dunes areas between Atlantic Avenue and Indian Wells Highway, and to the west. Environmental groups such as TNC conduct periodic organized walks in these areas. A raised wooden walkway through the secondary dunes of the Gansett Dunes subdivision off Marine Boulevard also offers a fine sample of the fragile double dune ecosystem without treading on the delicate lichens and other vegetation.

Hither Hills and Napeague State Parks and the Double Dunes offer excellent forage for wild fruits and cranberries, etc. in season. All the sites in the reach provide subject matter for photography, sketching and painting, particularly the unspoiled park areas. More consumptive uses of the landscape such as fishing and ORV driving may sometimes conflict with or mar these esthetic pursuits. Amagansett Beach Association conducts a children's camp for members at their beach site, with a lifeguard.

6. Use conflicts and recommended resolutions

The popular State parklands in Reach 10 receive considerable use, with consequent impacts on beaches and other resources. Almost all of the ocean access sites in the reach have existing ORV conflicts similar to Reach 9, affecting habitat, dune and beach vegetation and other recreational users. On a busy summer day over 100 vehicles may use the ORV access located at the east end of Marine Boulevard. Due to the numbers of vehicles seeking access at this point, conflicts with pedestrians are not uncommon.

Beaches throughout the reach are historically nesting sites of the piping plover and least tern, with three pairs nesting in Napeague in 1997 (NRD, 1997). Nesting can be disrupted by beach vehicle traffic, as well as pedestrians, pets and animal predators, especially during critical periods between hatching and fledging of chicks. Vehicles can disturb nesting birds, compact their wrack line food source, and trap unfledged juveniles in wheel ruts. No piping plover chicks were successfully fledged at this location in 1996, but in 1997 one piping plover pair fledged one chick.

Surfcasting and swimming potentially conflict at several beach sites used extensively for both, especially at the end of the summer when bathing and surf fishing coexist at their height. Common courtesy and safety awareness should prevent hazardous situations.

At Beach Plum Court there is a potential conflict between the private subdivision and public access to the beach over a Town reserved area. There are also concerns over the extensive wetlands at the northerly part of the site.

7. Environmental concerns

Four sites at the east end of the reach, Hither Hills State Park, the Dolphin Drive and Navahoe Roadends, and Seabreeze Estates are existing or historically active colonial shorebird nesting areas which are vulnerable to human, pet and ORV disturbance. Although storms are the primary cause of erosion, beach driving also increases it by retarding protective vegetation. For instance, at the east end of Marine Boulevard in Amagansett the Trustee right-of-way onto the beach receives a high volume of ORV traffic in summer. By eliminating the beach vegetation at this access ORV use has destabilized a dune, causing a blowout that allows floodwaters to enter behind the dune into the Marine Boulevard area. See **Flooding and Erosion Policies #11-17** and **Townwide issues** in this section. (Note: In general, the Town Trustees do not agree with this assessment of the impacts of responsible beach driving. Citing the Marine Boulevard access as an example of erosion caused by beach vehicles is inappropriate. The access existed for many years prior to the extension of Marine Boulevard and the resulting new homes.)

Much of the dune and double dune section of the Reach 10 shore is within the State designated Significant Coastal Fish and Wildlife Habitats of Napeague Beach and Atlantic Double Dunes, including the USFWS preserve between Atlantic Avenue and Indian Wells Highway. The Nature Conservancy's private Atlantic Double Dune Preserve holdings extend west of Indian Wells Highway into East Hampton Village. The double dunes form one of the largest preserved beach and back dune areas on Long Island and host a number of protected plant and animal species (see **Significant Habitats Policy #7**).

Public access at road-ends may potentially increase inland flooding in a hurricane storm surge, a concern at a number of locations including Navahoe Road, Dolphin Drive, Atlantic Drive, the east end of Marine Boulevard, Napeague Lane, Atlantic Avenue Beach, and Indian Wells Beach (see **Flooding and Erosion Policies #11-17** and Road-end and Beach Access Modifications in **Projects**). Flooding is also a significant concern for a proposed subdivision known as Sea Breeze Estates. This is located behind the Lobster Roll restaurant in Napeague, in NFIP flood hazard zones and within a CBRA zone barrier island designation, which precludes eligibility for flood insurance and other federal programs. The parcel is inappropriate for development and should be considered for public acquisition, purchase of development rights, conservation easements, or other open space preservation.

8. Improvement opportunities

Potentially the most significant improvement in Reach 10 involves the former Assembly of God parcel in Napeague, originally purchased by the Town for a bathing beach. Development of a designated Town bathing beach at the site would help to alleviate a marked shortage of available public beach facilities and accompanying parking on the ocean shore. Extensive site planning will be required to minimize impacts to wetlands, fragile dune vegetation, and nesting shorebirds. Improvements should be well set back from the primary dune to avoid potential blowouts. Suggested facilities include benches, bike racks, garbage cans, toilet facilities and a parking area.

Two additional sites are suggested for public access, over the proposed Sea Breeze Estates subdivision and through a reserve area at the Shipwreck Drive road-end, once dedication of the road to the Town is completed. An existing ORV access should be maintained across the southwest corner of Sea Breeze Estates, whereas access at the Shipwreck Drive site would be pedestrian only.

The Town reserved area at Beach Plum Court should be marked by signs. The Town should ensure maintenance of this access while preventing conflicts between subdivision owners and the public.

Bike racks, benches, and other minimal amenities are recommended at several of the road-ends in the reach including Navahoe Road, Dolphin Drive, Atlantic Drive, Shipwreck Drive, Whaler's Lane, and Napeague Lane. Bike racks supplemented by benches and picnic tables are recommended for the Town beach at Indian Wells Highway.

9. Public access and recreational uses compatible with new development

Continued public access to the beach for swimming is compatible with the proposed Sea Breeze Estates subdivision in Napeague. The existing ORV access crossing the southwest corner of the subdivision should be maintained for public use, and may also be protected by Town Trustee ownership.

10. Analysis

Reach 10 encompasses some of the Town's most intensively used recreational ocean beaches, in addition to long stretches of uninhabited parklands that include sensitive beach and dune habitat. Because of summer crowding at existing municipal beaches and road-ends, the popularity of surf fishing, and ORV use, the formerly pristine park beaches have become rutted and disturbed. While providing access to relatively remote beaches, the increased use of ORV's has affected both the recreational resource and habitat, and has diminished the ability of the beach to withstand erosion. In Napeague intensive ORV beach traffic from Marine Boulevard east into Napeague State Park has impaired the beach ecology by damaging vegetation, decreasing nesting habitat and compacting wrack forage for shorebirds. Beach grass growth is retarded by ORV traffic, reducing the stability of the beach in storm conditions and its ability to recover from storm erosion. Excessive traffic has expanded the dune opening at the Marine Boulevard ORV access, forming a flood corridor into the back dune residential area. (Note: In general, the Town Trustees are not aware of any increased erosion caused by beach driving. To the contrary, the dune opening at Marine Boulevard has been considerably reduced, thereby causing unnecessary problems for beach vehicle drivers.)

By some accounts the increased ORV traffic results from insufficient parking and availability of existing Town beaches and road-ends. To the extent this is true, development of a Town bathing beach at the Assembly of God parcel in Napeague may help to relieve some pressure for ORV beach driving. However, to a beach-going public accustomed to driving to solitary spots and easily transporting truckloads of recreational and picnic gear, it may not be a sufficiently attractive substitute. In any case, though constrained by wetlands and a fragile dune system, this beach would add capacity in an area that has presently has little public parking and limited access to the water. See Townwide Issues below.

Reach 11 - Wainscott

1. Public access

Reach 11 suffers from a dearth of public access to Georgica and Wainscott Ponds, and very limited parking areas at the public road-ends leading to the ocean beach at Beach Lane and Town Line Road. Beach Lane has only 36 parking spaces and Town Line Road, 20.

Public access to Georgica Pond is via a parking area near the head of the pond on Route 27, owned by New York State, with room for approximately ten cars, where canoes and other small craft can be launched. The only other public access to the pond is over the ocean beach, either on foot or by ORV from Beach Lane or Town Line Road. The brackish waters of the pond have traditionally been a good source of blue claw crabs prized by locals, and a bayman has in the past been permitted to launch a boat over a private parcel along Matthew's Road. The Georgica Association on the west side of the pond operates a small private beach club with cabanas and a wooden walkway over the dune, which has about twenty parking places for members.

There is no public access to Wainscott Pond at this time, although the pond is owned by the Town Trustees.

2. Boating facilities

There are 19 permitted moorings in Georgica Pond according to Town Trustee records. In addition there are six private docks in the pond, and several places where residents pull rowboats and other small craft up on the shore. Most boating in the shallow waters of the pond is in small sailboats, canoes and kayaks, the latter often launched from the State access on Montauk Highway. Main Beach Surf Shop across the highway rents these craft in season. Georgica Association residents are allowed to launch and maintain small craft in a cove on the west shore of the pond. Motorized craft are not permitted in the pond except from October 1st - April 30 when outboards of 10 h.p. or less are allowed, with a permit obtainable from the Town Clerk. As noted, a bayman has been permitted to launch a boat for crabbing and fishing from Mathews Road.

3. Fishing and hunting

The ocean beaches in Wainscott are popular with surfcasters, especially during the fall runs of bluefish and striped bass.

Georgica Pond remains the best source in Town for blue claw crabs, which residents have traditionally caught with a net and a fishhead or chicken neck on a string from near the gut or mouth of the pond. The pond is also a source of anadromous fish species such as white perch which enter the pond during periodic storm breaches, and when the Town Trustees open, or "let", it semi-annually to enhance fishery productivity.

Wainscott Pond has some freshwater fishing, though as noted above, public access is not presently available. Duck and goose hunting goes on in both ponds, with duck blinds occasionally mounted seasonally in Georgica Pond, subject to Town Trustee permit. There are no permit-restricted hunting grounds within the reach where supplemental access permits are required to hunt.

4. Beaches and swimming facilities

Beach Lane and Town Line Road-ends are non-designated bathing beaches that require a Town resident permit for parking. The small private beach club and cabana building for the Georgica Association is the only other beach facility in the reach.

Surfing and body surfing take place on the Wainscott ocean beach, though the preferred surfing spots are to the east in the Village of East Hampton where the federal groins create a better "break". Beach walking, jogging, picnicking, sunbathing and beachcombing are all popular pastimes on this beach. Also, because of the excellent feeding area and habitat for colonial birds on the flats near the Georgica Pond gut, this is an exceptional area for bird watching as well. Federally endangered piping plovers and least terns are among the species frequently nesting here.

5. Other recreation activities

The Georgica Association maintains four tennis courts and a ballfield for use by association residents.

Other recreational pursuits in the reach are mainly aesthetic. The environs of Georgica Pond and the vista of Wainscott Pond from Main Street attracting a constant stream of photographers, artists and walkers.

6. Use conflicts and recommended solutions

Beach Lane and Town Line Road are the two most widely used beaches in the reach. Parking is insufficient for the demands of even modest summer crowds. Cars often line the road right-of-way, interfering with other traffic and the enjoyment of homeowners.

During surf fishing season at the end of summer there are potential conflicts between surfcasters and swimmers on the Atlantic Ocean beach, avoidable if safety is kept in mind by both parties.

ORV driving on the beach causes similar problems with habitat and other users in Reach 11 as in the other ocean reaches. Conflicts emerge with ORV's and unrestrained pets every year at the popular crabbing spot at the ocean gut to Georgica Pond, which is also a primary colonial bird nesting and feeding area. Nesting shorebirds, including threatened or endangered species such as piping plover, need special protection at this location, and although delimiting string fences and signage are erected annually around the nesting areas, stringent enforcement is needed. Both Wainscott and Georgica Ponds are Locally designated Significant Coastal Fish and Wildlife Habitats, the spit at Georgica is identified as a least tern and piping plover nesting area, and the pond is noted as providing feeding area for osprey, winter waterfowl, common terns, roseate terns, least terns, and several heron species. See **Significant Habitats Policy #7**.

Beach users at the Georgica Association between the Beach Lane access and Georgica Pond also complain about ORV use interfering with their enjoyment of the beach and endangering children. The Georgica Association has asserted their right of ownership of this beach and have sought to close the beach to vehicles during daytime hours. Better uniformity with Town regulations on other beaches would help to resolve this problem.

Public access to Georgica and Wainscott Ponds, public waterbodies owned by the Town Trustees, is limited at Georgica and unavailable at Wainscott Pond because it is surrounded by private property. Additional public access is recommended.

7. Environmental concerns

Conflicts with nesting shorebirds, beach erosion, and potential water quality problems in Georgica and Wainscott Ponds are the primary environmental concerns in the reach.

Although Georgica Pond is generally opened semi-annually by the Town Trustees, nutrient loading often increases during the summer months when the pond is closed. This is attributable to the residential development surrounding the pond, and to road drains such as the large pipe in Georgica Cove emanating from NYS Route 114. Water quality affects recreational and commercial fishing and crabbing in the pond, and the water level affects recreational boating, canoeing, kayaking and small sailboats. Sporadic debate continues on the merits of opening the pond at particular times, dredging an accumulated sandbar near the gut, and the possibility of stabilizing water levels with an outflow pipe as at Hook Pond.

Water quality in Wainscott Pond is generally poor owing to agricultural runoff, and much of the fringing wetlands have historically been mowed. In recent years invasive and non-native species such as phragmites and purple loosestrife have invaded the pond fringe.

Beach erosion in Reach 11 has occasionally been severe in recent years, and is aggravated by the presence of the federal groins in East Hampton Village to the east. Winter storm erosion periodically causes a significant drop in the level of the ocean beach and scarping of the road-ends at Beach Lane and Town Line Road can make these locations impassible for ORV access.

For mitigation proposals for some of the concerns above see **Flooding and Erosion Policies #11-17**, **Water and Air Resources Policies #30-44**, and *Stormwater Abatement, Drainage Mitigation, Georgica Cove*, and *East Hampton/Southampton Cooperative Run-off Mitigation, Wainscott Pond* in **Projects**.

8. Improvement opportunities

Addition of bike racks at both Beach Lane and Town Line Road-ends would alleviate some of the pressure for more parking spaces although vehicle parking, too, needs to be better addressed.

Access to Georgica Pond at the state access on Montauk Highway should be upgraded with bike racks, garbage cans, interpretive signs, and picnic tables. Improvement of the launch area to provide a ramp for low draft boats is suggested. Acquisition of additional public access to Georgica Pond is recommended via the Hopping parcel on the west shore of the pond.

Acquisition of public access to Wainscott Pond is also recommended, although access to the pond is complicated by private ownership of the land surrounding it, and its closure to the ocean since the late 1930's or early 1940's. The two best prospects for public access at present are via a "non-exclusive easement of access" over two lots of the 1993 "Sweet Potato" subdivision, SCTM #200-2-

20 and #200-2-28.9; and a private road at the south end of the pond, SCTM #202-2-2, over which the Town Trustees may have a claim to access.

9. Public access and recreational uses compatible with new development

Significant new development is not projected in Reach 11.

10. Analysis

Recreational opportunities in Reach 11 would be most directly improved by more public access to the water on the ocean beach and to Georgica and Wainscott Ponds. At the Beach Lane and Town Line Road-ends, public parking should be improved or expanded and bike racks supplied. ORV access should be limited to lessen conflicts with habitat, natural resources and other users. Public access to Georgica Pond should be expanded by acquisition at the possible locations noted above, or enhancement of existing publicly owned locations on the east side of the gut. Access to Wainscott Pond at the south end needs to be obtained by securing public access the pond by virtue of their ownership of the pond bottom.

Reach 12 - Gardiner's Island

Gardiner's Island is private property in its entirety, therefore no analysis of public access, recreational resources or related issues is being undertaken at this time. Should Gardiner's Island change ownership or if the Gardiner family discontinues its stewardship, and particularly if it were to be acquired for public parkland or as an historic site, a thorough study of all the island's resources, recreational and otherwise, would be essential for future management.

H. KEY TOWNWIDE ISSUES, OPPORTUNITIES AND RECOMMENDATIONS

1. Key issues

Key issues for expanding recreational use of fish and wildlife resources (**Policy #9**), public access to the water (**Policies #19-20**), and enhancement of water-related recreation (**Policies #21-22**), represented by the spectrum of concerns in this Analysis section, include ways to improve or expand recreational use of the coast consistent with LWRP policies, use conflicts including impacts on recreational and natural resources, and habitat protection.

2. Summary of townwide use conflicts

Townwide conflicts between boaters and swimmers occur at several sites, including Maidstone Park on Three Mile Harbor, and Louse Point on Accabonac Harbor where boat channels coincide with favored swimming areas. Improved signage is recommended to alert swimmers to the danger and illegality of swimming in the channels, along with enforcement of harbor speed limits (generally 5 MPH) for boaters.

Natural resources are affected by beach driving at 55 sites plus two of the waterbody sites; in addition ORV's (off-road vehicles) are noted as an existing or potential use conflict with habitat or

natural resources at 68 sites and with passive human activities at 55 sites. Other types of conflicts with resources occur at 29 sites, while pedestrian overuse is a problem at 2 sites.

Other use conflicts include fishing and swimming at 1 site; surfcasting and swimming, 14 sites; jetskis and swimming, 2 sites; and hunting vs passive activities, at 13 sites. Private property impedes public access to the shore at 26 sites.

Beach Driving

ORV driving on the beach is the most frequent use conflict, affecting natural resources such as dunes and beach vegetation and habitat for nesting shorebirds, as well as interfering with more passive uses of the beach. In the scientific literature, Leatherman and Godfrey (1979) report that,

"We have concluded that there is **no** carrying capacity for vehicular impacts on coastal ecosystems. Even low-level impacts may result in severe environmental degradation ... Dunes can be quickly devegetated by vehicular passage, resulting in blowouts and sand migration" (emphasis in original).

Recreational ORV driving on the beaches of the Town has become a contentious environmental issue, primarily because of increasing numbers of 4-wheel drive vehicles. In the past only dedicated sport and commercial fishermen drove on the beach. Mass marketing of 4-wheel drive "sport-utility" vehicles has made the beach accessible to even the casual driver. ORV-related conflicts and impacts to natural and recreational resources are documented for every reach except Gardiner's Island. While direct vehicular access to the water is necessary for some purposes, including water rescue, commercial fishing, and handicapped access, significant damage has resulted from the irresponsible actions of some off-road vehicle enthusiasts and the sheer numbers of sport utility vehicles.

The Town requires a one-time resident vehicle permit for use on Town regulated beaches. New York State also requires an annual state permit for driving on State park beaches, and annual County Park permits are required for driving on beaches in Suffolk County parklands. Through 1998, a cumulative total in excess of 12,000 free no-expiration beach vehicle permits had been issued by the Town, in addition to approximately 100 annual non-resident permits in 1998. In 1997, New York State issued approximately 8800 permits and Suffolk County issued approximately 5800. While not all of these permit holders use East Hampton beaches, the Town is a statewide and countywide resort and sportfishing destination. Its population is increasing and, with many other Towns closing their beaches to off-road vehicles, demand for beach vehicle access is likely to remain high or increase. The Town may wish to consider ways of reducing numbers of vehicles, for instance, by requiring an annually renewable permit, with a registration time window, and a user fee dedicated to a fund for road-end restoration and beachgrass planting.

Note: In general, the Town Trustees do not agree with this assessment of the impacts of beach driving. The Town Trustees do not support further restrictions on beach vehicle use. The Town Trustees believe that increased and consistent enforcement of existing town code provisions for irresponsible beach driving will reduce the problems cited, while still protecting the public's right to use and enjoy our beaches.

New York State Office of Parks, Recreation and Historic Preservation requires Town residents to have a State permit to drive on beaches within State parklands, according to a letter from State Parks Commissioner Bernadette Castro to Assemblyman Fred Thiele, dated January 21, 1999. Suffolk County Park locations such as Cedar Point and Montauk County Park (from Gin Beach to Shagwong Point) require Suffolk County beach vehicle permits. Insofar as Town beach driving regulations may differ from those of NYS OPRHP, and the Town Trustees disagree with New York State's jurisdiction to regulate beaches adjoining its parklands, present beach driving regulations may be subject to change. A conflict between Town and State regulatory authority at Turtle Cove near Montauk Point was resolved when a survey proved ownership of the parcel and access by the Town.

The current Town beach vehicle ordinance (**§43-5** of the Town Code) restricts some Town beaches but not others, primarily during the peak season from Memorial Day to September 15th, between 10 a.m. and 6 p.m. ORV's are restricted from driving on Town ocean beaches during these times at the following locations: in Wainscott, from Town Line Road east to the Village of East Hampton boundary; in Amagansett, from Indian Wells Highway to Atlantic Avenue beach; and in Montauk, from Hither Hills State Park to Camp Hero State Park. Commercial net fishermen, handicapped persons, and those crabbing in Georgica Pond, after 4 p.m., are exempt from the restrictions. On Town Trustee beaches within the Village of East Hampton vehicles are restricted between the hours of 9 a.m. - 6 p.m. Along the northern bay shore, ORV's are unrestricted on all but two beaches: the Accabonac Harbor side of Louse Point (except the launch ramp) extending around to the Gardiners Bay side 300' south of the point; and in Maidstone Park along Gardiners Bay. In addition the Town code prohibits driving on beach or salt marsh vegetation, on a dune or bluff face, or within or adjacent to a protected bird nesting area.

Existing regulations are difficult to enforce, and on many isolated and infrequently patrolled beaches where the Town's police presence is minimal do not adequately protect coastal resources. Enforcement has not kept pace with the increasing numbers of 4-wheel drive vehicles, which are often used to access less crowded beaches when existing beach facilities become congested on summer weekends.

In recent years, the Town Natural Resources Department, Town Trustees, The Nature Conservancy, USFWS, and NYS DEC have worked together under cooperative management agreements to protect endangered shorebirds. They have occasionally closed or partially closed nesting areas on the beach to ORV's during critical breeding and fledging periods.

The Town's beach vehicle ordinance was revised a few years ago after much debate and compromise. The law provides for joint authority by the Town Board and the Town Trustees, and represents a delicate balance of user group interests. The current law is satisfactory but should be reviewed periodically to consider the numbers of vehicles on the beach, the geographic inconsistencies and to simplify enforcement. The Town Trustees must approve of any change in the beach vehicle permit system. In addition to the endangered species nesting closures, a number of changes or additions should be considered to improve the existing situation: General:

- Expand existing daytime (10:00 a.m. to 6:00 p.m.) beach vehicle restrictions between June 1 and September 15 to all ocean beaches and all bay beaches to reduce confusion and user conflicts.
- Require the Town beach vehicle permit to be renewed annually, with a user fee going to a dedicated fund for restoration of road-ends and beach revegetation.
- Restrict the time period for obtaining a permit to a period between January 1 and April 1, similar to the State Parks approach.

(Note: The Town Trustees, unanimously (1999), are not in agreement with the above three recommendations.)

Public education (including for pedestrians and other beachgoers):

- Distribute educational brochures with each beach vehicle permit.
- Prepare a Beach Vehicle Safety Course and require permit holders to take the course; use fees from the course for beach/dune restoration.
- Prepare maps of acceptable routes for ORV's.
- Prepare a beach vehicle awareness/safety course for school children.
- Prepare signs that inform vehicle users, beachgoers and beach walkers of environmental sensitivity and "rules of conduct" for critical access points. An example of such a sign is provided in Figure 1.
- Update existing map of Town parks and recreational facilities that provides a list of acceptable bathing areas to minimize the need for signs at access points.

Figure 1 - Sign for Environmentally Sensitive Access Points

This is an environmentally sensitive area, please observe the following rules of conduct:

- * Respect and stay away from all areas fenced or posted for protection of wildlife.
- * Do not approach or linger near nesting areas.
- * Keep your pets leashed or ensure that they do not disturb nesting areas.
- * Don't leave or bury trash or food scraps on beaches. Garbage attracts predators which may prey upon eggs or chicks.
- * Duneland vegetation is destroyed by pedestrian and vehicular traffic.
- * Drive only in designated areas; along one set of wheel tracks near the water line.
- * Allow breaks in the dune to revegetate: do not walk, drive or picnic in the beach grass.

Enforcement:

- · Increase fines for abuse of beach vehicle regulations.
- Increase funding for enforcement personnel and equip them with off-road vehicles.
- Develop a "Citizen-watch" program for beach vehicle enforcement. Comments at the public hearing before the Planning Board strongly supported this recommendation. Two organizations, The Nature Conservancy and the Montauk Surfcaster Association noted [in 1991] they have individuals available to participate.
- Make beach vehicle permits specific to the driver's license rather than the vehicle.
- Prohibit all-terrain vehicles (ATV's) from all State and County parks.

Several areas within the Town were specifically noted by members of the public as most in need of ORV enforcement. They include the Walking Dunes and Goff Point, Gin Beach-Shagwong in Montauk County Park, the Montauk ocean beach from downtown, east through Rheinstein Park and Ditch Plains, and the ocean beach and back dunes in Napeague State Park.

Jetskis

A significant potential conflict looms over the use of jetskis (water scooters) or personal water craft (PWC's) known by various brand names such as Jet Ski, Sea Doo, Wave Runner, etc. Safety issues are a major concern with these fast and highly mobile craft. Numerous complaints have been received by Town Harbormasters and Bay Constables of situations where jetskis have threatened the safety of swimmers or other boaters. Noise and irritant factors for other nearby users are also serious

concerns, as are the environmental impacts. The jet pump action of jetski engines can propel them into the shallow waters of harbors and creeks where no other motorized craft can operate. There they can significantly disrupt vulnerable life cycles of fish fry, shellfish larvae and other delicate marine organisms. Even in the open waters of the bays the jet pump is interacting with the topmost layer of the water column where the greatest concentrations of marine life are found and where cumulative environmental impacts on marine biota are likely to be the greatest.

PWC's are the most rapidly growing market segment of the recreational boating industry, with the total registered in the state estimated to be expanding at 20% a year. Although accidents and fatalities among other vessels are actually decreasing, numbers of jetski related accidents and fatalities are soaring. While personal water craft are regulated by the Navigation Law and there are provisions of law that apply specifically to them, jetskis tend to be operated by people with little boating experience who are unfamiliar with waterborne rules, safety and courtesy, and enforcement is difficult (NYS OPRHP 1995 Recreational Boating Report).

The Town presently regulates use of jetskis ("water scooters") in **§149-12** of the Town Code, excluding them from harbors and bathing areas, and requiring that they be operated 500 feet from shore, except for slow speed (<10 m.p.h.) launching and landing runs perpendicular to the shore. However, the Town has limited enforcement capability on the water, with only 2-3 boats to cover over 100 miles of shoreline, and the law requires an officer to be an eye-witness in order to issue a violation.

Other localities have taken more stringent measures to limit the use of jetskis in their waters (New York Times: Jet Skis vs. Peace on Islands in Battle of San Juan County, 3/16/96, and Jet Skis Annoy Waterfront Residents, 6/2/96). Based on the safety issues, potential for environmental damage, and existing conflicts with other users, the Town should consider ways to further restrict jetskis.

Trail Uses

The Town has an extensive network of multi-use trails shared by hikers, equestrians and mountainbikers with few conflicts to date. Motorized all-terrain vehicles (ATV's), including off-road motorcycles and snowmobiles, are prohibited under **§147** of the Town Code on Town trails. If and when other use conflicts become a problem, the Town will revisit its trails policy, but until then the multi-use scheme has produced a broad base of public support for maintaining the trail network and should be continued.

Other Use Conflicts

Other use conflicts also impinge on public access and coastal recreation. Private property impedes or blocks access in many locations to the public resources of the shore. In other locations public parking is so restricted it is difficult for the public to reach paths and walkways that provide pedestrian access to the shore. Construction of private erosion protection structures in some areas has blocked or eliminated longshore public access or caused loss of fronting beaches. In other instances increased volume of recreational activity is adversely affecting natural resources, for example, at the windsurfing access on Napeague Harbor where parking and pedestrian overuse are damaging roadside wetlands and shoreline vegetation. Some sites have a mix of recreational and commercial uses, as at the Town's commercial docks and the jetties at Three Mile Harbor and Lake Montauk, used by recreational fishermen casting from shore as well as by commercial boats. These different uses generally coexist amicably. However, when changes are proposed at these sites the Town should be careful to safeguard the interests of commercial fishermen.

Potential use conflicts mainly involve active consumptive uses such as hunting or fishing and passive uses such as sunbathing or beach walking. Potential hiking vs hunting conflicts are identified in large open space tracts with permit-restricted game or waterfowl hunting (13 sites), and potential swimming vs. surfcasting problems are noted on beaches where both activities are prevalent, especially when they coincide during prime sportfishing season at the end of summer (14 sites). Most problems are preventable with signage, common sense, safety awareness and public education. Their notation here is a precautionary one, that hunter safety education and enforcement needs to be vigilantly implemented.

3. Summary of townwide environmental concerns

Resource and habitat concerns include protection of rare and endangered species, especially within State and Locally designated Significant Coastal Fish and Wildlife Habitats, problem areas where public access and recreation are limited by erosion, potential flooding problems at access points, and potential water quality problems that affect recreation use.

Of the 208 land and 31 waterbody sites inventoried, 32 of the land sites and 9 of the waterbody sites exhibited recreation opportunities reduced by erosion, e.g. public beaches or public access lost to storm erosion and effects of erosion protection structures. Potential storm flooding at road-ends, which may affect recreation resources, is noted at 50 sites. These problems are addressed in more detail in **Flooding and Erosion Policies #11-17** and further in *Road-end and Beach Access Modifications* in **Projects**.

39 of the land sites and 12 of the waterbodies surveyed include State designated Significant Coastal Fish and Wildlife Habitats, and 38 land sites and 10 waterbodies encompass Locally designated Significant Coastal Fish and Wildlife Habitats. Protected animal species are present at 34 sites, protected plant species at 41. Nesting shorebirds are recorded as a concern at 11 land sites and 16 waterbody sites. As noted, the Town Natural Resources Department in cooperation with the Town Trustees, TNC, NYS DEC, and the USFWS operate a breeding protection program for endangered shorebirds, particularly the least tern and piping plover. See **Significant Habitats Policy #7**.

Recommended dates for beach closures near nesting areas are between April 1 and August 15. It is recognized that the birds customarily return to the same general areas but that fencing and beach closure recommendations must be flexible to allow for yearly shifts in nesting sites. Ideally, bird nesting areas should be closed completely and the birds should not be disturbed by humans at all. However, people need access to the waterfront for public safety, recreational pursuits and commercial fishing. In balancing habitat and human needs, adequate alternative access should be provided where possible, and an adequate protected area should be secured for nesting sites to ensure successful reproduction, with birds disturbed as little as possible.

All nesting sites are delineated insofar as possible with string fencing. However, the extent of the beach closure depends on the site. In some cases, where the beach is very narrow, alternative access points are available and beach vehicle access is unnecessary. Examples are Goff Point in Napeague and Gerard Point on Accabonac Harbor. Minimal pedestrian access may be appropriate in some of the areas such as Gerard Point, but education of beach users is an important component of such a strategy. In other situations, for instance along Napeague Beach on the Atlantic shoreline, there are numerous alternative access points and a complete 24-hour closure is recommended. If both vehicles and shorebirds are to share beaches and have successful bird reproduction, education and enforcement are essential. In addition all fenced areas should be equipped with reflectors to minimize nighttime disturbances.

Other environmental concerns center on potential water quality problems, noted at 63 of the land sites, and 14 of the 31 waterbody sites. Water quality issues are addressed in **Water and Air Resources Policies #30-44**.

4. Summary of townwide improvement opportunities

Public access to the water is the single most important issue for recreation in the Town, and provides the most significant opportunity to improve and expand coastal recreation and traditional fishing. Existing access to the water in East Hampton is of several different types. For simplicity in the inventory database, public access in this report is classified by a progression, in descending order of inclusiveness as follows:

Launch ramp Boat access without ramp ORV access Pedestrian walkway Natural pedestrian access [path] Visual access

Each category is intended to include all categories below it, for example a *Launch ramp* is assumed to also provide *ORV*, *Pedestrian* and *Visual access*; an *ORV access* is assumed to also incorporate *Pedestrian* and *Visual access*, etc. (see inventory checklist and associated criteria in **Appendix F**). In both the original Public Access inventory [completed in 1991] and this Public Access/Recreation Inventory, care was taken to assess the appropriateness of existing access and of suggested service improvements. Launch ramp installations or improvements are recommended at 7 sites, ORV access at 3 sites, pedestrian access at 29 sites, parking additions or improvements at 17 sites, and scenic viewpoints at 20 sites.

Existing access points identified in the inventory are shown on Maps VII-1A, -1B facing page VII-4.

Additional public access is recommended for 10 of the Town's waterbodies at a variety of locations, some of which include:

Reach 2

- Three Mile Harbor, on west side of harbor, at Duke Drive road-end or vicinity of Hand's Creek, to replace lost access at Dominy's Point
- Hog Creek, access needed at north end

Reach 3

• Accabonac Harbor, west side, obtain land or an easement for vehicular access to the edge of the meadow, with pedestrian access to the water for clamming

Reach 4

- Cranberry Hole Road, obtain access or easement, across existing preserved feature on SCTM #128-1-7.1 or other suitable access to Napeague Bay
- Promised Land in Napeague State Park, pedestrian access for fishing at old fish factory pier (see Projects)
- Lazy Point area, open Bay View Avenue road-end to the public

Reach 5

• Fort Pond Bay, additional access needed on SE side, or from Navy Road

Reach 6

- Lake Montauk, West Lake Drive south of Star Island, access or an access easement
- Lake Montauk, East Lake Drive, underwater land associated with a Town access on (SCTM #7-3-8/2-9.4, -9.22, -9.23)
- Stepping Stones Pond, pedestrian access from road

Reach 9

• Atlantic Ocean, Montauk, obtain pedestrian access at Shadmoor

Reach 11

- Georgica Pond, additional access via the Hopping parcel, SCTM #197-7-15, 4.6 acres of woodland on the west side, or opening of Village of East Hampton property at SCTM #301-15-5-21.1, or assertion of Trustee right of passage over West End Road via SCTM #301-15-5-17
- Wainscott Pond, obtain land or an easement, or establish Trustee right of access by virtue of their ownership of the pond

Town-wide service recommendations were developed based on problems and service needs common to all access points. They include the following:

- Establish a Town-wide marine park network with primitive camping facilities at Cedar Point County Park, Napeague State Park and Culloden. "Marine park" refers to a park where access is by small unpowered water craft (canoes, kayaks, small sailboats) rather than overland. See **Projects**.
- Establish upland beach parking in the hamlets and East Hampton Village with a shuttle bus service to ocean beaches. Mitigation of bus traffic impacts on local streets in hamlets such as Amagansett must be carefully addressed if this approach is to succeed.
- Provide additional bike racks at all access points.
- Retrofit existing chemical toilets and flush systems near sensitive wetland and surface waters to composting or low-water sanitary facilities. Facilities at bay beaches are in the most need of upgrading and are more likely to be located next to sensitive wetlands than the ocean beaches. Budget priorities should focus on these facilities.
- Install outdoor rinse showers with water saving fixtures at major public beaches when upgrading facilities.

There are a number of opportunities to regain or reassert public access at locations where it has been eliminated. Misleading signage, claims of private ownership over public lands, and unavailability of parking are some obstacles to be resolved. For example, Bay View Avenue leading to the water in the Lazy Point area has a sign that says "Private Road", although it also serves a Town-owned waterfront parcel which could be used for public access. Such locations offer opportunities to enhance public access at little or no cost to taxpayers. At other locations where public access is severely lacking the Town should move to obtain necessary parcels or easements. In many cases access can be achieved with a natural pedestrian trail at minimal cost and with minimal impact to neighboring private property. The inventory lists a number of sites where this could be accomplished.

Significant improvements are also recommended at a number of publicly-owned sites, for example, creation of a municipal beach at the Town-owned "Assembly of God" parcel (SCTM #130-2-10) in Napeague, originally purchased for that purpose. Careful planning to optimize natural resource protection is a vital component of all these projects, and it is important to coordinate efforts of relevant Town agencies: Town Trustees, Planning and Natural Resources Departments, Parks and Highway Departments and Town Engineer. Several significant improvements and/or management plans for State-owned sites are discussed which require close cooperation between NYS OPRHP and the Town. These include the old fish factory site in Napeague State Park, Hither Hills/Hither Woods, and Camp Hero in Montauk State Park.

Repairs are needed at several launch ramps to bring them to safe operating status, for instance, the ramp at the County Dock at Northwest Creek. New or upgraded public launch ramp facilities are recommended at several sites, including the west side of Napeague Harbor (needs relocation or reconstruction) and East Lake Drive in Montauk. The Town should also consider making improvements so launch ramps are easier to use for handicapped and elder boaters, for example, by constructing a handrail, small catwalk or removable floating dock.

Modest upgrades in infrastructure can greatly enhance enjoyment of existing recreation facilities in the Town, and the Inventory and Analysis details a number of sites where simple amenities such as benches, bike racks, interpretive signs, garbage cans, and toilets should be placed. While the costs would be significant if all sites were upgraded at once, improvements can be accomplished gradually with a relatively nominal annual budget allocation.

Habitat, dune repair and wetland restoration are other areas where relatively low cost measures can help maintain natural resources and their recreational values for future users. The impending dune blowout at Kirk Park in Montauk is one example where expeditious use of snow fence and revegetation with beach grass may well prevent future damage. Many wetland sites where phragmites have invaded should also be restored, where this species has choked saltmarshes and interrupted scenic vistas. Budget wise, this should also become an annual undertaking to be performed on an incremental but consistent basis. See also *Public Access and Recreation Improvements* in **Projects** section.

5. Townwide summary of recreational uses compatible with new development

Consistent with Policy 22, which states that coastal zone development should provide for recreation as a multiple use, opportunities for incorporating recreational uses within new development were examined in the survey. Opportunities are necessarily limited by existing development and land use designations. However, 12 sites received recommendations for additional recreational uses. 2 sites in Montauk, the Benson Point and Roughrider Landing docks on Fort Pond Bay, are recommended for use as fishing piers. A launch ramp is also recommended at the Benson site when new development occurs. Preservation of an ORV access is recommended at the proposed Sea Breeze Estates subdivision in Napeague, where a traditional sand road access exists. New or improved pedestrian access to the beach is recommended at 8 sites, a swimming beach at 4 sites, and 5 sites are recommended for trails or preservation of existing trails. See *Public Access and Recreation Improvements* in **Projects** for specific site information.

J. IMPLEMENTATION

Implementing public access and recreation recommendations and policies involves actions that range from simple administrative changes (removing illegal signs, changing parking regulations), to management practices (fencing shorebird nesting areas), to acquiring public access. Specific site recommendations are in the reach Analysis sections and in *Public Access and Recreation Improvements* in **Projects** which recommends improvements in facilities, habitat protection, public education, enforcement, and land acquisition.

Other, more complex, policy implications and future management issues are raised in specific reach analyses and in policies. Some of these include:

- Funding mechanisms for acquisitions, easements, or other creative solutions for providing additional public access
- Public education programs and materials
- Long-term capital improvements

- Long-term maintenance needs
- Management plans for fish and wildlife, multi-jurisdictional habitat management and restoration plans
- Conflict resolution procedures between user groups and between government agencies
- Increased levels of enforcement including personnel and equipment
- Increased user fees and "abuser" fines to finance the above

K. PUBLIC ACCESS POLICIES

For a coastal community public access to the shore, foreshore, adjacent public lands and underwater lands is of the utmost importance for recreational, esthetic and economic purposes. Public access to the water is pivotal to East Hampton's resort and traditional fishing economies. Coastal recreation not only attracts tourists, the amenities of the shore are fundamental quality of life and esthetic values for all townspeople, year-round residents and second homeowners alike.

Fortunately, East Hampton and the other east end towns enjoy public ownership of most beaches and harbor bottomlands, a circumstance stemming from the colonial patents that established the Town Trustees as stewards of common lands "for the freeholders and commonalty" of the town. This heritage of public ownership is one that the Town is striving to preserve for posterity, but has been increasingly challenged by private development and misappropriation of public resources.

Within the LWRP framework, the objectives of **Public Access Policies #19-20** are to preserve and maintain existing public access to the water, prevent loss of access to development or construction of shorefront structures, and to increase or expand public access where needed. Potential ways to increase or expand access include: acquisition; restoration of traditional accesses that have been lost, reduced or degraded; encouraging private developers to provide public access through incentives, good planning techniques or other means; and cooperative efforts between government and private landowners to provide increased or enhanced access, for example, through construction of an integrated walkway connecting commercial waterfront parcels surrounding Montauk Harbor (see **Projects**).

All efforts to preserve or expand public access must be balanced with protection of associated coastal features and resources, as noted in LWRP policies for **Development (#1-6), Habitats (#7), Flooding and Erosion (#11-17), Recreation (#9, 21-22), Historic and Visual Resources (#23-25), and Water and Air Resources (#30-44)**. Use conflicts between different types of access or with natural features have been extensively noted in the Inventory and Analysis for the combined Public Access and Recreation report, with remedies proposed in the associated recommendations.

POLICY 19 PROTECT, MAINTAIN AND INCREASE THE LEVEL AND TYPES OF ACCESS TO PUBLIC WATER-RELATED RECREATION RESOURCES AND FACILITIES SO THAT THESE RESOURCES AND FACILITIES MAY BE FULLY UTILIZED IN ACCORDANCE WITH REASONABLY ANTICIPATED PUBLIC RECREATION NEEDS AND THE PROTECTION OF HISTORIC AND NATURAL RESOURCES. IN PROVIDING SUCH ACCESS, PRIORITY SHALL BE GIVEN TO PUBLIC BEACHES, BOATING FACILITIES, FISHING AREAS AND WATERFRONT PARKS.

Explanation of Policy:

The objective of this policy is to maintain or improve public access to public water-related recreation resources and facilities. The policy calls for achieving a balance between public recreation needs and natural and historic resource protection. Public beaches, public boating facilities such as launch ramps, fishing areas, road-ends and waterfront parks are priority types of access.

Balancing public access to the water with preservation of the plant and wildlife habitats of the beach and the overall health of the shoreline ecosystem entails policy decisions on access location and what type of access is appropriate for individual sites. It is the Town's policy to improve public access where appropriate to meet public demand, and to provide access to the water where it is limited or unavailable, but with a clear caveat that protecting natural and historic resources should take precedence over recreation needs.

It is also Town policy to guard against encroachment of private development on rights of access to beaches and harbors that have been guaranteed under State Law and the Dongan Patent, the colonial document that granted in-common ownership to the Town Trustees. This affects much of the traditional water access from coastal trails and sand roads, which needs to be preserved and, in some cases, restored. Where public access has been lost through oversight, insufficient documentation or misappropriation of public lands, the Town and Town Trustees should reassert rights of public passage to the water.

The Inventory and Analysis for this section describes existing access points and types of access to the water with associated facilities, and ways to improve them. In reaches with abundant public parklands (1,2,3,4,5,7,9, and 10) the inventory indicates sufficient availability of existing public access. In the remaining reaches (6,8,11 and 12) and in localized areas within the other reaches, some waterbodies have very limited public access. Likewise, services and facilities within the more developed reaches (2,6,9 and 10) are generally more extensive than facilities in other reaches.

A compilation of recommendations for improving access facilities, acquiring additional access points, and protecting natural resources at certain access areas are contained in the database developed for the Public Access and Recreation Inventory and Analysis and in reports provided in *Public Access and Recreation Improvements* in **Projects**. Sites are located on Maps VII-1A & -1B, Public Access and Recreation. Town-wide recommendations concerning public education, enforcement of use restrictions and resource protections are also provided in the Inventory. Use conflicts at public access points and waterfront recreation facilities have also been recorded in the

inventory database, and site-specific recommendations for their resolution are included in *Public Access and Recreation Improvements* in **Projects**.

Recommended improvements are both diverse and specific, ranging from installing park benches for a particular view of the sunset to developing a marine park network with non-motorized water access and primitive camping facilities. Other public improvements include drainage abatement structures, bike racks, parking facilities, toilets, boat launches, trash and recycling receptacles, waterfront walkways and removing navigational hazards.

Recommendations for habitat protection include fencing shorebird colonies, removing asphalt, revegetation of disturbed areas, restricting vehicle access, and coordinating management with other agencies. Associated with habitat protection are public education recommendations including signs at designated areas, brochures for distribution when obtaining a beach vehicle permit, and an education course for beach vehicle users to be required before permit issuance. Other recommendations target increased enforcement of existing regulations for specific areas of the Town and on holiday weekends and the full moon.

Opportunities for public access and recreational use of the publicly owned foreshore can be significantly improved through land acquisition, as discussed in **Policy #20** and in related LWRP sections, especially **Significant Habitats Policy #7**, and Open Space Plan recommendations in **Development Policies #1-6**. Some areas where additional public access points are needed are listed under Townwide Improvement Opportunities in the Inventory and Analysis. Additional site recommendations are contained in *Public Access and Recreation Improvements* in **Projects**. Recommendations are made for purchase of these lands or for purchase of easements across them to provide public access to the publicly owned foreshore. See Maps VII-1A/-1B, Public Access and Recreation, for locations.

Several proposed access improvements warrant further study such as the addition of a bathing beach on Town-owned property in Napeague, improving access and services for surfing on the Atlantic shoreline east of Ditch Plains, and the ownership and related rights of public access to Wainscott Pond. See **Projects**.

Implementation of this policy requires cooperation and coordination with the other owners of parkland and open space in the Town, including NYS OPRHP and Suffolk County Parks Department. As examples, limiting numbers of ORV overnight campers using the Shagwong Point, "Gin Beach" area in Reach 7 would have to be implemented and enforced by the County Parks Department. Enforcement of vehicle restrictions in the Walking Dunes area in Reach 4 requires action by NYS OPRHP. Developing a trash and recycling collection system necessitates East Hampton Town and State Department of Environmental Conservation cooperation.

The following guidelines will be used to determine the consistency of a proposed action in the coastal area with this policy:

- (1) Existing access to public water-related recreation resources and facilities shall not be reduced, nor shall the future possibility of access from adjacent or proximate private or public lands/facilities to public water-related recreation resources and facilities be eliminated, unless in the latter case, estimates of future use of these resources and facilities are too low to justify maintaining or providing public access.
- (2) Public lands or facilities including underwater lands shall not be leased or otherwise limited in use so as to deny public access, except where required for preservation of natural features, habitat values or other environmental protection, or where private use of bottomlands or other other coastal resources also produces a net benefit to the public resource consistent with **Commercial Fishing Policies #10/10A**.
- (3) Any proposed project to increase public access to public water-related recreation resources and facilities shall be analyzed according to the following factors:
 - (a) To be consistent with this policy, the level of access to be provided should be in accord with estimated public use.
 - (b) In providing access, conservation of natural or historic resources shall take precedence over recreation uses. The level of access to be provided shall not degrade or exceed the physical capability or ecological carrying capacity of the resource or facility. If this is determined to be the case, the proposed level of access shall be deemed inconsistent with this policy.
- (4) The Town shall not undertake, fund or endorse any action which increases access to a water-related resource or facility that is not open to all Town residents. This shall not, however, be taken to mean that any particular type of access (visual, pedestrian, vehicular, etc.) is appropriate for a given site.

The following is an explanation of terms used in the above guidelines:

- (1) Access the ability and right of the public to reach and use public coastal lands and waters.
- (2) **Public water-related recreation resources or facilities** all public lands or facilities that are suitable for passive or active recreation that requires either water or a waterfront location or is enhanced by a waterfront location.
- (3) **Public lands or facilities** lands or facilities held by the State, County or the Town in fee simple or less-than-fee simple ownership and to which the public has access or could have access, including underwater lands and the foreshore.

- (4) **Reduction in the existing level of public access** includes but is not limited to the following:
 - (a) The number of parking spaces at a public water-related recreation resource or facility is significantly reduced.
 - (b) The service level of public transportation to a public water-related recreation resource or facility is significantly reduced during peak season use and such reduction cannot be reasonably justified in terms of meeting system-wide objectives.
 - (c) Pedestrian access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines, or similar linear facilities.
- (5) **Elimination of the future possibility of public access** includes but is not limited to the following:
 - (a) Construction of public facilities which physically prevent the provision, except at great expense, of convenient public access to public water-related recreation resources and facilities.
 - (b) Sale, lease, or other transfer of public lands or underwater lands that could provide public water-related recreational resources or traditional fishing or shellfishing stocks.
 - (c) Construction of private facilities which physically prevent the provision of convenient public access to public water-related recreation resources or facilities, including berms, fences or other landscaping that impedes or obstructs public access.

POLICY 20 ACCESS TO THE PUBLICLY-OWNED FORESHORE AND TO LANDS IMMEDIATELY ADJACENT TO THE FORESHORE OR THE WATER'S EDGE THAT ARE PUBLICLY-OWNED SHALL BE PROVIDED, AND IT SHOULD BE PROVIDED IN A MANNER COMPATIBLE WITH ADJOINING USES. SUCH LANDS SHALL BE RETAINED IN PUBLIC OWNERSHIP.

Explanation of Policy:

With the exception of the Montauk peninsula east of Hither Hills State Park, the majority of beaches and harbor bottomlands in the Town are held in fee title by the Town Trustees for "the freeholders and commonalty of the Town". Below the high tide line the foreshore is owned by the State of New York.

In addition to Town and State-owned beaches and the public foreshore there are a number of Town, County and State-owned parklands that provide access to the coast.

Appropriate public access to these and other public lands of the coast shall be provided, except in order to preserve natural features, habitat values or for other critical environmental protection.

The principal publicly-owned parklands in the Town of East Hampton located on or adjacent to the water are summarized for each reach as follows:

Reach 1	Barcelona Neck (NYS DEC)
	Grace Estate Preserve (TOEH)
	Cedar Point Park (Suffolk County)
Reach 2	Sammy's Beach (TOEH)
	Maidstone Park (TOEH)
Reach 3	Parklands at Gerard Dr., Louse Pt., Albert's Landing and Fresh Pond (TOEH)
Reach 4	Napeague State Park (NYS OPRHP)
	Hither Hills State Park (NYS OPRHP)
Reach 5	Hither Hills State Park (NYS OPRHP)
	Hither Woods (TOEH, State and County)
Reach 6	Montauk County Park (Suffolk County)
Reach 7	Montauk County Park (Suffolk County)
	Montauk Point State Park (NYS OPRHP)
Reach 8	Montauk Point State Park - Camp Hero (NYS OPRHP)
Reach 9	Rheinstein Park (TOEH)
	Kirk Park (TOEH)
Reach 10	Napeague State Park (NYS OPRHP)
	Atlantic Double Dunes Preserve (USFWS)
	Atlantic Avenue and Indian Wells Highway beaches (TOEH)

Public access is provided at numerous public road-ends, Trustee lands and waters, Town, County and State parklands and water bodies, and publicly owned docks. Access points are located in all reaches and are recorded in detail in the Inventory and Analysis. Locations are shown on Map VII-1A/-1B, Public Access and Recreational Resources, facing page VII-4.

Publicly-owned lands referenced in the inventory shall be retained in public ownership. Although sale, easements and leases on underwater lands have historically been granted by the New York State Office of General Services, sale, easements or leases of underwater lands to adjacent onshore property owners or to private individuals and corporations is inconsistent with this policy. Such grants of underwater lands represent a loss of public access to the publicly owned foreshore as well as a loss of access to publicly owned common property resources like shellfish beds, and are therefore inconsistent with both this policy and **Policy #19** and **Commercial Fishing Policy #10/10A**. However, limited private use of public bottomlands may be permitted consistent with **Aquaculture/Mariculture Policy #10A**, provided the activity is on a relatively small scale and also benefits the public resource through distribution of wild spawn, etc.

Use of public lands of the shore or foreshore will only be consistent with these policies if it does not substantially interfere with continued public use of coastal resources, and is consistent with protection of habitat and natural coastal features. Consistency may include maintaining public access for recreation or shellfishing, providing a nursery area for future public shellfishing resources (or providing some percentage of the total harvest to the public), or guaranteeing future public access along the shoreline, if such agreements do not compromise environmental protection or water quality.

In exceptional cases longshore access may include creation of a publicly accessible dock or boardwalk/promenade linking the shorefront of adjacent commercial properties, for example, in the proposed boardwalk for Montauk Harbor (see **Projects**, *Revitalization of Montauk Harbor*).

The following guidelines will be used to determine the consistency of a proposed action with this policy:

- (1) Existing access from adjacent or proximate public lands or facilities to existing public coastal lands and/or waters shall not be reduced. The possibility of increasing access in the future from adjacent or nearby public lands or facilities to public coastal lands and/or waters shall not be eliminated. Reductions in access or elimination of future access shall be acceptable only where these actions are demonstrated to be of overriding regional or statewide public benefit.
- (2) The existing level of public access to or within public coastal lands or waters shall not be reduced or eliminated.
- (3) Public access from the nearest public roadway to the shoreline and along the coast shall be provided by new land use or development, except where:
 - (a) It is inconsistent with public safety, military security, or the protection of identified fragile coastal resources,
 - (b) Agriculture would be adversely affected.

Such access shall not be required to be open to public use until a public agency or private association agrees to accept responsibility for maintenance and liability of the access.

- (4) Increased public access to coastal lands and waters shall be justifiably proposed where two or more of the following six criteria are met:
 - (a) Past development practices have rendered publicly owned foreshore and bottomlands inaccessible through privatization of historical access points and public rights of way.
 - (b) No other public access exists within one half mile of the proposed access point.

- (c) The level of access to be provided is in accord with estimated public use.
- (d) The access is one of exceptional and unique aesthetic appeal within the Town, e.g. the "Shadmoor" parcel on the Montauk peninsula.
- (e) The level of access to be provided will not cause a degree of use which would exceed the physical capability or ecological carrying capacity of the resource.
- (f) The existing means of obtaining access to the publicly owned foreshore, e.g. by boat, is more environmentally destructive than an alternative means of reaching the foreshore or the bottomlands, e.g. overland.

The following is an explanation of the terms used in the above guidelines:

- (1) See definitions under Policy 19 for "access", and "public lands or facilities".
- (2) A reduction in the existing level of public access includes but is not limited to the following:
 - (a) Pedestrian access is diminished or eliminated because of hazardous crossings required at new or altered transportation facilities, electric power transmission lines, or similar linear facilities.
 - (b) Sale, lease, easement or other conveyance of public lands, underwater lands or waters.
 - (c) Construction of private facilities, landscaping or other barriers which physically prevent convenient public access to public coastal lands and/or waters from public lands and facilities.
 - (d) Existing public access is reduced or blocked by any public or private development.

L. RECREATIONAL RESOURCES POLICIES

Coastal recreation is the linchpin of East Hampton's resort economy, enhances its attractiveness as a place to live and for tourism, and is deeply embedded in local lifestyles and traditions. A spectrum of recreational opportunities in the Town's coastal zone provide enjoyment for every age and taste, from toddlers in the sand to accomplished surfers, from sedentary sunbathers to swimmers and surf fishermen.

Recreation depends on coastal resources, and recreational uses must be compatible with protection of these resources and other LWRP planning goals. These are addressed in other sections, including **Development Policies #2 & #4, Significant Habitats #7, Flooding and Erosion Policies #11-17,**

Public Access Policies #19-20, Historic Resource and Visual Quality Policies #23-25, and Water and Air Resources Policies #30-44, with their accompanying Inventory and Analysis sections.

The objectives of **Recreational Resource Policies #9 & #21-22** are to improve or enhance coastal recreational opportunities and recreational use of fish and wildlife resources in the Town, to find locations where water-dependent and water-enhanced recreation can be encouraged and facilitated, and to incorporate such opportunities as part of new development. Any efforts to expand recreation must also ensure renewal of fish and wildlife resources, and protect habitats, beaches, and surface waters, and consider the economic activities dependent on them. Some of the ways recreational opportunities can be improved or expanded include increasing public access, improving facilities at park and beach areas, supplementing fish or wildlife stocks, and providing standards for development that incorporate coastal recreation.

Where recreation uses have adverse impacts on other resources or conflict with other uses of the resource, it is important to minimize or mitigate these impacts or conflicts, or to discontinue the use if it is inappropriate for a particular site or area. The Town will only be harmed if it permits or allows to expand recreation activities that despoil the resources they depend on, reducing or destroying them for future generations. Regulating and preventing such activity is a legitimate and appropriate function of government.

Many of East Hampton's public lands and bottomlands and some public access points are owned by the Town Trustees under colonial patents for the "freeholders and commonalty" of the Town. The Trustees' holdings are an important component in the recreational life of East Hampton, and the Trustees' prerogatives are significant considerations in implementing these policies.

POLICY 9 EXPAND RECREATIONAL USE OF FISH AND WILDLIFE RESOURCES IN COASTAL AREAS BY INCREASING ACCESS TO EXISTING RESOURCES, SUPPLEMENTING EXISTING STOCKS, AND DEVELOPING NEW RESOURCES.

POLICY 9A RECREATIONAL USE OF FISH AND WILDLIFE RESOURCES WILL BE EXPANDED BY INCREASING PUBLIC ACCESS AND OTHER MEASURES AT SITES RECOMMENDED UNDER "OPPORTUNITIES FOR IMPROVEMENT" AND "RECREATIONAL USES COMPATIBLE WITH NEW DEVELOPMENT" IN THE ANALYSIS NARRATIVE OF THIS REPORT, AND IN "PUBLIC ACCESS AND RECREATION IMPROVEMENTS" IN PROJECTS SECTION XIV.

Explanation of Policy:

Traditional and acceptable recreational uses of fish and wildlife in the Town of East Hampton waterfront area include fishing, shellfishing, hunting, trapping, foraging for wild fruits and berries, bird-watching, photography, sketching and nature study. Efforts to expand recreational uses of fish

and wildlife must also ensure protection and renewal of both the resource and the habitats on which they depend. Other uses and users of these resources must also be taken into account.

Increasing public access to the water is a primary way to enhance recreational use of fish and wildlife. The Inventory and Analysis makes site specific recommendations for acquiring additional public access and other measures to improve recreational access. See Analysis and *Public Access and Recreation Improvements* in **Projects** for detailed recommendations.

The following guidelines shall be used to determine the consistency of proposed actions with this policy:

- (1) Government agencies should determine whether an action will harm existing or future uses of the Town or State's recreational fish and wildlife resources. They should evaluate the impacts on fish and wildlife resources and habitat of development in the coastal zone including highway, residential, commercial and marina construction, boat-related pollution, navigational congestion, and pressures on local resource stocks from over-harvesting or inappropriate use.
- (2) Efforts to increase access to recreational fish and wildlife resources should not lead to overutilization of that resource or cause habitat impairment. Sometimes such impairment can be more subtle than actual physical damage to the habitat. For example, increased human presence can deter animals from using the habitat area, pollutants can affect shellfish populations, and development of a site can lead to habitat fragmentation even with maintenance of open space. Increase in access should only be in accordance with sound resource management considerations, including the biology of a particular resource, the standing stock, sustainable yield, economic importance, habitat, food supply, costs and available technology, and public demand for a given resource.
- (3) The impact of increasing access to recreational fish and wildlife and other coastal resources should be determined on a case-by-case basis, consulting the significant habitat narrative (see Significant Habitats Policy #7), and/or conferring with a trained fish and wildlife biologist. In some cases, access should be reduced. For instance, numbers of beach camping permits issued in Montauk County Park should be reduced because of vehicle impacts on beaches and coastal ecology (see Flooding & Erosion Policies #11-17).
- (4) Any public or private sector initiatives to supplement existing stocks or develop new resources must be designed to benefit the public resource as a whole, shall be consonant with sound ecology and resource management, and in accord with existing State laws. See also **Commercial Fishing Policies #10/10A**.
- (5) Access to fish and wildlife resources should, wherever possible, be structured to avoid conflicts of use, e.g. hunting in residential areas, fishing in public bathing areas, recreational vehicles in significant habitat areas. However, regulation of resources by New York State agencies should not discriminate in favor of one user group at the expense of another.

- (6) Access to State lands within the Town for hunting or hiking should be enhanced by making State permits more accessible to the public, by allowing East Hampton Town to issue NYS DEC hunting and access permits locally, and by providing more pedestrian access and additional roadside parking areas, e.g. at Napeague Harbor during hunting season, to make it feasible to bring in blinds and gear. Permits for recreational fishing on State park beaches are presently available from LI State Parks at Montauk Downs.
- (7) Part of the Town's shellfish management policy is to maintain and enhance public shellfish stocks in Town and State waters. East Hampton operates a Town hatchery, grow-out and seeding program to enhance local recreational and commercial shellfishing. 10% of the hatchery output is seeded in New York State waters under a 25-year agreement with NYS DEC [until ca. 2015].

Other desirable management programs to increase available shellfish stocks are carried out by the Town Natural Resources Department, Harbormaster, Town Trustees and East Hampton Baymen's Association, including:

- Shellfish transplants within local waters
- Shellfish seeding programs to enhance recreational fisheries
- Relays of shellfish spawning stock from productive to less productive areas
- Identification and protection of shellfish spawning stocks
- Open Marsh Water Management (OMWM) plans to reduce pollution and improve finfish nursery areas
- Non-point pollution abatement and reduction of road runoff through installation of catchment and retention basins
- Wetlands restoration measures such as controlling invasion of phragmites

Agencies should encourage the voluntary participation of recreational enthusiasts in the labor-intensive aspects of these management programs.

- (8) NYS DEC should inform, consult, and coordinate with, East Hampton Town and Town Trustees on stocking waters within the Town, or other non-regulatory management actions, prior to undertaking such action. The Town Trustees are solely responsible for Wainscott and Hook Ponds.
- (9) Surface water quality is an intrinsic factor in maintaining harvestable shellfish stocks and finfish spawning and nursery areas in the Town's harbors and bays. Actions affecting surface water quality should be evaluated to prevent damage to shellfish, finfish and wildlife populations and habitat (see also **Water and Air Resources Policies #30-44**).
- 10) No new leases of productive bottomlands under Town, County or State jurisdiction should be granted to private entities. Public bottomlands should remain open to all users for fishing and shellfishing. Existing leases should not be renewed (see also **Commercial Fishing Policy #10/10A**).

- POLICY 21 WATER-DEPENDENT AND WATER ENHANCED RECREATION WILL BE ENCOURAGED AND FACILITATED, AND WILL BE GIVEN PRIORITY OVER NON-WATER RELATED USES ALONG THE COAST, PROVIDED IT IS CONSISTENT WITH THE PRESERVATION AND ENHANCEMENT OF OTHER COASTAL RESOURCES AND, TAKES INTO ACCOUNT DEMAND FOR SUCH FACILITIES. IN FACILITATING SUCH ACTIVITIES, PRIORITY SHALL BE GIVEN TO AREAS WHERE ACCESS TO THE RECREATION OPPORTUNITIES OF THE COAST CAN BE PROVIDED BY NEW OR EXISTING PUBLIC TRANSPORTATION SERVICES AND TO THOSE AREAS WHERE THE USE OF THE SHORE IS SEVERELY RESTRICTED BY EXISTING DEVELOPMENT.
- POLICY 21A WATER-DEPENDENT AND WATER-ENHANCED RECREATION WILL BE ENCOURAGED AND FACILITATED AT SITES RECOMMENDED UNDER "OPPORTUNITIES FOR IMPROVEMENT" AND "RECREATIONAL USES COMPATIBLE WITH NEW DEVELOPMENT" IN THE ANALYSIS NARRATIVE OF THIS REPORT, AND IN "PUBLIC ACCESS AND RECREATION IMPROVEMENTS" IN PROJECTS SECTION XIV.

Explanation of Policy:

The character of East Hampton and its quality of life are defined by its water-related recreation. Recreation is vital to the Town's resort economy. However, demand for recreation in the waterfront area must be balanced with preservation of the Town's natural heritage of coastal resources.

The Inventory and Analysis section of this report provides a detailed view of recreation in the coastal zone, including types of access to the shore, bathing beaches, recreational boating and fishing, passive uses such as sunbathing, photography and nature appreciation, and facilities at parks and road-ends.

Almost all land uses can be considered "enhanced" by their proximity to the coast. As described in **Development Policies #1-6**, there is a limited amount of land Town-wide that is zoned in the commercial Waterfront (WF) District. In addition, there is a limited amount of land available for paved surfaces or expansion of other facilities due to the sensitivity of the near-shore environment. Therefore, when considering development proposals in the near-shore environment, priority should be given to land uses that are water-dependent over those that are merely water-enhanced or not water-dependent at all. Specific areas where water-dependent and water-enhanced recreation will be encouraged and facilitated are discussed in the Analysis section of this report as well as listed in the *Public Acccess and Recreation Improvements* in **Projects**. Recommendations are also discussed in **Development Policy #2**, Water-Dependent Uses and Public Access Policy #20, Access to **Publicly-Owned Lands Adjacent to the Water's Edge**.

The following guidelines will be used to determine the consistency of a proposed action with this policy:

- (1) The development of water-related recreation must be consistent with preservation and enhancement of important coastal resources such as fish and wildlife habitats, scenic areas, historic and cultural resources, agriculture and significant mineral and fossil deposits.
- (2) No form of water-related recreation shall be allowed that significantly infringes upon the enjoyment of coastal resources by the majority of other users of the resource. For example, the use of jetskis causes excessive noise, poses significant safety concerns for riders and other users such as swimmers, and causes adverse impacts to the marine environment, particularly in shallow waters where jet drives can harm larval marine organisms or fish fry and increase turbidity. The Town prohibits their use within enclosed harbors and 500' of shore, except for launching and landing. State and County entities regulating activities on lands within the Town should conform to these regulations.
- (3) Water-related recreation development shall have a higher priority than non-water-dependent uses. See **Development Policies #1-6** for further guidelines for water-dependent and water-enhanced land uses.
- (4) The siting or design of new development, or expansion or protection of existing development shall not result in barriers to the recreational use of the Town's shore.
- (5) The siting of boating facilities must be consistent with preservation and enhancement of other coastal resources and the capacity of the resource to accommodate demand. Marina design and slip capacity shall not exceed the ability of enclosed harbors to provide adequate tidal circulation or flushing action around all slips. Marinas will, as appropriate, include parking, park-like surroundings, shower and toilet facilities, trash and recycling facilities, and pumpout facilities.
- (6) Future expansion of beach parking should be located in upland village-center parking facilities with shuttle bus transportation provided to and from the shore and the hamlet or village center. Mitigation of bus traffic impacts on local streets in hamlets such as Amagansett must be carefully addressed if this approach is to succeed.
- (7) Agencies of the State and County governments should grant lead agency status to the Town of East Hampton and submit for SEQRA review proposed actions on State and County lands within the Town which may affect coastal recreational resources.
- (8) Water-related use of off-road vehicles (ORV's) is an acceptable activity provided no adverse environmental impacts occur. Where adverse environmental impacts occur or will potentially occur, mitigating measures will be implemented, where practicable, to minimize such adverse impacts. The Town Trustees believe that acceptable mitigation is possible and

practicable in virtually all cases. If acceptable mitigation is not practicable, ORV prohibitions will be posted and enforced.

POLICY 22 DEVELOPMENT, WHEN LOCATED ADJACENT TO THE SHORE, WILL PROVIDE FOR WATER-RELATED RECREATION, AS A MULTIPLE USE, WHENEVER SUCH RECREATIONAL USE IS APPROPRIATE IN LIGHT OF REASONABLY ANTICIPATED DEMAND FOR SUCH ACTIVITIES AND THE PRIMARY PURPOSE OF THE DEVELOPMENT.

POLICY 22AFOR SPECIFIC LOCATIONS WHICH MAY APPROPRIATELY
PROVIDE WATER-RELATED RECREATION AS A MULTIPLE USE
WITH DEVELOPMENT SEE RECOMMENDATIONS UNDER
"OPPORTUNITIES FOR IMPROVEMENT" AND "PUBLIC ACCESS
AND RECREATIONAL USES COMPATIBLE WITH NEW
DEVELOPMENT" IN THE ANALYSIS NARRATIVE AND IN
"PUBLIC ACCESS AND RECREATION IMPROVEMENTS" IN
PROJECTS SECTION XIV. SEE ALSO PUBLIC ACCESS POLICIES
#19-20.

Explanation of Policy:

This policy calls for compatible inclusion of recreational facilities in new developments adjacent to the shore. Under this policy public development within the coastal zone should provide public access to the shore and appropriate water-related recreation as an integral part of its planning, realization and management.

Private development which uses the allure of public coastal resources to enhance its value or business opportunities should also provide significant public access to the shore and to water-related recreation resources. Much development presents practical opportunities for providing recreation facilities as an additional use of the site or facility. Therefore, whenever development is located adjacent to the shore, it will to the fullest extent permitted by existing law provide for some form of water-related recreation use unless there are compelling reasons why any form of such recreation would not be compatible with the development, or a reasonable demand for public use cannot be foreseen.

The types of development which can generally provide water-related recreation as a multiple use include but are not limited to: residential development, marinas, yacht clubs, hotels, and restaurants. The Analysis section discusses specific locations that can appropriately accommodate water-related recreation uses as part of development. See also sites and recommendations in *Public Access and Recreation Improvements*, and *Revitalization of Montauk Harbor* in **Projects** for a discussion of the linked walkway proposal for Coonsfoot Cove.

The following guidelines will be used to determine the consistency of a proposed action with this policy:

- (1) Trail ends, Trustee roads and other access points used traditionally by recreational and commercial fishermen, the Dory Rescue Squad and other members of the public to gain access to the publicly owned foreshore shall be preserved in place or relocated. Such relocation should maintain the access in a manner that is no less useful, ie. navigable, beautiful etc., and is compatible with adjacent land uses and sensitive habitat.
- (2) Subdivision design that provides a near-shore road-end, a large cul-de-sac and a buffered access strip to the waterfront would be consistent with this policy. At a minimum, subdivision design should allow water access for all residents of the subdivision.
- (3) Development of State, County, or Town infrastructure within the coastal zone shall include a recreational component.
- (4) Recreational uses will not be excluded from new development solely because of safety or liability considerations. This policy recognizes that some risk is acceptable in use of recreational facilities.

SECTION VIII

HISTORIC RESOURCES POLICY #23

A. INTRODUCTION

History shapes a community in subtle ways, colors the assumptions of community life, enriches and enlivens the sense of place for residents and visitors alike. Historic and cultural resources are the touchstones of tradition. They can be housed in museums, monuments and structures, but the real keys to continuity with the past, and the underpinnings of a viable future, are a community's awareness of its cultural history. The Inventory, Analysis and **Historic Resource Policy #23** that follow are intended to promote an ethic of respect for the past, impress the need for study and quality information, and instill pride in the community's cultural and historic resources.

In 1998 East Hampton Town celebrates the 350th anniversary of its founding by English settlers, the historical mainstream of present society. There have been other streams too, aboriginal settlements that date to thousands of years B.C., a heritage that left its mark in the Indian place names that abound in the community, and the wealth of archaeological sites the Town struggles to protect from pervasive development. Buildings and structures remind us of the colonial era; only the subtleties of the archaeological record and the oral history of native descendants remains to preserve aboriginal history.

Since colonial times the Town has participated in several of the great tides of American history in its journey from a subsistence agricultural and fishing community to a premier coastal resort. The country's military history was acted out here beginning with the American Revolution. In 1781, the British warship H.M.S. Culloden foundered off Culloden Point in Montauk. In 1839 the same location saw the arrival of the pirated slave ship Amistad. Following the Spanish-American War, Teddy Roosevelt's Rough Riders, many stricken with malaria and yellow fever, were quarantined at Montauk. Camp Hero, Gardiner's Island and the Town's Atlantic Ocean shoreline were extensively used during World War II, including a submarine landing of German spies in Amagansett.

As a coastal community the Town has a rich marine history, replete with shipwrecks dotting the shores, and fishing traditions from coastal whaling to fish factories that smelted menhaden (bunkers) into fish meal and oil at Amagansett and Napeague. Great storms have punctuated the climate record; some of these are touched on in the Introduction to **Flooding and Erosion Policies #11-17**.

Several important movements in American art history found their home in East Hampton: the Tile Club of 1880's landscape painters; Thomas Moran, whose landscapes of Yellowstone and other areas provided impetus for the National Park system; an early generation of American impressionists including Childe Hassam; European surrealist artists taking refuge from World War II; and the first wave of American abstract expressionists including Jackson Pollock, Willem deKooning, and Robert Motherwell, all of whom worked actively here.

While buildings and artifacts survive, the anthropological record is fading as generations fall and offspring enter a mobile society. Preserving oral history with the aid of modern technology should become a priority, before the current elders depart. Structures also need better preservation as development pressure increases, and the Town should update its previous historic survey and put in place the recommended measures. Likewise, archaeological resources are under increasing pressure from development and require more intensive vigilance and better preservation through the SEQRA

review process and other development controls. Each of these, oral history, preservation of historic structures, and archaeological resources, are proposed for detailed attention in the **Projects** section.

B. HISTORICAL CONTEXT

The Town's human history begins with the earliest settlements of Native Americans. The oral traditions of these peoples resulted in little written documentation of their culture. Archaeology supplies the primary source of knowledge for early native cultures. The State's archaeological site location map indicates numerous archaeological sites in East Hampton, Montauk being a particularly sensitive area.

Areas adjacent to ponds, harbors or bays, particularly where fresh water meets salt, were often settled by aboriginal peoples, and are particularly apt to contain archaeological material. Several sites in East Hampton have undergone archaeological surveys, and these reports, as well as the more general information compiled by State and County agencies, serve as a basis for identification of archaeologically sensitive areas.

Research conducted on different sites in East Hampton has uncovered remains dating as far back as the Archaic Age (ca. 4500-1300 B.C.), characterized by subsistence hunting, fishing, and gathering (Landow). Some of the most recent remains of native culture exist in Montauk, as this was the last area in East Hampton Town where the Montauk tribe had a reserve of land. Most of the known native grave sites are in Montauk, and a large-scale archaeological project conducted in 1975 uncovered and recorded the remains of the last Indian settlement in Montauk in an area known as "Indian Fields" (Johannemann).

The history of Native American occupation in East Hampton appears in written records in the 17th century, when European settlers arrived and began to negotiate with them over the use of land. Documents from the 17th and 18th century attest to the agreements made and conflicts which occurred between the settlers and the native inhabitants. Wyandanch, who was the sachem of the Montauk Indians during the time of East Hampton's European settlement, has been identified in historical accounts as the grand sachem of the Long Island tribes, making Montauk the "seat of royal authority and center of power" among the Indians of Long Island (Thompson).

The following historical account of the European settlement and development of East Hampton is indebted to the historic overviews written by Robert J. Hefner which are included in the Town Comprehensive Plan's Historic Preservation Report.

The first English settlement in East Hampton was preceded by the arrival of Lion Gardiner on Gardiner's Island in 1640. Gardiner purchased the island from the Montauk Indians in 1639, and the island remained a private manor and working farm until after the American Revolution, when it was annexed to East Hampton Town. The 3300-acre island was used for agricultural purposes by the Gardiner family until the late 19th century, when the island was leased as a private game and hunting preserve. This use of the island continued until about 1962. The entire island has been

recommended as an historic district due to the number of extant early structures related to this once self-sufficient manor.

The early settlement and development of East Hampton was largely dependent on the Town's geography. The core settlement established in 1648 by emigrants from Lynn, Massachusetts was in the fertile coastal plain along Hook Pond in what is presently the incorporated Village of East Hampton. The hamlets of Amagansett and Wainscott developed later as these areas, abundant in fertile farmland, were cleared, settled and cultivated by descendants of the original settlement. Proposals for historic districts in both of these hamlets have been prompted by the number and high degree of integrity of historic structures. While the agricultural basis of Amagansett has been obscured in part by development in the late 19th and early 20th centuries, when it was popular as a summer resort, the agrarian character of Wainscott remained largely unchanged by development until recent times. Overall, the Town of East Hampton remained predominantly rural and agricultural until the last quarter of the nineteenth century when a number of wealthy New York families discovered the pleasant alternative to hot city summers offered by Long Island's seashore areas.

North of the coastal plain in Northwest and Springs, the soil was generally less fertile and these settlements were characterized for the most part by small subsistence farms. Many of the residents of these regions, like the native tribes who preceded them, turned to the harbors and creeks to supplement their livelihood with fishing, shellfishing and hunting. Whaling companies were formed and Indians were among those who manned the early whaleboats. A major port became established at Northwest Harbor, and as early as 1668 a collector was appointed to this harbor to keep track of taxes on whale oil shipped out. By the mid-eighteenth century the whaling and shipping activities at Northwest Harbor had been supplanted by the deeper port at Sag Harbor, but a small farming community continued to thrive, with sufficient population to prompt construction of a schoolhouse on Northwest Road in 1792. While the settlement at Northwest has all but disappeared, leaving only the ruins of the core homesteads and scattered family grave sites, many of the original farmhouses in the hamlet of Springs have retained their integrity. An historic district is proposed along Springs Fireplace Road in the core settlement area of Springs, as well as historic designation of several individual properties outside the proposed district found eligible for listing on the State and National Registers of Historic Places. A proposed Project to establish historic districts which would include Springs is described in Section XIV-34. In October 1999 the Town Board passed enabling legislation for historic districts and an historic preservation local law, although the actual districts were not then established.

Springs also became known as a haven for writers and artists in the post World War II years, a reputation that persists into the present. Two of the Springs' most notable artists were Jackson Pollock, whose house and studio is now a National Historic Landmark, and Willem deKooning.

Montauk was one of the last outposts of the native tribes who were slowly displaced and disappeared as the European settlement moved eastward. Montauk was used as common pasture from 1658 through the late nineteenth century. A few structures remain to attest to this phase of Montauk's history. Second House, located within the Town's Kirk Park on the banks of Fort Pond, and Third House, located on County parkland, were both used to house the keepers of the livestock, the original cowboys.

The Lighthouse at Montauk Point, one of the best known features in the State, was authorized for construction in 1795 by George Washington. The Montauk Lighthouse and keeper's dwelling were renovated during the nineteenth century and their functions evolved as well, the keeper's dwelling serving as a sort of public house for travelers to the Point during the early nineteenth century.

Present development in Montauk is largely a result of influences and events from the late 1800's onward. Before that time and through much of the nineteenth century, the Montauk peninsula continued to be used by area farmers as summer grazing land for livestock because of abundant grasslands, which were periodically burned over. In 1879, Arthur Benson purchased the entire Montauk peninsula, with the exception of the Montauk Lighthouse and the life-saving station at Ditch Plains, for the sum of \$151,000. In doing so, he also purchased the last of the lands reserved for the native Montauks, and moved the remaining members of the tribe from their home in Indian Fields.

Carl Fisher (1874-1939) is largely responsible for the visual character of present day downtown Montauk and the shape of residential subdivisions between Lake Montauk and Flamingo Road. Fisher was one of the most widely known sportsmen, developers and celebrities of his day. After making and losing several fortunes in the 1890's he organized the Prest-O-Lite Company to make automobile headlamps in Indianapolis, and along with local acquaintances in automobile parts manufacturing, Fisher organized the Indianapolis Speedway to test and promote automobiles in 1909. Imaginative promotional stunts created a vast fortune, which Fisher then used for the development of resorts, first in Miami, Florida, and then in Montauk, Long Island. The following discussion on the development of Montauk is based on information from the National Register nomination forms for Montauk Tennis Auditorium, Montauk Manor and Caleb Bragg Estate (NYS OPRHP).

After nearly a decade of involvement in the speculative real estate project of Miami Beach, Carl Fisher encountered Montauk. Cooled by the Atlantic climate, surrounded by superb fishing and with sites for boating, polo, and tennis, Fisher envisaged Montauk as the summer resort for those who wintered in Miami. Fueled by the immense success of turning Miami Beach into a thriving vacation spot, Fisher acquired a vast tract of 10,000 acres in Montauk in 1926 and set about laying out a community which he envisioned could range from 50,000 in the winter to 150,000 in the summer and that could be marketed, as the "Miami Beach of the North."

To create the resort, Fisher organized the Montauk Beach Development Company as a subsidiary of the Miami based Carl G. Fisher company. A professional staff of architects headed by Fisher's staff architect, Richard Webb, and by Robert Tappan, a veteran of Ralph Adams Cram's office, designed the community and many of its lesser buildings, while the major focal points were designed by important contemporary architects including Walker and Gillette and Schultze and Weaver. The plans called for the connection of Lake Montauk to Long Island Sound to form a protected harbor, the formation of a village center with a ring of shops and Fisher's office building, the development

of a resort complex, and the construction of four major sporting facilities, the Surf Club, the Polo Club, the Tennis Club and the Yacht Clubs.

As with most speculative resorts, a great hotel was erected to serve as a magnet to attract visitors, who might then be persuaded to purchase cottage lots. The Montauk Manor, designed by Schultze and Weaver, whom Fisher knew from their Miami work, notably the Biltmore Hotel in Coral Gables, was the first major building to be completed (1926) and it established the English Tudor design that would characterize the new community. The hotel was soon followed by the Polo Club, Yacht Club and, in 1928, the Tennis and Surf Clubs. With the resort office building, the English half-timbered shops around the circle, and a golf course, Montauk was sufficiently complete to begin marketing its house lots in 1928. Lake Montauk was dredged and an inlet opened between it and Block Island Sound creating one of the best protected harbors on the northeast coast.

Most of Fisher's buildings were sheathed in stucco and evinced a variety of revival styles popular for upper middle class suburban developments in the 1920's, including Colonial Revival, Spanish Mission Revival and Tudor. Unlike the formal grandiose estate development on much of Long Island, the resort developed at Montauk by Fisher and his associates was not a statement of wealth and power but an informal community devoted to play and recreational activities such as swimming, boating and tennis.

The great hurricane of 1926 that devastated Miami slowed Fisher's project, and the Great Depression ended the prospects of the Montauk resort complex just as it was gaining popularity. Fisher lost control of his project in the early 1930's and died in 1934. In the next two generations, the hotel went bankrupt and the Polo, Yacht and Surf clubs were demolished, leaving Montauk as much memory as reality, with only the Montauk Manor, the tennis auditorium, the Montauk Railroad station, the office building and some of the distinctive Tudor revival buildings of the central business district left to recall Fisher's vision and the legacy of Montauk's grand resort era.

Montauk has also had an extensive military history, beginning with naval encounters in the Revolutionary War, including the grounding of the British warship HMS Culloden off Culloden Point, a period when it functioned as a way station for returning veterans of the Spanish-American War including Teddy Roosevelt's Rough Riders, and as an extensive coastal defense battery during World War II.

In addition the Coast Guard maintained a number of installations along the coast for wartime observation and warning against invasion, at Ditch Plains, Napeague, and Amagansett, and a network of observation bunkers at isolated locations like Shagwong in Montauk and on Whale Hill on Gardiner's Island. In fact a German submarine landed an espionage team on the beach at Amagansett during the war, and they blithely took the LIRR train into Manhattan, to be discovered weeks later only when a member of the band, which had by then dispersed, found a guilty conscience and turned himself in. The Coast Guard station at Star Island in Lake Montauk is the sole operational survivor of this observation network; it was originally located at Napeague as the life-saving station, and later barged to Montauk Harbor.

Structures of historical importance from World War II have just recently reached the fifty year mark necessary for listing on the State and National Registers, and include artillery fire control stations, bunkers and other coastal defense structures. The structures attest to the strategic importance of the Town in the Eastern Defense Shield. Camp Hero, a military installation during World War II and today part of the State's parkland holdings in Montauk, contains the most intact examples of artillery fire control stations used during World War II. These utilitarian concrete structures were given a facade treatment to disguise them as residential cottages. The remains of other fire control stations used during the war still exist, though some have been converted to dwellings.

C. INVENTORY OF HISTORIC RESOURCES BY REACH

This inventory is not exhaustive, as it relies on secondary sources and previously compiled surveys. In addition, not all the resources listed possess the necessary integrity for inclusion on the State and National Registers, or would justify protection under a local historic preservation ordinance. However, they are nonetheless important to the historical understanding of the Town. Resources included in the Town's Intensive Level survey and found to possess the integrity to support nomination to the State and National Registers of Historic Places are so indicated. Resources which are already Register-listed are so indicated. Suffolk County tax map numbers accompany the descriptions in parentheses where applicable. (See Map VIII-1)

Reach 1

The Monks House, located at the end of Mile Hill Road overlooking Northwest Harbor, was built ca. 1895 and incorporated an earlier farmhouse (72-1-3.31).

Cedar Point Lighthouse, built in 1868 and associated with navigation to the port of Sag Harbor, is located within the Cedar Point County Park (34-1-1).

Ruins within the Grace Estate Preserve are associated with the early settlement of Northwest (90-2-9.1 and 54-3-31).

The Russell/Payne cemetery, an Indian campsite, and the ruins of early houses are all resources within the State-owned land at Barcelona Neck (111-1-1.3, 1.4 & 1.7-1.13).

Reach 2

The Duke prehistoric archeological site is located on the western shore of Three Mile Harbor (74-5-30.1).

The Hands Creek Town Park has archeological potential due to its association with the Ashawagh Indian settlement (74-5-1).

The Bianco site, located to the south of Hands Creek on the shore of Three Mile Harbor, has been found to contain a prehistoric and historic archaeological site (74-7-27,-28,-29).

Two properties which were found eligible for listing as part of the Springs Multiple Resource Area are the John Edwards House (Duck Creek Farm) on Three Mile Harbor Road (59-2-17.1); and the Zadoc Bennett House, located on Three Mile Harbor Road (77-4-2).

Reach 3

The proposed Springs Historic District lies partially within this reach. The Jackson Pollock-Lee Krasner House and Studio (also known as the Henry Hale Parsons House) is a contributing building within the historic district, and was listed on the National Register of Historic Places in April 1994 due to its association with the artists. It was also listed individually as a National Historic Landmark at this time. The following summary of its importance is extracted from the National Register nomination form (OPRHP, 1994):

This 1.5 acre site is located to the east side of Fireplace Road in Springs.

The Jackson Pollock House and Studio is made up of four buildings. The two-story, frontgabled, shingled house and a wooden, partly shingled barn have historic significance dating from the late nineteenth century. It is typical of many of the buildings in the area that date from this era.

The property is of national importance. From 1945 to 1984, the property was owned by the artists Jackson Pollock (1912-1956) and Lee Krasner (1908-1984), who used the site as their primary living and working spaces. The house and barn represent the greatest single site associated with the birth of Abstract Expressionism, the movement that catapulted American painting onto an international stage.

After Krasner's death, the site and its contents were taken over by the Stony Brook Foundation, a non-profit affiliate of the State University of New York, expressly to preserve and restore the house and studio and to convert the non-contributing structures into research facilities on Pollock, Krasner and other Long Island artists. Because the property passed directly from Krasner's estate, it accurately reflects the artists living and working environment.

Other properties found eligible for nomination as part of the Springs Multiple Resource Area include the Elnathan Parsons house located on the corner of Hog Creek Lane and Fireplace Road (24-13-11); the Hezekiah Edwards house, located on Barnes Hole Road (103-9-28); and the second Howard Ross House, located on Barnes Hole Road (103-9-36).

The Dennistoun M. Bell House and associated structures (103-11-12, 104-2-6, -7, & -8) were evaluated in the Intensive Level Survey and recommended for listing on the State and National Registers as an example of the "County House" property type. However, the main house has since been destroyed by fire, and some of the accessory structures, located on separate lots within a subdivision, have been removed.

Reach 4

The Mrs. Mortimer Levering House (151-2-14.2), built in 1910, has been evaluated in the Intensive Level Survey and recommended for listing on the State and National Registers as an example of the "Country House" property type.

The Devon Yacht Club on Abrahams's Landing Road was built in 1909 by the Devon Colony owners (127-3-16).

On Hicks Island within the Napeague State Park are the ruins of the Swan Finch Company fish factory (86-1-1). The remaining buildings of the Smith Meal company fish factory are located on Cranberry Hole Road (128-1-32).

The "Art Barge", or Victor D'Amico Institute of Art, a former barge moved to the site in the 1950's by the Museum of Modern Art, operates as a summer art center and is a significant cultural resource in Napeague (109-1-21).

A concentration of small 20th century cottages, once used as summer camps and fishing shanties, line Shore Road on the bay side at Lazy Point.

The Mackay Radio Station constructed on Napeague Harbor Road prior to 1930 may be significant due to its association with the history and technology of international radio communications.

Reach 5

Second House was originally built in 1797 at the time that Montauk was used as a common pasture and was altered in 1879 when the structure was used as a boarding house. The site is owned by the Town (48-3-31 & 37)

The site of the HMS Culloden shipwreck was listed on the National Register of Historic Places in March 1979. The following summary of its importance as an archaeological site is extracted from the National Register nomination form (OPRHP, 1979). This site is located in Block Island sound in the vicinity of Culloden Point.

The HMS Culloden, a 74-gun British frigate was launched in 1776 after its construction at the royal shipyard in Deptford. The vessel ran aground on January 1781 during a severe winter storm. Initial salvage was conducted through March 1, 1781, when much of the ships stores and rigging were removed and ferried to shore, along with the upper and quarter-deck guns. Subsequently, the vessel was burned to the water line by the British.

Further salvage of the abandoned frigate began after the British abandoned Long Island. More guns were salvaged in 1781 and pig iron and another gun was salvaged in 1815. No other record of salvage or investigation occurs until 1971, when parts of the ships structure was discovered. Further artifacts were recovered and reported in later years. The HMS Culloden shipwreck site is significant not only for its historical connection with the American Revolution, but also because it represents a record of British nautical technology for the period.

There is also a recently documented Native American archeological site at Culloden Point, which was found eligible for listing on the National Register.

Structures within this reach associated with developer Carl Fisher include the Montauk Arms Apartments, built in 1927 and located on Second House Road; Shepherds's Neck Village, consisting of approximately 25 small Tudor-revival style workers cottages built by Carl Fisher between 1926 and 1927; Montauk School, built in 1928 and located on Second House Road; and the Montauk Railroad Station located on Edgemere Road, and built in 1927.

Reach 6

Most of the structures associated with the developer Carl S. Fisher are found in this reach. Three structures are listed on the National Register of Historic Places: the Montauk Manor on Fairmont Avenue, built in 1926, the Montauk Tennis Auditorium on Edgemere Road, built in 1929, and the Caleb Bragg Estate on Star Island, built in 1929.

Montauk Manor

Montauk Manor was listed on the National Register of Historic Places in August 1984. The following summary of its importance is extracted from the National Register nomination form (OPRHP, 1984). This property is located on an undeveloped hill overlooking Montauk and its surrounding coastal waters.

Designed by Schultze and Weaver and built in 1926, the brick and stucco building is three and a half stories, with a symmetrical H-shape plan, gable roofs and a large tower. It is a conspicuous local landmark with a distinctive English Tudor revival style exterior. A former hotel, it is now a resort. The interior has guest rooms, numerous public rooms and associated service areas.

Montauk Manor is historically significant as a major resort hotel built at the height of the transformation of Montauk into a resort community. It was the centerpiece of Carl Fisher's Montauk Beach development and it is the one of the few remaining local historic resources associated with the growth of Montauk as a resort.

Caleb Bragg Estate

The Caleb Bragg Estate was listed on the National Register of Historic Places in February 1987. The following summary of its importance is extracted from the National Register nomination form (OPRHP, 1987). This 4.2 acre waterfront estate is situated on Star Island in Lake Montauk.

Designed by the prominent architectural firm of Walker and Gillette and built in 1929, the estate contains seven contributing historic buildings and one contributing structure, all set

within a well maintained landscape that itself contributes to the significance of the property.

Unlike the large mansions that dominate many of Long Island's early twentieth century estates, the Bragg Estate has several relatively small buildings of similar size and appearance that serve the functions of the estate. This grouping of structures displays a picturesque cottage like appearance. The eastern portion of the estate has open lawns and unobstructed views of Lake Montauk.

The centerpiece of the estate is the group of three buildings in the middle of the property. These provided the living quarters and a guest house. These buildings are similar in design and detail, featuring distinctive high gable roofs with dormers, prominent central gable ends, entrance porches, casement windows and balconies. All of the estate buildings have smooth stucco exterior walls and all but one have terra-cotta tile roofs. The interior of the buildings remain largely intact.

The Caleb Bragg Estate is historically and architecturally significant as a distinguished example of an early twentieth century estate that recalls Montauk's extensive development as a fashionable summer resort during the 1920's. Built at the height of this resort development, the estate retains a high level of integrity and it is one of the few remaining properties that reflect the important episode in the development of Montauk.

Montauk Tennis Auditorium

The Montauk Tennis Auditorium was listed on the National Register of Historic Places in February 1988. The following summary of its importance is extracted from the National Register nomination form (OPRHP, 1988). This structure is located on a 4.4 acre parcel on Edgemere Street.

The Montauk Tennis Auditorium was one of the central buildings of the great resort planned by Carl Fisher. It was erected in 1928-9 and was intended to provide recreation for guests at the nearby Montauk Manor. The auditorium was designed in the same picturesque Tudor form that characterizes much of the remaining resort structures. The main gabled roofed volumes mark the great tennis halls, while the lower shed roofed volumes contain the lobby and lounges. The exterior is sheathed with plywood and stuccoed, while rough fieldstone forms the base of the building. Designed to provide seating for 6,000, part of the interior tennis courts and seating area has been converted into a theater.

The auditorium is architecturally and historically significant as an unusual large scale example of an indoor tennis auditorium from the late 1920's. It is an important component of the resort complex planned for Montauk.

The Tennis Auditorium, now in a deteriorated state with gaping holes in the roof, was recently acquired by the Town, and plans are being formulated for its renovation as a community center.

Other historic properties associated with Fisher include the following: Fisher Office building on the Plaza, 1927; Security and Professional Building, Euclid Ave, 1928; Montauk Manor Barn, built

1927, located on Fairview Ave.(16-2-22); Star Island Gateway, ca.1927; Carl Fisher House on Foxboro Road, 1928; the Montauk Yacht Club on Star Island, built 1927; East Lake Drive gateway, built 1927; the L.R. Wasey House on East Lake Drive, ca. 1928, now known as the Montauk Lake Club (300-13-3-26); Thomas Ringwood House, West Lake Drive, Ca. 1928; Albin Pearson House, South Fairview Ave., Ca. 1928; the Waite Raymond house, on Gravesend Road, ca. 1930; the Arthur B. Wood house on Fairview Ave., ca. 1928.

Other structures of significance on Star Island include the Montauk Island Club, built in 1928; and the U.S. Coast Guard Station, which was formerly the Napeague Life Saving Station and was moved by barge to Star Island in 1955.

This reach also contains a large portion of Montauk County Park, which includes the following resources: Third House, now a County Park office; Indian Field, on which is a documented archeological site of the last Indian settlement in Montauk; and a coastal artillery fire control station built during World War II, which was later converted to a dwelling.

Also within this reach are remnants of a stone wall which was built from 1823 to 1832 and stretched from Fort Pond to Lake Montauk; two documented Indian burial grounds (lots 13-2-19 and 19-2-60); the Capurso prehistoric archeological site; the Landow prehistoric archeological site (16-2-17 and 28-1-1.1); the Fort Hill archeological site on which a 17th century Indian Fort was located and the adjacent Massacre Valley, which was the site of a battle between the Narragansetts and the Montauk.

Reach 7

The Montauk Lighthouse, built in 1797, is the oldest lighthouse in New York State. Montauk Point Lighthouse was listed on the National Register of Historic Places in July 1969. The following summary of its importance is extracted from the National Register nomination form (OPRHP, 1969). The Lighthouse is located on the bluffs overlooking Montauk Point.

President George Washington authorized the construction of the Montauk Point Lighthouse in 1796. Designed by John McComb, the architect for New York City Hall, the light is the oldest beacon established in the United States. This beacon was rebuilt in 1860. At that time, steps replaced an interior ladder and the height was increased by 28 feet. The massive octagonal structure, pyramidal in shape, is fashioned of cut stone with walls three feet thick enlarging to 12 feet thick at the base. Outbuildings for living quarters were also rebuilt in 1860 and the site includes a number of other structures that contribute to the significance of the property.

When originally constructed, the lighthouse was situated nearly 100 yards from the shoreline. Erosion of the bluffs has been substantial and now the lighthouse stands almost on the shoreline. The US Army Corps of Engineers has recently completed a major shoreline fortification project to protect the lighthouse. A Cultural Resources Study, carried out as part of this project, highlighted the historical and architectural importance of the site and identified prehistoric features that pre-date the period of historic significance.

The Lighthouse is significant for its associations with George Washington and the early development of navigation in the country. It is an important example of lighthouse design and construction. The light's location on the important approach to New York Harbor has made it a landmark for ocean navigation. It is also an important scenic attraction for tourists on the East End of Long Island.

Other structures at Montauk Point have been included in a proposed historic district, as per a report prepared by the Army Corps of Engineers.

Reach 8

Camp Hero, part of land held by the State, was an army facility during World War II and contains structures dating from that period which attest to East Hampton's strategic importance during World War II. A consultant for OPRHP has evaluated the surviving structures at Camp Hero, and the Field Services Bureau of OPRHP is of the opinion that the site as a whole is not elegible for the State Register of Historic Places (Cashin Associates, 3/99). The Town is interested in seeing Camp Hero and its associated structures more thoroughly evaluated within the regional historical context of the Eastern Defense Shield, and would like to see its historic role recognized in some fashion.

The Montauk Association Historic District, consisting of seven 19th century cottages designed by the architectural firm of McKim Meade and White, was listed on the National Register in October 1976. This resort, established by a group of wealthy New Yorkers, is a site of profound significance in the development of American landscape architecture, community planning, and architectural design. The Historic District, encompassing approximately 100 acres, is located on a ridge to the east of Ditch Plains overlooking the Atlantic Ocean. The following narrative is extracted from the National Register Nomination form for Montauk Association National Historic District (OPRHP, 1976):

A prime mover in the seasonal exodus to eastern Long Island was Brooklyn financier Arthur W. Benson, who purchased much of the Montauk peninsula for \$151,000 in 1879 as a speculative venture. Benson envisioned an exclusive resort colony of summer cottages to be developed at Montauk Point, and toward this end interested several of his New York associates in the enterprise. Benson's group, which included lawyers Robert and Henry DeForest, in 1881 commissioned noted landscape architect Frederick Law Olmsted to plan the site.

Other New York friends soon joined with the original group to form the Montauk Association the same year. The membership included businessmen Henry Sanger and Alfred M. Hoyt, author William L. Andrews, merchant and financier Alexander E. Orr, and Cornelius R. Agnew, a prominent ophthalmologist.

Olmsted's plan for the Montauk Association colony utilized existing contours, taking maximum advantages of vistas and prevailing sea breezes. The asymmetrical design placed

individual structures in a natural setting along a ridge facing the Atlantic. Connecting the buildings of the complex was a maze of unpaved roads and trails.

Soon after the Montauk Association was organized in 1881 the group contracted with the prominent New York architectural firm of McKim, Mead, and White for a design for their clubhouse, the central structure in the summer colony. Begun in the fall of 1881, the clubhouse was completed in 1883 and stood near the site of the present Tweed house. The building accommodated fifty guests, and the seven member families dined there frequently. The clubhouse burned in 1933.

While the central clubhouse was under construction, each member of the Montauk Association commissioned McKim, Mead, and White to design his own cottage, to be built on one of the plots flanking the clubhouse in accordance with Olmsted's site plan. McKim, Mead, and White prepared plans for the seven association houses in 1882, and all were built by the end of 1883. Ranging in size from the small, modest Benson and Andrews cottages to the large, imposing Hoyt and Orr residences, the Montauk Association houses share a similar spatial arrangement and large dominant gable. All are outstanding early examples of the innovative "shingle-style" resort architecture being developed by H.H. Richardson, McKim, Mead, and White, and their imitators during the early 1880's.

In their freedom of design and massing, the Montauk Association houses underscore the sensitivity of McKim, Mead & White, to the relationship between their architecture and its natural surroundings. Moreover, the textures created using shingle coverings and the decorative effects achieved with gables, moldings, pediments, and balustrades recall the vernacular architecture of colonial New England, a rich heritage rediscovered and revived by Charles F. McKim and Stanford White after 1878.

The Montauk Association complex, which ultimately included the clubhouse, seven cottages, a laundry building, a large stable, and private beaches, remained a haven for the sporting resort life enjoyed by its members for over forty years. Private yachts often transported the wealthy seasonal tenants from New York to Montauk for the summer, while extra baggage was shipped by rail to Sag Harbor and hauled to the Montauk colony by wagon. Fishing, yachting, and other outdoor sports filled the leisure time of Association members during the four summer months, and the Montauk community developed as an exclusive resort area to rival the nearby Hamptons.

As the original members of the Association passed away or became less active, the Montauk properties changed hands repeatedly. The l920's saw the arrival of Carl Graham Fisher (1874-1939), a real estate developer and multimillionaire who purchased the former DeForest cottage. Carl Fisher envisioned and promoted a future Montauk as the "Miami of the North". Fisher and other property owners were ruined by the Great Depression of the l930's, during which time many of the Association houses were closed up by their owners. With the return of seasonal vacationers to eastern Long Island following the Second World War, the cottages again became private summer residences.

The Montauk Association Historic District includes a complex of seven "cottages" designed and built between 1881 and 1884. It also includes the sites of two former structures which were part of the original complex, a community laundry and a stable. The boundaries of the Historic District approximate those of the original complex of 1881, except in the vicinity of Ditch Plains, where development has encroached upon the former Association property. Two modern residences are presently located within the Historic District, neither of which visually intrudes upon the setting of the Historic District.

Architecturally, the cottages are a response to their natural surroundings: each is situated and planned so as to take advantage of ocean views and prevailing sea breezes. The stylistic freedom displayed in the architecture of each "cottage" compliments the overall setting of the Montauk Association complex.

Varying in size and detail, the cottages are superb early examples of American "shingle-style" resort architecture. The individual "cottages" follow no common plan, though all are rambling, gable-roofed frame structures characterized by wide verandas, balustrades, and shingle covering. Decorative elements give variety to the elevations and wall surfaces of the cottages. The interiors of the Montauk Association houses epitomize the cottage architecture of the 1880's.

Olmsted's site plan for the Montauk Association colony took maximum advantage of surrounding natural features, utilized existing contours, and exploiting the extensive vistas and prevailing sea breezes. The asymmetrical design placed individual structures in a natural setting along a ridge facing the Atlantic. Connecting the buildings of the complex was a maze of unpaved roads and trails which conformed to the undulating topography of the area.

Little formal landscaping was attempted, and the former Association properties retain the natural environment of low tangled scrub growth and marshland incorporated in the original design for the site. The natural coastal marshes and tangled undergrowth of the Montauk peninsula became integral elements in Olmsted's overall scheme. Despite the demise of the Montauk Association, the site today remains a significant example of Olmsted's pioneering design concepts in landscape architecture.

Although the Montauk Association no longer exists, the houses continue in use as private residences. The Montauk Association Historic District retains its key elements and preserves a sense of the leisure life enjoyed by Montauk's wealthy seasonal residents during the last quarter of the nineteenth century. The rambling style of the Montauk Association houses and their natural surroundings reflect the sensitivity of Olmsted and McKim, Mead, and White to the interrelationship of environment and architecture.

McKim, Mead and White share credit for initiating the "colonial revival" in American architecture of the late nineteenth century. Their work in the innovative Montauk

Association houses of 1882-1883 are significant landmark structures in the emergence of the "shingle style" and the transition toward modern architectural trends.

The Montauk Association was symptomatic of changing economic and social conditions in America during the late nineteenth century. It represented a new response to nature and the out-of-doors, and was above all a significant attempt at resort planning, at constructing an alterative to the usual urban mode of existence. As an experiment in landscape architecture and architectural design, the Montauk Association was an unparalleled success.

Individual cottages within the Historic District:

Agnew House (1884): This dwelling is a rectangular two and one-half story, gable-roofed frame cottage with central brick chimney. A two-story gabled projection at the east and west ends, a gable-roofed wing abutting the north elevation, and a one-story veranda extending half the length of the south elevation are notable features of this moderate sized cottage.

Benson House (1883): A one-story balustraded veranda extends around the east, south, and west elevations of the Benson cottage. This nearly square two-story structure with central chimney retains its original scalloped shingle sheathing on the north elevation.

Sanger House (1883): This moderate-sized shingled cottage with veranda, attached rectangular wing, and transverse gable is notable for its fine interior detail. The rich wood wainscoting, moldings, fireplace mantels and paneled ceilings together with lattice panels and an ornate stair balustrade reflect the best design elements of McKim, Mead and White.

Hoyt House (1883): The largest of the Montauk Association cottages, this rectangular, gable-roofed structure is two and one-half stories high. Clapboards cover the first story, while the upper story and projecting gables are sheathed in shingles. The Hoyt house was poorly altered during the 1950's when it was briefly converted to a restaurant and hotel. The veranda was enclosed and six bathrooms were added. The house retains its fine wood paneling, overmantel, decorative batten ceilings, and an ornate staircase resembling that of the Sanger cottage.

Andrews House (1884): This is the smallest of the Association houses. A one-story veranda with gable roof extends across the south elevation, at right angles to the projecting second-story porch formed by the gable roof of the cottage. Despite some interior alteration, the original moldings, wainscoting, and staircase remain in an excellent state of preservation.

DeForest House (1882): Clapboarded around the first story, the DeForest cottage is shingled on its upper one and one-half stories. Dominating the south elevation is a veranda terminating in a polygonal porch projection. The veranda has been enclosed during the twentieth century. Patterned shingles, bands of fenestration, and two ornate brick chimneys are noteworthy exterior features of this fine shingle-style cottage. Orr House (1883): The horizontal emphasis of this rambling rectangular structure is relieved by a pair of transverse second-story gables which project on the south elevation. A broad, balustraded, one-story raised porch surrounds the east, south, and west elevations. A central brick chimney and a small decorative tower with bell-cast copper roof provide vertical thrust to this long gable-roofed cottage. N.B. Orr House burned down in March, 1997 and is being reconstructed.

Stone House, built 1912 by Grosvenor Atterbury was destroyed by fire in 1991 and rebuilt (22-1-3.3).

Deep Hollow Ranch, located on County Parkland, no longer contains any historic structures, but is a use which aids in the historic interpretation of this site which was once a common pasture for cattle.

The Carl Fisher polo stables, built in 1927, retain the integrity of their historic setting and are still used as part of a horse farm on Montauk Highway.

Reach 9

The remains of two Artillery Fire Control Stations eligible for listing on the State and National Registers of Historic Places are located in the Shadmoor property on a high bluff overlooking the ocean (28-9-46.1 and -46.2).

Structures within this reach associated with Carl Fisher include the Montauk Beach Gateway, ca. 1927, located on Old Montauk Highway just east of Hither Hills State Park boundary; Montauk Tavern Building, located on south side of Montauk Highway, built 1928; Montauk Community Church, Montauk Highway, 1928; Church of Saint Therese, Montauk Highway, 1930.

Reach 10

Within the Hither Hills Park is located a colonial era cemetery and the remains of the foundation of first house, which was built in 1798 to replace a 1744 dwelling (86-2-5).

The Bluff Road Historic District, evaluated in the Intensive Level Survey and recommended for listing on the State and National Registers, lies partially within this reach. Although the portion of the district which lies within the reach does not contain any contributing structures, the duneland is important to the historic setting and interpretation of the houses within the district.

An Artillery Fire Control Station is now converted to a beachfront residence on the western boundary of Napeague State Park.

Former structures and remnants of structures still exist from the Atlantic Avenue Coast Guard Station, including the present Town Marine Museum and Lamb buildings on Bluff Road. Other buildings have been moved from the site and converted to nearby residences.

The Edward E. Bartlett House (189-5-2.1), located on Further Lane in Amagansett and built in 1914, has been evaluated in the Intensive Level survey and recommended for individual listing as an example of the "Country House" property type.

The George S. Davis House, built in 1884 and located on Indian Wells Plain Highway in Amagansett, has been evaluated in the Intensive Level survey and recommended for individual listing on the State and National Registers as an example of the property type "Summer Cottages."

Reach 11

The Wainscott Historic District, evaluated in the Intensive Level Survey and recommended for listing on the State and National Registers lies partially within this reach.

The Nathan Sanford House, built ca.1892 and located on Main Street in Wainscott, has been evaluated in the Intensive Level Survey and recommended for listing on the State and National Registers as an example of the property type "Victorian Dwellings."

The Wainscott Windmill was listed on the National Register of Historic Places in December 1978 as part of the Wind and Tide Mills of Long Island Thematic group. This thematic listing collectively illustrates the diverse and sophisticated technical knowledge which Long Island's talented artisans brought to bear on the problems of industrial power transmission in a low energy society and remain a significant link with America's "Wooden Age". The following summary of the importance of the Wainscott Windmill is extracted from the National Register nomination form (OPRHP, 1978). The Wainscott Windmill is located on the grounds of the Georgica Association.

Formerly a wind powered grist mill constructed in 1813, the Wainscott Windmill now serves as a visual decorative element within a residential community. It is an octagonal, timberframed structure sheathed in weathered shingles and features a sophisticated fantail cap. It is one of the few remaining early windmills on Long Island, and is one of only seven Long Island windmills containing major internal machinery. It is the only extant windmill attributed to Samuel Schellinger, who succeeded the Dominy family as the principal millwright of eastern Long Island.

Reach 12

The Gardiners Island Historic District was evaluated in the Intensive Level Survey and recommended for listing on the State and National Registers in its entirety.

The Gardiners Island Windmill was listed on the National Register of Historic Places in December 1978 as part of the Wind and Tide Mills of Long Island Thematic group. This thematic listing collectively illustrates the diverse and sophisticated technical knowledge which Long Island's talented artisans brought to bear on the problems of industrial power transmission in a low energy society and remain a significant link with America's "Wooden Age". The following summary of the importance of the Gardiners Island Windmill is extracted from the National Register nomination form (OPRHP, 1978). It is located on the "mill lot", a knoll on the western shorelands of Gardiners Island overlooking Cherry Harbor and Gardiners Bay.

The Gardiners Island Windmill, constructed in 1795 and still in its original location, is an octagonal, three story, shingle clad smock mill with boat-shaped cap. It is one of four extant Long Island windmills built by the famous Dominy family of craftsmen from East Hampton. With all its machinery intact, the windmill has remained a part of the historic Gardiner Estate since its construction. The continuous ownership by the Gardiners and its isolated location have helped to preserve this technologically significant structure.

Numerous other historic buildings, the Gardiner family cemetery, and artifacts of the island's agrarian/maritime economy are also of importance, making the island as a whole one of the most significant and intact remnants of colonial history on the east coast.

The World War II observation bunker atop Whale Hill on the island's northern shore was part of the Eastern Shield coastal defense network which linked artillery positions at Montauk, Gull Island, etc. set up to defend the mouth of Long Island Sound.

D. EVALUATION OF HISTORIC RESOURCES

The historic importance of structures, areas, and sites in the Town of East Hampton have been recognized on a state and national level through the State and National Registers of Historic Places. Included among the resources which are listed on the National Register are the Montauk Association Historic District consisting of the seven original cottages and surrounding natural landscape, the Montauk Lighthouse, also a candidate for National Historic Landmark status as the oldest lighthouse in New York State, the Wainscott Windmill in the Georgica Association, and numerous other individual properties.

In 1983 a survey of the historic resources in the hamlet of Springs resulted in a proposed historic district and the proposed listing of several individual properties as part of a "Springs Multiple Resource Area" designation. Although found eligible for listing by the State Review Board, the district and properties were never actually listed on the State and National Registers. Some of the properties surveyed in 1983 have since lost their integrity.

In 1989 a Phase One reconnaissance survey was completed as part of a Historic Preservation Report for the Town of East Hampton. This report identified sites and structures already listed on the State and National Registers, and provided an inventory of structures which were of historic importance. A Phase Two intensive level survey was completed in 1990, which narrowed its scope to resources within the hamlets of Amagansett and Wainscott and on Gardiner's Island. The Phase Two survey evaluated the integrity of sites and structures of historical importance, and identified districts and properties which had sufficient integrity to be nominated for listing on the State and National Registers of Historic Places. The Town proposes updating these surveys (see **Projects**).

Many of the resources contained within the waterfront reaches have already been identified and evaluated using the property type criteria developed in the Phase Two survey. Additional property types may be developed upon the evaluation of other waterfront resources, related to archaeological resources, coastal defense, navigation, cultural and economic history of the town, etc.

The Town also proposes to develop and refine a cultural resources sensitivity model (see **Projects**) to better identify and protect archaeological, historical and cultural resources during the planning and zoning process and to incorporate National Register criteria into local procedures.

East Hampton's coastline has a history of shipwrecks and other maritime activity, as well as revolutionary, colonial, contact and pre-contact cultural activity or artifacts that may now be submerged. Some of these have been recognized on Town maps published over the years. As noted, the Culloden wreck site has been included in the National Register of Historic Places

These submerged historic resources can provide substantial economic benefits to the local economy as heritage tourism and sport diving attractions. Submerged wrecks, besides attracting recreational divers, are often good fishing sites as well. Recognizing the importance of the commercial and recreational fishing industries, the Town is concerned that any designated shipwreck preserve not impinge unnecessarily on fishing around the wreck site.

New York's Interagency Ad-Hoc Committee for Submerged Cultural resources, which is responsible for establishing shipwreck preserves (such as the Land Tortoise in Lake George), is comprised of the Office of General Services, the Department of Environmental Conservation, the Office of Parks, Recreation and Historic Preservation, the New York Department of State, and the New York State Museum.

E. RECOMMENDATIONS

Phase Two of the Town's Historic Preservation Report contained recommendations for the establishment of a local historic preservation ordinance, and other preservation planning programs which could be implemented by the Town. Development of an historic preservation local law is proposed as an LWRP project (see **Projects**). The scope of the legislation would necessarily extend townwide to include areas beyond the coastal zone.

The two-volume Historic Preservation Report has been accepted into the Town's Comprehensive Plan, although the Town has not yet developed the historic preservation legislation, and National Register nominations have not been prepared for all the districts and properties identified in the report.

Through the Town's implementation of the State Environmental Quality Review Act, the review of most proposed projects includes an assessment of potential impacts to historic and archeological resources.

While the Historic Preservation Report has identified extant structures of historical significance, no comprehensive survey exists of all the identified archaeological sites within the Town. The State Office of Parks Recreation and Historic Preservation has published a "Circles and Squares" map indicating the frequency of archeological sites throughout the Town. However, a survey which more accurately identifies the location of known archeological sites would be a useful tool in assessing the potential impacts of development proposals, and would be an indicator which would justify an

in-depth archeological study of the property in question. Unfortunately, because of amateur digging and looting that could compromise the integrity of such sites, and other preservation concerns, information of this type would have to be kept secure from the general public. This may not be practical given the need for open government, requirements for public information and the wide latitude of the Freedom of Information Act. In the meantime it is recommended that the Town develop and incorporate into the permitting process a sensitivity model and related standards for the identification and protection of historic and pre-historic resources (see **Projects**).

Culturally significant landscapes, such as sites historically favored by artists, cranberry bogs and farm fields, and other sites which are significant to the cultural, economic, and historic development of the Town should also be identified through the survey and sensitivity model.

F. HISTORIC RESOURCES POLICY #23

POLICY 23 PROTECT, ENHANCE AND RESTORE STRUCTURES, DISTRICTS, AREAS OR SITES THAT ARE OF SIGNIFICANCE IN THE HISTORY, ARCHITECTURE, ARCHEOLOGY OR CULTURE OF THE STATE, ITS COMMUNITIES, OR THE NATION.

Explanation of policy:

Among the most valuable of the Town's man-made resources are those structures or areas which are of historic, archeological, or cultural significance. For a description of these resources see the accompanying Inventory and Analysis.

Protection of historic resources must include not just specific sites, but areas around specific sites, and areas of significance to cultural and economic history. These sites must be sufficiently broadly defined to include standing and subsurface historical remains, prehistoric localities and/or sites, and geographical areas of cultural, historical, economic and environmental significance. This policy is not to be construed as a passive mandate but must include effective efforts to identify, protect, restore, or revitalize historic structures, both standing and subsurface, and/or prehistoric resources, either through preservation in place or through adaptive reuse. While the Town is concerned with the preservation of all historically significant resources, the LWRP actively promotes the preservation of historic and cultural resources within the coastal boundary which have a coastal relationship.

Structures, districts, areas, sites or resources of significance to the history, economic history, cultural traditions, architecture, archeology or cultural history of the Town of East Hampton, the State, or the Nation may comprise the following:

- (1) A local landmark, park, or locally designated historic district that is located within the boundary of the Town of East Hampton Local Waterfront Revitalization Program.
- (2) A resource on or nominated to be on, or determined eligible for nomination to be on the National or State Registers of Historic Places.

- (3) A resource on or nominated to be on, or eligible for nomination to, the State Nature and Historic Preserve Trust.
- (4) An archeological resource which is on the State Department of Education's Inventory of Archeological Sites or on the archeological sensitivity model of the New York State Office of Parks, Recreation and Historic Preservation, or found through SEQRA, or through the discovery and compliance process of East Hampton Town, or through local sources, to be of local, regional or national significance relative to the eligibility criteria of the State and National Register of Historic Places. This assumes, as part of the Town's Comprehensive Plan, that the identification, definition, and evaluation of local historical and archaeological resources represents an ongoing and incremental process of local preservation and protection.
- (5) In addition to these areas of architectural and historical sensitivity, sites in the coastal zone of potential significance to the history, archaeology and culture of the Town which shall also be protected under this policy by all practicable means shall also include, but not be limited to the following:
 - (a) Cultural landscapes of pre-historic or aboriginal significance including those surrounding spiritual or ritual sites, burial sites, and areas of concentrated habitation or economic activity.
 - (b) Cultural landscapes relating to the economic history, culture history or esthetic history of the Town.
 - (c) Localities of historic or pre-historic structures, whether standing or not standing, or activities, including the subsurface remains thereof, and including waterfront structures relating to port facilities, docking, fishing, or whaling facilities, including submerged and other marine resources. Marine resources may include submerged structural remains of vessels, as well as "wash zones", due to tidal action, of associated artifacts.
 - (d) Colonial and prehistoric communication networks, such as old roads and trails, including contemporary roads which may have been built over colonial routes.
 - (e) Structures, localities or sites which reflect or are significant to patterns or periods of local economic activity, e.g. whaling stations, cranberry bogs, brick factories, smiths, shipping points and landings, wampum manufacture, signal stations, lighthouses, centers of agricultural activity, taverns, inns or way stations.
 - (f) Any site or activity of historical research potential of local, regional, or national significance more than fifty years old, e.g. cemeteries, mills, tidal

mills, traditional fisheries and fishing techniques, World War II military installations.

The above shall reflect both the concerns raised by the sensitivity model of the NYS Office of Parks, Recreation, and Historic Preservation, as well as the planning priorities and mandates of the Town of East Hampton.

Structures, districts, and sites, among others, in the Town of East Hampton area that are of historic, architectural, archeological, or cultural significance meriting protection under this policy are listed in the accompanying Inventory and Analysis. The Inventory is indicative rather than definitive, and it is expected that additional significant structures, districts and sites will be discovered through future research, or be included within the fifty year criterion.

Many one-mile square sites shown on the New York State Historic Preservation Office Site File Map, and many one-mile diameter sites shown on the New York State Archeological Site Locations Overlay Map, are sites within or near the Town's coastal boundary having the potential of being archaeologically significant. These sites are concentrated in Reaches 1, 2, 5, 6, and 7. Given the strong possibility of zones of archeological sensitivity within the waterfront area, public agencies and private parties attempting to undertake activities shall as part of the SEQRA process or locally mandated planning and environmental review procedures, consult with the State Office of Parks, Recreation, and Historic Preservation to determine whether significant archeological resources have been previously identified at proposed development sites and, further, take appropriate measures through the East Hampton Town locally mandated planning procedures or SEQRA guidelines to identify, define, and evaluate the potential presence of historic or prehistoric resources, which may be of local, regional, or national significance relative to either New York State or Federal National Register criteria for significance. If such resources are identified, the planning and permit process shall include mitigation through avoidance via design alternatives, or if avoidance is documented to be impossible, the mitigation of impacts to resources through public acquisition, or appropriate mechanisms of study and documentation in accordance with U.S. Department of Interior standards and guidelines.

The following standards and guidelines apply to construction activity within or near the Town's historically significant resources to prevent significant adverse impacts:

All practicable means to protect structures, districts, areas or sites that are of significance in the history, cultural history, economic history, architecture, archeology or culture of the Town, the State, or the Nation shall be deemed to include the consideration and adoption of any techniques, measures, or controls to prevent a significant adverse change to such significant structures, districts, areas or sites. A significant adverse change includes but is not limited to:

(1) Alteration of or addition to one or more of the architectural, structural, ornamental or functional features of a building, structure, or site that is a recognized historic, cultural, or archeological resource or component thereof. Such features are defined

as encompassing the style and general arrangement of the exterior of a structure and any original or historically significant interior features including type, color and texture of building materials; entry ways and doors; fenestration; lighting fixtures; roofing, sculpture and carving; steps; rails; fencing; windows; vents and other openings; grillwork; signs; canopies; and other appurtenant fixtures and, in addition, all buildings, structures, outbuildings, walks, fences, steps, topographical features, earthworks, paving and signs located on the designated resource property. (To the extent they are relevant, the Secretary of Interior's "Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" shall be adhered to.)

- (2) Demolition or removal in full or part of a building, structure, or element of the cultural landscape that is of relevance to the structural and historical integrity of an historic, cultural, or archeological resource or component thereof, to include all those features described above plus any other appurtenant fixture associated with a building, structure, or the subsurface remains of an identified cultural resource.
- (3) All proposed actions within 500 feet of the perimeter of the property boundary of the historic, architectural, cultural, or archeological resources and all actions within an historic district that would be incompatible with the objective of preserving the quality and integrity of the resource. Primary considerations to be used in making judgement about compatibility should focus on the visual and locational relationship between the proposed action and the special character of the historic, cultural, or archeological resource. Compatibility between the proposed action and the resource means that the general appearance of the resource should be reflected in the architectural style, design material, scale, proportion, composition, mass, line, color, texture, detail, setback, landscaping and related items of the proposed actions. For historic districts this consideration would include infrastructure improvements or changes, such as, street and sidewalk paving, street furniture and lighting.

This policy shall not be construed to prevent the construction, reconstruction, alteration, or demolition of any building, structure, earthwork, or component thereof a recognized historic, cultural or archeological resource which has been officially certified as being imminently dangerous to life or public health. Nor shall the policy be construed to prevent the ordinary maintenance, repair, or proper restoration, according to the U.S. Department of Interior's *Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings*, of any buildings, structure, site or earthwork, or component thereof of a recognized historic, cultural or archeological resource which does not involve a significant change to the resource, as defined above.

SECTION IX

SCENIC RESOURCES POLICIES #24-25

A. INTRODUCTION

The Town of East Hampton has an extraordinary endowment of coastal scenery, vistas of the slender isthmus of Napeague stretching to Hither Hills, soft-edged coastal ponds, sinuous saltmarsh shorelines, puffs of spring shad bloom undulating over Montauk's moorlands, towering hoodoo ocean bluffs west of Montauk Point. The visual quality of the coast is part of the Town's natural wealth and its cultural heritage. Panoramic views of the water and esthetic issues are important not only because they deeply affect the way people feel about living in the community, but because scenic values play a vital part in attracting visitors, residents, and businesses to East Hampton. Certain esthetic values are deeply embedded in our culture and value systems, among them the passion for visual proximity to the water.

Like people everywhere, East Hampton's residents have grown accustomed to their surroundings and tend to lose sight of the visual glory amidst their lives. Too often scenic resources are taken for granted and given short shrift until spectacular views have been marred by inappropriate development, dunescapes cluttered with boxy condominium rooflines, or the lines of dunes and bluffs broken by multi-storied homes thrust skyward for water views.

With its untreed openness, the visual integrity of the Atlantic Ocean shore is easily disrupted and the most vulnerable to impairment from development. The scenery of the more wooded Peconic Estuary coast is more forgiving and in places can better conceal residential construction. However, in the open areas surrounding the harbors, on sandy spits like Sammy's Beach, Gerard Drive and Lazy Point, and in dune areas like Promised Land and Napeague, houses obtrude in the visual landscape, especially when seen from the water. Along both Town coasts more care is needed to preserve existing views before careless development permanently disfigures them. Besides scenic values, it is important is to consider the economic and cultural consequences of public views and to prevent their further deterioration. Visual resources are a source of community pride and enhance the quality of life for residents and visitors alike.

Too often esthetic issues are dismissed by the claim that they are too subjective or a matter of individual taste. This is not true. There are proven and objective ways of dealing with esthetic issues, and the Town can take positive action to protect its visual heritage. A comprehensive inventory and analysis of Town scenic resources is envisioned in the *Scenic and Visual Resources Survey and Protection Program*, outlined in **Projects**, with subsequent development of implementing local laws. Ideally, this would be accomplished in conjunction with a parallel effort by the New York State Department of State to designate Scenic Areas of Statewide Significance (SASS) throughout the East End of Long Island (see **Policy #24**). State designation would add consistency, credibility and an added layer of protection to Town scenic resources which surely rank with the most spectacular in the State.

The Town's scenic resources can be described in terms of their physical and cultural characteristics. Physical character considers land form, vegetation, shoreline configuration, water features and land use patterns. The cultural character includes the cultural and historical elements of landscape, the design of structures and landscapes, the state of upkeep, the symbolic value and meaning of the landscape and the negative impacts of discordant or unattractive landscape features. The scenic

quality of the Town results from the interaction of these components in the landscape. High scenic quality results from a variety of contrasting components that blend well together in a unified setting. Scenic quality is also reflected through the ability of the public to view the landscape and its components and in their recognition of the values of the landscape components.

The physical character of the Town's coastal area incorporates broad vistas of the south shore Atlantic Ocean beaches, coastal ponds, the cliffs of Montauk and the Montauk Lighthouse, and the varied terrain of the northern bay shores with its rolling morainal land forms, harbors, creeks, beaches and bluffs, wooded areas and expanses of open saltmarsh. The wide variety of land and seascapes and natural vegetation hides visually incompatible development better in some areas than others. Land uses are primarily residential, commercial, and open space, interspersed with remnants of the Town's agricultural past.

The cultural character of the Town centers on the defined hamlets, of which Montauk is the only one entirely within the coastal area. The developed harbor waterfronts of Montauk and Three Mile Harbor have their own distinctive scenic character, as do the undulating wetland edges of the more pristine creeks and harbors, Northwest Creek, Hog Creek, Accabonac Harbor and Napeague Harbor. Montauk Highway is the main linking artery through the Town, and east of Amagansett it provides the most spectacular vistas of the coast.

Overall, the scenic quality of the Town is excellent, despite areas of incompatible development which affect its esthetic character. In some areas commercial and residential development is obtrusive and incongruous, with design and location of structures, site lighting, and signage out of harmony with the historic land use patterns and rural character of the Town. The preservation of the esthetic, historic, and scenic character of the Town is critical to its continued attraction as a waterfront resort community. Substantial effort is justified in order to balance growth and development with the integrity of the scenic landscape and cultural character of the Town. Development should be guided and regulated through the use of site plan, architectural review and other constraints to achieve this goal. It is important to protect these positive visual resources and to improve the quality of deteriorated areas.

In order to assess the scenic quality of the Town's coastal area, identify the important scenic components, locate the main viewpoints and to place East Hampton's scenic resources in a regional, state and national perspective, the Town recognizes the need to undertake a detailed scenic assessment. Ways of achieving this goal are discussed below and in **Projects**.

In recognition of the scenic value of the coast, the State Coastal Management Program provides for protection of Scenic Areas of Statewide Significance (SASS) and the general scenic quality of the coast. The New York State Department of State has embarked on a program to identify, evaluate, and recommend areas for designation as a SASS. NYS DOS has developed a scenic assessment methodology to determine the scenic quality and esthetic significance of the coastal area. It identifies the scenic quality of the components of coastal landscapes and evaluates them against criteria for determining esthetic significance. The scenic assessment methodology is outlined in

detail in the "Technical Memorandum: Identification of Scenic Areas of Statewide Significance in New York State" (NYS DOS, 1992).

To facilitate the determination of landscape quality, the landscape of the coastal area is divided into three categories of landscape components which are divided further into sub-elements of the landscape, as listed below:

Physical character:	land form, vegetation, shoreline configuration, and water features				
Cultural character:	land use, ephemeral characteristics, historic character, symbolic value/meaning, architectural character, landscape character, state of upkeep, and discordant features				
Views:	coastal viewshed, length of views, breadth of views, background, composition, and focal points				

To determine esthetic significance, the composition of the landscape as a whole is evaluated. All the landscape components are rated for scenic quality and are evaluated against the criteria that determine esthetic significance. These are:

- the variety, unity, contrast and uniqueness of scenic components
- the lack of discordant features in the landscape
- the degree of public accessibility and recognition of a landscape.

The components are then described according to three levels of quality and significance:

- distinctive, of statewide significance
- noteworthy, of regional and local significance
- · common

The first application of the scenic assessment methodology has been in the Hudson River Valley coastal region, where six Scenic Areas of Statewide Significance have been designated. The Draft Long Island Sound Coastal Management Program has identified that this approach could easily be applied in the Long Island Sound coastal region. The Town of East Hampton is part of this coastal region and a regional scenic assessment would help place the scenic resources of the Town of East Hampton in a statewide perspective, providing recognition to the landscapes of the Town that are of statewide significance and that are important to the community character and sense of place of the East End of Long Island.

B. INVENTORY & ANALYSIS OF SCENIC RESOURCES

Lacking a detailed survey of the Town's scenic resources, the Planning Department has compiled a list of general criteria for types of views considered scenic in the coastal zone, and criteria for types

of unattractive views or qualities that detract from scenic values, in Table IX-1, page IX-5. Since it is the large number as well as the quality of attractive views that contribute to the Town's status as one of the premier resort and recreation areas of the east coast, this report has not in this document attempted to inventory every scenic vista in detail. In Table IX-2, beginning page IX-6, the Town has listed examples of the types of views that constitute East Hampton's scenic wealth and currently exist in each reach.

Artists are a prime source for scenic values, and are perhaps most keenly and intimately aware of them. In some measure artists were the first to realize and popularize the scenic attractions of East Hampton. Two major movements in American art history have had deep associations here: Childe Hassam, William Merritt Chase and the members of the Tile Club summered here and produced some of their memorable work in East Hampton in the 1880's; and in the 20th century, major artists of the Abstract Expressionist movement, including Jackson Pollock, Willem de Kooning, Franz Kline, Adolph Gottlieb, Robert Motherwell, Stuart Davis, etc. found a haven and painted here beginning in the 1940's. These artists were inspired by the scenic qualities of East Hampton's coastal landscape, as evidenced by their journals, the extensive literature about them, and above all, their artwork.

Artists continue to contribute substantially to the present day economic and cultural life of the town. The local East Hampton Artists' Alliance has over three hundred members who are practicing artists or working in related fields. More than a dozen galleries show and sell artwork in the Town, many featuring landscape painting of local scenes. Commercial advertising and fashion photographers often utilize the open spaces of the Town as backgrounds for their work. Many movies have been filmed here, beginning perhaps with Rudolf Valentino's "Desert Sheik" in the early 1920's, to contemporary work ranging from an environmental TV series, "Earth Journal", to recent feature films like "Last Summer in the Hamptons". While they produce extensive economic and cultural benefits to the town and state, art related activities generally have minimal impact on the environment or on scenic resources themselves.

SCENIC VIEWS	UNATTRACTIVE VIEWS				
Panoramic views: scenic overlooks, views of the shoreline from the water or points on land, views of the ocean	Crowded manmade views: crowded buildings, congested roads, crowded parking lots, overcrowded anchorages				
Water views: bays, harbors, inlets, coastal ponds, virtually any body of water	Items that detract from the existing landscape: objects of color, shape or size that draw attention to themselves, e.g. garish colored or outsize signs, inappropriate architecture in an historic district				
Open spaces: uninterrupted stretches of dunelands, farmland, meadows, maritime grasslands, downs, moorlands, wetlands, beaches, points for viewing sunrises and sunsets	Structures or objects that block or interrupt a vista: telephone lines, overhead wires, billboards, fences, berms, walls, or hedges in front of a view; buildings too close together; oversized buildings; buildings isolated in surroundings, or that physically block sight-lines				
Woodland views: views from woodland trails, from roadsides looking at, into, or over forested areas, wetland vegetation, swamp thickets, scrub forests, pine, beech or oak groves	Monotonous manmade views: grid subdivisions, expanses of pavement, series of identical structures				
Unique natural features: gardens, wildflowers, wildlife, large or specimen trees, large dunes, bluffs, big boulders (glacial erratics), kettleholes, sandspits, unusual shoreline formations	Clutter, litter, trash: unkempt areas, structures with graffiti, discarded junk or vehicles, merchandise or furniture on streets, haphazardly parked vehicles, exposed trash containers				
Existing prominent features of the landscape: silhouettes, skylines, high points	Lighting pollution: large lighting installations which emit skyglow, fixtures which shine into neighboring properties or are visible for long distances, unshielded or improperly aimed fixtures, broad-spectrum or overly powerful light sources, from ballfields, parking lots, interior lit signs, illuminated signs, billboards				
Views which evoke feelings of nostalgia: traditional nautical views such as harbors or lighthouses, rural landscapes, historic structures and areas, landmarks, farm buildings and animals					
Scenic roads and byways: roadways and street ends that provide scenic views of water and coastal terrain, native flora, and generally enhance the rural character of the Town					
Views of natural diversity: multiple ecological communities, successions of different geologic and other natural formations, interfaces between marine and upland habitats, etc.					

Table IX-1: TYPES OF SCENIC OR VISUALLY INTERESTING VIEWS /UNATTRACTIVE VIEWS

Table IX-2:VIEWPOINTS, VISTAS AND SCENIC ROUTES

Reach 1 - Northwest

Barcelona Neck - coastal ponds, west side trail, overlook from bluffs of Northwest Harbor

Northwest Creek - views from County Dock, sand spit on east side, Cuffee's Landing and point of Barcelona Neck on west side

Old Northwest Road - scenic road, historic settlement area, access to trails, dogwood and other spring flowering trees

Mile Hill Road end - views of Northwest Harbor/Cedar Point, beaches east & west, walk to mouth of Alewife Brook

Grace Estate - trails, view from Kirks Park, shoreline

Cedar Point Park - Alewife Brook and Alewife Brook Pond, view from bluffs in park of Northwest Harbor and Gardiners Bay from trail along Hedges Bank, Cedar Point and Cedar Point Light

Reach 2 - Three Mile Harbor/Hog Creek

Hedges Bank - view of Gardiners Bay from bluff

Sammy's Beach - views of saltmarsh inside Three Mile Harbor, interior trails and bay beach, views of harbor and bay from interior dunes, view of boat channel from east end and breakwater

Hands Creek - views across Three Mile Harbor, natural saltmarsh, osprey and other bird life

Three Mile Harbor - sunset views from east side of harbor, including from Town Dock, Commercial Dock at Gann Road, Harbor Marina, Harbor View Drive, etc.; views of boats at marinas, commercial fishing boats at Gann Road

Maidstone Park - bay view from athletic field, back dunes and scrub adjoining beach, sunset view from east breakwater, view of wetlands from old fishing station

Flaggy Hole Road/Camp Blue Bay - view of Gardiner's Bay

Hog Creek - view of ponds to west of Creek entrance, views of Hog Creek and Gardiners Bay from either side of Creek entrance, boat marinas

Reach 3 - Accabonac

Fireplace Road end - view of Gardiners Island and Bay

Gerard Drive - scenic road, views of Accabonac Harbor saltmarsh and Gardiners Bay, bird and seal watching along beach, sunset views of harbor

Louse Point - views of harbor, boat anchorage, Wood Tick Island, fishing activities at launch ramp area, shorebirds on mud flats across channel, sunset views of harbor, sunrise views of Gardiners Bay

Barnes Landing - panorama of Gardiners Bay/ Gardiners Island/ Cartwright shoal from top of Accabonac Cliff, [sunrise] view of Gardiners Bay from Barnes Landing Road end, view of bay and ocean from Bell Estate stairway

Fresh Pond/Devon - interior view of pond, views of Gardiners Bay and Promised Land from Fresh Pond and Abrahams Landing Road ends

Reach 4 - Napeague North

Bendigo/Cranberry Hole Roads - scenic roads with views of wetlands, dunelands and bay, old fish factory at Promised Land

Old fish factory/Promised Land/Cherry Point - views of Gardiners Bay, back side of Gardiners Island, sunset view, ruins of old fish factory

Lazy Point - views of saltmarsh, salt ponds, osprey and other bird life, dune lands, Napeague Harbor, boat anchorage, Hicks Island and Gardiners Bay

Napeague Meadow Road - scenic road, views of saltmarsh and dune lands, Napeague Harbor

Art Barge (D'Amico Art Institute) - panorama of Napeague Harbor from upper deck

Walking Dunes/Goff Point - Napeague Harbor views, sunset views, back dune wetlands and Walking Dunes, panoramic views from heights of Walking Dunes

Reach 5 - Hither Woods/ Fort Pond Bay

Fresh Pond - coastal pond, unspoiled natural beach

Napeague overlook - panoramic view of bay and ocean

Quincetree Landing - natural beach, concentrations of driftwood and flotsam

Hither Woods - extensive trail system, variety of glacial topography

Rocky Point - eroding rocky headland, views of Gardiners Bay, backside of Gardiner's Island, Fort Pond Bay

Montauk Mountain - views of Fort Pond Bay and Fort Pond

Fort Pond - pond shores, scenic route along Second House Road, Second House historic museum

Fort Hill - panoramic view of Fort Pond Bay, Fort Pond to Montauk business district, and ocean, sunset views, historic Native American burial site, Council Rock, view of Montauk Manor (similar vantage point)

Hotel Montaukett - view from bluff overlooking Fort Pond Bay, legendary sunset view

Culloden Point - eroding headland with variety of natural shoreline textures

Reach 6 - Montauk North Side

West jetty - views of harbor entrance, Block Island Sound, working harbor waterfront and Coast Guard Station

East jetty - views east to Shagwong, sunset views over Block Island Sound, harbor entrance

Coonsfoot Cove/Star Island - Town commercial docks, marinas, restaurants, retail stores and fish markets, view of south end of Lake Montauk from Star Island causeway

Stepping Stones Pond/Old West Lake Drive - pond to south and Lake Montauk to north

South Lake Drive - view of south end of Lake, nearby tributary streams and wetland areas

Big and Little Reed Ponds - views of ponds, fringing marshes, dreen into Lake Montauk

Montauk County Park - dunelands, Block Island Sound along Gin Beach

East Lake Drive/Indian Field - Native American burial ground, views of Lake Montauk

Third House - views of Deep Hollow/Indian Field Ranch, views of Lake Montauk from hill above, wetlands and pond

Reach 7 - Oyster Pond/North Montauk Point

Oyster Pond - pond shores, rocky beach on Block Island Sound, seals and migrating shorebirds in fall and winter

Montauk Point and Lighthouse - panoramic views stretching to Block Island in clear weather, historic lighthouse, surf fishermen on rocks, extraordinary views from lighthouse of bluffs and rocky shoreline to west

Reach 8 - Montauk Bluffs

Turtle Cove - views of lighthouse, shoreline, bluffs extending to west

Camp Hero - hoodoo bluffs along shore, rocky shoreline, interior trail to Old Montauk Highway, views from bluffs along shore

Montauk Point State Boulevard (Rte 27) - [overgrown] Deep Hollow overlook has views to Oyster Pond

Indian Field Ranch - views of cow/horse pastures and barns

Warhol Estate TNC Preserve - views of rocky shoreline, bluffs, downs and moorlands ecosystems, coastal pond

Reach 9 - Hamlet of Montauk

Rheinstein Park - views of Shadmoor bluffs to west

Kirk Park, north side - walkway to Fort Pond

Kirk Park, south side - municipal beach, views of downtown Montauk and ocean beach from walkway over dune

Old Montauk Highway - coastal scenic route from Montauk business area to Hither Hills State Park

Town overlook, Old Montauk Highway - views of ocean beach, Benson reserve

Reach 10 - Napeague South/Amagansett

Montauk Highway/Rte 27 - scenic highway through Napeague to Bluff Road, views of dunelands, pine barrens

Navahoe Road - views of ocean beach, dunelands from over dune walkway

White Sands/Atlantic Drive - ocean beach

Whaler's Lane - interior double dune landscape

Napeague Lane - ocean beach

Atlantic Avenue - ocean beach, Double Dunes Preserve (USFWS + TNC), old Coast Guard buildings (overlook at Bluff Road/Atlantic Avenue)

Bluff Road - scenic alternate route, views of ocean, double dunes, traditional summer cottages

Indian Wells Highway - ocean beach, double dunes

Further Lane - scenic road

Reach 11 - Wainscott

Rte 27 State access to Georgica Pond - views of pond, scenic approach for canoe/kayak tours

Beach Lane - ocean beach, access to Georgica Pond at ocean gut

Wainscott Main Street - scenic road through Wainscott hamlet, farm fields, community buildings, views to dunes

Wainscott Pond - views from Wainscott Main Street, pond with ocean in background, Community Hall to north

Town Line Road - ocean beach

Reach 12 - Gardiners Island (no public access)

Bostwick Pond/Point overlook - views of north end of island, to Fort Tyler (the Ruins)

Whale Hill - WWII observation bunker atop 100' bluff, panoramic views to east and north

Tobaccolot Pond - pond views and views to Napeague Bay on backside of island

Air strip - broad vistas of southern sector of island, much of it still mowed for hay or pasture

Cartwright Spit - south end of island, extending sandspit, nesting gulls and other shorebirds

Manor House and restoration of manor buildings - some original and some rebuilt/restored buildings from the early days of the Gardiner manorial estate, including family cemetery

Gardiner Windmill - restored and maintained, one of very few on Long Island still in reasonable repair, navigation landmark from the water

C. SCENIC RESOURCES POLICIES

POLICY 24 PREVENT IMPAIRMENT OF SCENIC AREAS OF STATEWIDE SIGNIFICANCE, AS IDENTIFIED ON THE COASTAL AREA MAP. IMPAIRMENT SHALL INCLUDE:

- (i) THE IRREVERSIBLE MODIFICATION OF GEOLOGICAL FORMS, THE DESTRUCTION OR REMOVAL OF VEGETATION OR STRUCTURES THAT ARE SIGNIFICANT TO THE SCENIC QUALITY OF AN IDENTIFIED RESOURCE;
- (ii) THE ADDITION OF STRUCTURES WHICH BECAUSE OF SITING OR SCALE WILL REDUCE IDENTIFIED VIEWS OR WHICH BECAUSE OF SCALE, FORM, OR MATERIALS WILL DIMINISH THE SCENIC QUALITY OF AN IDENTIFIED RESOURCE.

Explanation of policy:

This policy is not applicable in the Town of East Hampton because Scenic Areas of Statewide Significance (SASS) have not been identified. No Scenic Areas of Statewide Significance have been identified in the Town's coastal area because the designation procedure has not been completed by the State.

As a premier resort community, the Town almost certainly contains scenic resources of statewide significance. The Town intends to undertake a comprehensive inventory and analysis of its scenic resources to identify potential sites. See *Scenic and Visual Resources Survey and Protection Program* in **Projects**. In order to implement this policy the Town recommends that a parallel regional effort be carried out by the New York Department of State to designate Scenic Areas of Statewide Significance for the entire East End of Long Island.

POLICY 25 PROTECT, RESTORE OR ENHANCE NATURAL AND MAN-MADE RESOURCES WHICH ARE NOT IDENTIFIED AS BEING OF STATEWIDE SIGNIFICANCE BUT WHICH CONTRIBUTE TO THE OVERALL SCENIC QUALITY OF THE COASTAL AREA.

Explanation of policy:

The goal of this policy is to protect and restore or enhance the Town's scenic resources, and to avoid creating views that are unattractive. Although no scenic resources of statewide significance (**Policy #24** above), have not yet been designated here, the Town hosts a remarkable spectrum of coastal scenery that attracts many visitors. Visual interest stems from both the natural beauty of the shore

and from man-made landscapes of harbors and historic structures, such as the Cedar Point and Montauk Lighthouses.

Since the late 1800's, when it first became a mecca for visual artists and a fledgling summer resort, East Hampton's existence as a community has been intimately tied to its coastal scenery. While sometimes intangible, the scenic values of the shore are an essential underpinning of the Town's economic well-being. The openness of the sea, the multiplicity of textures in beaches, dunes, wetlands, bluffs and woods that frame sky and water, are intrinsic to East Hampton's quality of life. An intimate encounter with nature, infinite vistas of the sea, the power of coastal storms, changing seasons of saltmarsh and beach, contribute to a sense of place, and serenity of the human spirit. When scenic views are broken up or intruded upon by inappropriate development or landscaping something precious is lost for citizens and visitors alike. Some vistas that made East Hampton special will never be seen by future generations.

On first examination scenic values seem subjective. However, techniques have been developed to systematically categorize and quantify the value of scenic elements and views, using public input to characterize favorite viewpoints, vistas and scenic routes. Neither the Town or State has undertaken a comprehensive inventory and analysis of East Hampton's scenic resources. The Town has expressed its intention to do so in the *Scenic and Visual Resources Survey and Protection Program* (see **Projects**) referred to in **Policy #24**. This project will conduct a visual inventory of the coastal area, including identification and mapping of coastal viewsheds, key viewpoints, and visual subunits; a survey to rate public interest and reaction; describe areas suitable for SASS designation; develop design guidelines for managing future development within scenic areas; and recommend guidelines, local laws, regulations and planning procedures to protect scenic and visual resources.

Pending completion of the *Survey* and implementation of its results, in the inventory and analysis section of this section the Town has identified areas and types of views in the coastal zone considered scenic or attractive. Guidelines for siting structures and facilities in these areas to fulfill this policy include, but are not limited to, the following:

- (1) Structures and development in general including highways, power lines and signs, should be set back from public view points such as roads, parks, and especially shorelines, kept out of sight-lines to scenic views, and sited in inconspicuous locations to maintain the attractive quality of the shoreline and to retain views to and from the shore.
- (2) Structures and lots in subdivisions should be clustered or oriented to retain views, save open space, and provide visual harmony. *Visual compatibility*, the degree of congruity or "fit" between the visual elements of a project and the setting in which it is located, should be considered in the planning process to minimize the visual impacts of development.
- (3) Existing scenic structures (especially historic structures) should be incorporated into new development so that views of and from these structures are preserved. Neighboring structures within public view should be visually integrated with the historic or scenic structure[s].

- (4) Unattractive elements should be removed when they deteriorate or become degraded. Scenic elements should likewise be restored when they deteriorate. See Table IX-1 for examples.
- (5) Original land forms and historic landscapes, including natural landscapes, farms, gardens, and specimen trees, should be maintained or restored wherever possible.
- (6) Areas of vegetation, especially native vegetation, should be maintained or added to through scenic and conservation easements, or landscaping plans, and used to provide interest, encourage the presence of wildlife, blend structures into the site, and obscure unattractive elements, except when selective clearing creates views of coastal waters from public lands. Road shoulders, to the maximum extent possible, should be planted or allowed to grow in with native species only.
- (7) As a last resort appropriate materials other than vegetation should be used to screen unattractive elements.
- (8) Buildings and other structures should be on an appropriate scale, and use forms and materials to ensure they are compatible with and add interest to the landscape. Compatible colors and materials and sensitive design can help integrate development into the landscape.
- (9) When development is unavoidable in a prominent scenic location, approval by the Planning Board for site plan review, and by the Architectural Review Board should be required to maintain the existing scenic quality of the area.
- (10) Light pollution of the night skies should be avoided by encouraging use of least-polluting light sources. All fixtures should be properly shielded and aimed at the ground. Municipal lighting installations for street lighting, parking lots, ball fields, etc. should comply with these standards. Improvements in lighting control regulations for localized sources should be considered and better enforced.
- (11) A Town-wide survey of both scenic and unattractive sites should be conducted to identify and map scenic and unattractive areas and elements, incorporate historic research, a survey of residents and tourists, provide photo-documentation, and develop further guidelines for protection, restoration or enhancement of visual resources. See **Projects**.

SECTION X

AGRICULTURE POLICY #26

A. INTRODUCTION

This section provides the Inventory and Analysis for the Agricultural Land Policy. In discussing the Town's agricultural lands, it describes the location and classification of existing farmland, lists preserved agricultural lands in the Town, and gives brief descriptions of farmland preservation techniques and problems associated with agricultural preservation. The Agricultural Land Policy outlines development review criteria to minimize future loss of important farmland.

B. AGRICULTURAL LAND INVENTORY AND ANALYSIS

1. Location and Description

East Hampton's abundant prime agricultural soils are largely a result of the glaciation occurring approximately 10,000 years ago. During the Wisconsin stage, the last part of the Pleistocene epoch, a continental ice sheet twice advanced to Long Island. As these glaciers retreated, melt water streams flowed southward carrying large volumes of well sorted till, which was redeposited to form the outwash plain. This plain is relatively flat and corresponds to the prime agricultural soils in East Hampton.

Native American agriculture predated the earliest European settlements in East Hampton, and colonial settlers absorbed a number of agricultural techniques from the natives, such as cultivation of maize, squash and beans, before largely extirpating their benefactors. The colonial settlements, based on restrictive private land ownership and intensified crop harvest, centered around the fertile farmland. Although agriculture is no longer as extensive as it was in colonial and pre-colonial days, it is still an essential component of the year-round community. Not only does agriculture contribute directly to the economy of the town, it also contributes indirectly to economic well-being by maintaining an attractive rural atmosphere which brings artists, tourists and second homeowners to the area.

The prime agricultural soils in East Hampton, according to the Soil Conservation Service are listed as capability Class I and Class II Soils and are listed below:

- Bridgehampton silt loam, 0% to 2% slopes
- Bridgehampton silt loam, 2% to 6% slopes
- Bridgehampton silt loam, till substratum, 2% to 6% slopes
- Haven loam, 0% to 2% slopes
- Haven loam, 2% to 6% slopes
- Haven loam, thick surface layer
- Montauk fine sandy loam, 0% to 3% slopes
- Montauk fine sandy loam 3% to 8% slopes
- Montauk silt loam, 0% to 3% slopes
- Montauk silt loam, 3% to 8% slopes
- Plymouth loamy sand, silty substratum, 0% to 3% slopes
- Riverhead sandy loam, 0% to 3% slopes
- Riverhead sand loam 3% to 8% slopes
- Scio silt loam, till substratum, 2% to 6% slopes
- Scio silt loam, sandy substratum, 0% to 2% slopes

- Scio silt loam, sandy substratum, 2% to 6% slopes
- Sudbury sandy loam

There are approximately 6000 acres of prime soils or 16.1% of the total land area of East Hampton. Most of the prime soil has already been committed to various forms of development, predominantly residences. While the Soil Conservation service Soil Capability System has been found to be a helpful indicator of soil productivity, the Agricultural Land Classification System for New York State was subsequently developed in 1981 to determine the agricultural value per acre of land for assessment purposes. In East Hampton, the Soil Capability System Class I and II soils corresponds to the best farmland classifications of the Agricultural Land classification system.

The 1984 land use inventory conducted by the Planning Department identified 1,565 acres of agricultural land use in the entire Town, of which 174.5 acres are within the coastal zone. This agricultural land includes orchards, pastures, nursery land and crop land. The 1995 Open Space Plan identified 733.24 acres of permanently preserved farmland, of which 53.6 acres are within the coastal zone (see Table X-1, beginning page X-9). Most of the Town's existing and protected agricultural land is not within the coastal zone. Reaches 10 and 11 contain most of the agricultural land within the coastal zone, with additional farmland on Gardiner's Island, and a scattering within Reaches 5 through 9.

2. Agricultural Land Preservation

Agricultural land preservation depends on a healthy agricultural industry with support services. The 1982 Agricultural Land Study portion of the Town's Comprehensive Plan established the goal of preserving 1,200 acres townwide in order to maintain a critical mass needed for agricultural industry survival as well as to preserve the agricultural land setting. As agricultural issues are not limited to the coastal zone, the remaining sections of this Inventory and Analysis will approach farmland issues on a townwide basis.

A five-pronged approach is used to preserve farmland in East Hampton, including:

- Mandatory clustering
- Purchase of development rights
- Right-to-farm legislation
- · Agricultural value assessment through State Agricultural Districts
- Private conservation

As recommended in the Agricultural Land Study, zoning provisions were adopted in 1982 to help promote agriculture and stem the loss of farmland to development. These provisions require cluster development to preserve 70% of the prime agricultural soils on a parcel or tract whenever land is subdivided. A minimum of 40% of soils must be preserved on individual, non-contiguous farmland parcels. Since 1982 all subdivision on prime soils and farmland has followed these restrictions. The preserved agricultural lands are set aside as permanent reserved areas. Additional lands have been preserved as agricultural easements. A total of 155.2 acres of farmland have been preserved as

reserved areas through cluster subdivisions and an additional 120.54 acres of agricultural easements have been preserved through the subdivision process.

However, these cluster requirements are not adequate to protect all the remaining farmland in East Hampton. Even though cluster development protects as much as 70% of the prime soils, land remains difficult to preserve and expensive to farm due to the influences of nearby suburbanization and a general decline in the agricultural industry. In response to this problem and to complement the Town's cluster law, both Suffolk County and East Hampton Town have instituted purchase of development rights (PDR) programs to help stimulate reinvestment in agriculture and production. In both PDR programs the land owner retains the ownership and the right to farm the land, and is compensated for the difference in land value between farming and development. A total of 265 acres of farmland in the Town have been preserved through town and county PDR programs.

A complementary program to help preserve the farm industry in East Hampton is "right-to-farm" legislation. Residents who live near farms may complain about smells, noise, dust, sprays and other by-products generated by everyday farming operations. To protect against nuisance claims and potential lawsuits curtailing farmers' activities, local right-to-farm legislation has been adopted in East Hampton to protect the normal activities conducted on working farms.

At the State level an Agricultural Districts Law adopted in 1971 provides preferential property tax assessment treatment for agricultural land for farmers who enroll in an agricultural district. Assessments are based on the agricultural value of the land rather than the full market (development) value. Furthermore, farmers are not assessed for sewer, lighting, water or non-farm drainage districts, except for non-farm structures. In return for these benefits, farmers enrolled in Agricultural Districts sign a legally binding agreement to continue farming the property for a minimum eight year period.

Similar benefits are afforded farmers owning ten acres or more who are not enrolled in a State Agricultural District, provided they make an Individual Commitment to continue farming. However, under the Individual Commitment only a one year tax reduction is provided for every eight years the farmland remains undeveloped. There are 35 separate parcels in East Hampton enrolled in State Agricultural Districts, 6 of which are located within the Local Waterfront Area. For the most part, the land enrolled in Agricultural Districts in East Hampton has already been preserved through Town or County Purchase of Development Rights programs, or through other techniques.

As public dollars for land acquisitions dwindle, local land trusts are playing an increasingly essential role in the protection of significant farmland in East Hampton. In 1983 the Peconic Land Trust (PLT) was formed as a non-profit, tax exempt conservation organization dedicated to the preservation of farmland and open space on Long Island. PLT acquires land as well as easements for conservation purposes and provides advice on estate planning and land development alternatives. The trust has already protected and is managing approximately 192.5 acres of farmland East Hampton.

Despite these efforts, both preserved and unprotected farmland are subject to private and public actions which can threaten the continued viability of agriculture on the East End. Although "preserved" farmland is prohibited from further subdivision, public condemnation of these properties for road widening, new highways, pipelines or other utilities is not explicitly prohibited. Whereas residential subdivisions on unprotected farmland must follow Chapter 110 of the East Hampton Town code requiring mandatory clustering, other developments requiring site plan review on prime agricultural lands have no such requirements. For example, semi-public facilities, country and golf clubs, public utilities, taxi companies and riding academies could be established on prime agricultural lands in East Hampton.

3. Groundwater Contamination From Agricultural Practices

Some agricultural activities have resulted in groundwater and drinking water contamination. For instance, in 1979 the pesticide aldicarb (Temik) was found in several private wells in the South Fork including in East Hampton. The groundwater conditions on the South Fork enhance mobility of carbamate, the active ingredient in Temik, while it retards carbamate degradation. This discovery resulted in a pesticide monitoring program by the Suffolk County Health Department and an agreement by Union Carbide (producer of Temik) to supply private homes with granular activated carbon filters for households or individual faucets.

Impacts from fertilizer as well as pesticide use have been detected in groundwater supplies. In wells down gradient of potato fields nitrate concentrations approaching or equaling the drinking water standard of 10 ppm were reported in the 1987 Suffolk County Comprehensive Water Resources Management Plan.

Some contemporary farming trends may help to alleviate future groundwater contamination. According to the Suffolk County Cooperative Extension office, local agriculture has been evolving from reliance on potato crops to a more diverse industry based on perennial fruit (wine grapes, apples, etc.) and nursery stock. Nominal amounts of nitrogen are used for these crops which reduces potential groundwater contamination problems (however, these activities may require significant amounts of pesticide). For example, the typical annual application of nitrogen to grapes and fruit trees is approximately 20 lbs. per acre compared to approximately 150-180 lbs. per acre for potatoes.

The development of integrated pest management (IPM) systems has the potential to significantly lower volumes of pesticide, as do introduction of better targeted chemicals and the development of efficient biological pest controls. Establishment of a proposed NYS pesticide registry system for farmers would also help to monitor and reduce dispersion of farm pesticides and herbicides into the environment.

Interest in organic produce and alternative methods of agriculture such as bio-dynamic farming has fostered the emergence of community cooperative farms such as the Quail Hill farm run by Peconic Land Trust in Amagansett where no pesticides and herbicides are used. Local farm stands are also responding to popular demand and premium prices for organic fruit and vegetables.

4. Inheritance Taxes

As noted above the State Agricultural District Law helps to reduce property taxes for agricultural land by assessing these lands at their agricultural value rather than full market [development] value. Farmland preserved through purchase of development rights programs and cluster development regulations is assessed at farm value for property and estate tax purposes. However, land enrolled in State Agricultural Districts, while assessed at agricultural value for property taxes, is valued at full market value for estate tax purposes. This "highest and best use" valuation of farmland can result in combined federal and state death taxes of up to 70% of the development value of the land, an insuperable burden for most farm families that almost compels conversion to residential or commercial development.

The Federal Tax Code provision pertaining to farmland valuation of farmland or ranch land for estates taxes (Section 2032A of the Tax Code) offers only limited assistance to family farms in East Hampton. First, the formal requirements for qualifying for 2032A relief are exacting and complex. Forms improperly filled out or not filed on time have eliminated farm families from the potential benefits. Second, the limit on the total reduction in the fair market value that is offered through Section 2032 A is \$750,000. Given the value of land in East Hampton, a \$750,000 exemption may still leave a large estate tax liability. Other limitations on this federal estate tax exemption include burdensome requirements for proof of the family's prior farming practices and commitment to continue farming in the future. To realize the "current use" or farm valuation the land must be inherited by a "qualified heir" such as a family member, ancestor, lineal descendent, spouse, etc. A Sale or conveyance of the land to someone other than a "qualified heir" within ten years of the decedent's death will result in the recapture of the tax based on "highest and best use."

In its present form the limited benefits and cumbersome requirements of this tax code provision actually encourage the development of farmland. If there is societal value in productive farmland, scenic vistas, historically significant landscapes and recreational open space, the tax code should provide incentives rather than penalties to landowners who retain their land in agricultural or other open space. The Peconic Land Trust, a local non-profit land trust specializing in farmland preservation, has proposed the following revisions to Section 2032A:

A. Expand the definition of the type of land eligible for "current use" valuation to include nonfarm properties that qualify for protection by conservation easements under Section 170(h) of the Internal Revenue Code.

B. Eliminate the \$750,000 limitation on the reduction of value of adjusted gross estates. This will enable Section 2032A to be a useful tool where real estate is highly appreciated (i.e. Long Island and elsewhere).

C. Exempt land restricted to its "current use" through perpetual conservation easements or the sale of development rights from the recapture of tax based on "highest and best use" if the ownership or use of the property changes within ten years.

D. Simplify the process through which landowners can elect the "current use" valuation for estate tax purposes.

The Town endorses these proposed tax code reforms to encourage farmland and open space preservation.

5. Summary of Preserved Land

A combination of various preservation techniques has saved 902.51 acres of active agricultural land in East Hampton (see Table X-1, beginning page X-9). See also Map II-1A/-1B, Existing Land Use, and Map II-3, Proposed Land Use, for locations of farmland, both preserved and in need of preservation. Although the Agricultural District technique is not a permanent preservation method, 162 acres of farmland enrolled in these districts has already been protected by one or another permanent method or is under discussion for preservation. Since all remaining farmland development rights cannot be purchased, a continuing combination of programs is essential to save more farmland. Federal estate tax reforms similar to those outlined by the Peconic Land Trust would help prevent the premature conversion of farmland to development. Although only 11% of the Town's total farmland is located within the waterfront and the agricultural industry could not be sustained by preserving only this land, every effort must be made to protect coastal farmland. These lands have unparalleled scenic qualities which contribute greatly to our resort economy. Preserving working landscapes, including farmland, helps to preserve East Hampton's historic and cultural values, visual attraction and sense of place.

C. AGRICULTURAL LANDS POLICY

POLICY 26 (IMPORTANT AGRICULTURAL LANDS) TO CONSERVE AND PROTECT AGRICULTURAL LANDS IN THE STATE'S COASTAL AREA, AN ACTION SHALL NOT RESULT IN A LOSS, NOR IMPAIR THE PRODUCTIVITY, OF IMPORTANT AGRICULTURAL LANDS IF THAT LOSS OR IMPAIRMENT WOULD ADVERSELY AFFECT THE VIABILITY OF AGRICULTURE IN AN AGRICULTURAL DISTRICT OR, IF THERE IS NO AGRICULTURAL DISTRICT, IN THE AREA SURROUNDING SUCH LANDS.

Explanation of Policy:

This policy cannot be applied to East Hampton, as New York State has not identified any important agricultural lands within the Town. Although many of the town's agricultural lands might qualify, the designation process has not been undertaken either by the State or Town.

POLICY 26A (LOCALLY IMPORTANT AGRICULTURAL LANDS) TO CONSERVE AND PROTECT AGRICULTURAL LANDS IN EAST HAMPTON'S COASTAL AREA, AN ACTION SHALL NOT RESULT IN A LOSS, NOR IMPAIR THE PRODUCTIVITY, OF LOCALLY IMPORTANT AGRICULTURAL LANDS IF THAT LOSS OR IMPAIRMENT WOULD ADVERSELY AFFECT THE VIABILITY OF AGRICULTURE IN AN AGRICULTURAL DISTRICT OR IF THERE IS NO AGRICULTURAL DISTRICT, IN THE AREA SURROUNDING SUCH LANDS.

Explanation of Policy:

The objective of this policy is to minimize the loss of important farmland. Such loss is of particularly concern where it would affect an agricultural area's ability to continue to exist, prosper or expand. In East Hampton farmland is important not only for its direct contribution to the economy but also for its esthetic and social benefits. Agricultural land contributes to the rural and visually appealing nature of the Town and attracts artists, tourists and second homeowners to the area. The Town has expended large amounts of money to protect existing farm acreage and has instituted a number of complementary programs including mandatory clustering, architectural review, right to farm legislation and soil conservation.

For purposes of this policy important agricultural lands include:

- land within a State Agricultural District or subject to an individual eight-year commitment to farming
- all land farmed within the last 2 of 5 years containing soils in groups 1-4 as classified by the New York State Land Classification System, or
- any land farmed within at least two of the last five years which supports high value crops.
- · land identified as agricultural on Existing Land Use Map II-1A/-1B.

Any agricultural lands not meeting this criteria but located adjacent to any such land and forming part of an ongoing agricultural enterprise shall also be considered important agricultural land. Additionally, such lands in proximity to the coast may have high scenic values and represent cultural ties to the Town's historic roots (see **Policies #23-25**). Agricultural lands are also an integral component of the Town's overall policies regarding open space, as exemplified in the Town's ordinances requiring cluster development on prime soils, and in the Town Open Space Plan of September, 1995.

The Inventory and Analysis for Agricultural Lands describes the location of prime farmland, preserved farmland, and important farm soils. Important agricultural lands are found in Reaches 3, 6, 8, 10 and 11; prime agriculture soils are found in Reaches 5, 6, 7, 8, 9, 10 and 11.

As indicated in Preserved Agricultural Land and Method of Preservation (Table X-1) 169.27 acres townwide are enrolled in a State Agricultural District or Individual Eight Year Commitment. An

additional 162.47 acres are enrolled in State Agricultural Districts but have already been preserved through another permanent preservation technique. Of the 1,565 acres of farmland remaining in 1984, 57% had been preserved by the year 1995. Although farm-related buildings and structures are allowed on these protected parcels, no residences, including farm dwellings are permitted to be constructed on preserved farmland.

A series of determinations are necessary to establish whether an action is consistent with the conservation and protection of East Hampton's agricultural lands or whether it is likely to be harmful to the health of an agricultural area. First, all actions must be reviewed to determine whether the proposed action would result in the loss of important agricultural land. A proposed action will be deemed consistent with this policy if it will not result in either direct or indirect loss of important agricultural land. A proposal which would result in some loss of agricultural lands also may be consistent with this agriculture policy if it would not adversely affect the viability of agriculture or otherwise fulfills objectives for preservation of open space. If some agriculture land will be lost as a result of the proposal, steps to minimize the loss must be followed. If an action is determined to result in a significant loss of important agricultural land then the action is not consistent with this policy.

The following guidelines help define actions inconsistent with this policy:

- 1. The action would divide an active farm with identified important agricultural land into two or more parts thus impeding efficient farm operations.
- 2. The action would result in environmental changes which may reduce productivity or adversely affect the quality of the product of any identified important agricultural lands.
- 3. The action would create real estate market conditions favorable to conversion of large areas of identified important agricultural land to non-agricultural uses. Such conditions may be created by:
 - a. public water extensions to serve non-farm structures
 - b. transportation improvements, except for maintenance of any safety improvements to existing facilities that serve non-farm and non-farm related development
 - c. non-agricultural commercial development adjacent to identified agricultural lands
 - d. establishment of public institutions or semi-public facilities such as golf or country clubs, utilities, taxi companies, or riding academies
 - e. residential uses other than farm dwellings
 - f. any change in land use regulations applying to agricultural land which would encourage or allow uses incompatible with the agricultural use of the land.

The following guidelines help define actions consistent with this policy:

- 1. Whenever land containing prime agricultural soils is subdivided these soils should be preserved. Agricultural soils should not be contained within individual building lots but maintained in large, undivided parcels. Ownership of these preserve areas may be by a bona fide non-profit organization, the Town, a farmer or individual but should not be divided among a homeowners association. Careful consideration should be given to the size, shape and location of the preserved farmland so as to minimize conflicts between non-agricultural land and agricultural land uses.
 - a. At least seventy percent (70%) of the prime agricultural soils on a parcel or tract shall be preserved where the parcel or tract:
 - 1. Is being used for agriculture or has the potential for such use; and
 - 2. Is large enough for an open space subdivision which does not significantly disturb the prime soils; and either
 - 3. Is contiguous with other parcels of land having prime soils so as to permit unification into a large agricultural area; or
 - 4. Is not contiguous with other parcels of land having prime soils so as to permit unification into a large agricultural area, but is large enough to allow preservation of a significant parcel of agricultural open space; or
 - 5. Has had some development, but is capable of unification with other agricultural parcels or tracts, and the existing development will not impede conservation of remaining prime agricultural soils.
 - b. At least forty percent (40%) of prime agricultural soils on a parcel shall be preserved where the parcel:
 - 1. Is being used for agriculture or has the potential for such use; and
 - 2. Is large enough for an open space subdivision which does not significantly disturb the prime soils; but
 - 3. Is not contiguous with other parcels of land having prime soils so as to permit unification into a large agricultural area.
- 2. Proposed commercial developments are subject to the same standards as subdivision which are described in item #1 above.

- 3. No prime agricultural top soils, Class I and II, may be removed from Agricultural lands.
- 4. An agricultural easement may be required to ensure the preservation of prime agricultural soils.
- 5. Architectural Review Board approval is required for all structures greater than 200 sq. ft., that are proposed in or adjacent to the Local Agricultural Overlay Districts of Wainscott, South Amagansett, North Amagansett and East Hampton.

Actions determined to have an insignificant effect on important farmland i.e. not exceeding the thresholds listed in 1.a. & 1.b. above shall still meet certain requirements to minimize the farmland impacts. Furthermore, land not directly necessary for the operation of the non-agricultural use but at one time part of the land area devoted to agriculture should be sold, leased or otherwise made available to farmers. The following requirements shall be met to minimize the impacts of actions determined to have an insignificant effect on agricultural land.

- a. The proposed action shall, to the extent practicable, be sited on land not identified as important agricultural land. If it is determined that no alternatives exist to siting the proposal on important agricultural land, the project should be sited to avoid classes of agricultural land according to the following priority:
 - 1. prime or unique farmland in crop, orchard or vineyard use or farmland having statewide importance
 - 2. active farmland other than listed in 1
 - 3. prime I farmland or farmland of State importance not being farmed or farmland.

TABLE 1.

PRESERVED AGRICULTURAL LAND AND METHOD OF PRESERVATION TOWN OF EAST HAMPTON OPEN SPACE PLAN, SEPTEMBER 1995

SCTM # 300-	Location	Develop. Rights	Agricult. Resrv Area	Agricult. Easement s	Private Conservation	Total Permanentl y Committed	State Agricult. District Indiv. Commitment	TOTAL All Techniques
	Amagansett							
149-03-03.2	Peconic Land Trust				95.6			
149-03-12	Peconic Land Trust				13.8			
149-04-01	Peconic Land Trust				40.4			
149-04-04.5	Peconic Land Trust	11.9					*	
149-04-04.6	Town Lane Estates SD		8.7					
150-01-1.14p/o	Stony Hill Farm		5.776					
150-01-1.14p/o	Stony Hill Farm		8.293					
150-01-1.14p/0	Stony Hill Farm		3.218					
150-01-1.14p/o	Stony Hill Farm		5.873					
150-01-1.14p/o	Stony Hill Farm		7.077					
150-01-1.14p/o	Stony Hill Farm			10.108				
150-03-01.2	Peconic Land Trust/Quail Hill Farm			11.19			*	
150-03-02.1	Edwards Estate			1.3				
150-03-02.2	Edwards Estate			1.27				
150-03-02.3	Edwards Estate			1.25				
50-03-02.4	Edwards Estate			1.23				

* Indicates parcel is enrolled in a State Agricultural District or Individual Commitment, but acreage was included in another preservation technique.

PRESERVED AGRICULTURAL LAND AND METHOD OF PRESERVATION TOWN OF EAST HAMPTON OPEN SPACE PLAN, SEPTEMBER 1995

SCTM # 300-	Location	Develop. Rights	Agricult. Resrv Area	Agricult. Easement s	Private Conservation	Total Permanentl y Committed	State Agricult. District Indiv. Commitment	TOTAL All Techniques
150-03-03	Peconic Land Trust				22.6			
150-03-06	Peconic Land Trust				20.1			
150-03-07.1	Gordon SW			1.12				
150-03-07.2	Gordon SW			1.71				
150-03-07.3	Gordon SW			2.25				
150-03-07.4	Gordon SW			.98				
150-04-01.11	Brightwell			2.38				
166-02-01.1	Cameron			2.65				
166-02-01.2	Cameron			1.43				
166-02-01.3	Cameron			2.38				
166-02-01.4	Cameron			6.12				
166-04-01.3	Pheasant Run Estates		6.6					
166-04-01.4	Pheasant Run Estates		1.4					
189-05-07.3	Little			1.42			*	
189-05-07.4	Little			3.06			*	
TOTAL AMAGANSETT		11.90	46.94	51.85	192.50	303.19	0.00	303.19

PRESERVED AGRICULTURAL LAND AND METHOD OF PRESERVATION TOWN OF EAST HAMPTON OPEN SPACE PLAN, SEPTEMBER 1995

SCTM # 300-	Location	Develop. Rights	Agricult. Resrv Area	Agricult. Easement s	Private Conservation	Total Permanentl y Committed	State Agricult. District Indiv. Commitment	TOTAL All Techniques
	Wainscott							
185-02-44	Dayton						.43	
185-02-45	Dayton						.44	
196-01-08.8	Novak						1.3	
196-01-08.9	Kern						1.6	
196-01-08.10	Shanholt						1.6	
196-01-08.11	Jemkap		14.2				*	
196-01-08.9	Kern						1.6	
196-01-08.10	Shanholt						1.6	
196-01-11.5	Hedges & Pratt		6.2					
196-03-01	Strong/Orchard at Wainscott SD			.30				
196-03-02	Strong/Orchard at Wainscott SD			.45				
196-03-03	Strong/Orchard at Wainscott SD			.56				
196-03-04	Strong/Orchard at Wainscott SD			.67				
197-04-12	Dankowski	12.2						
199-01-01.1	Strong/Orchard at Wainscott SD			.79				

PRESERVED AGRICULTURAL LAND AND METHOD OF PRESERVATION TOWN OF EAST HAMPTON OPEN SPACE PLAN, SEPTEMBER 1995

SCTM # 300-	Location	Develop. Rights	Agricult. Resrv Area	Agricult. Easement s	Private Conservation	Total Permanentl y Committed	State Agricult. District Indiv. Commitment	TOTAL All Techniques
199-01-01.2	Strong/Orchard at Wainscott SD			1.11				
199-01-01.5	Strong/Orchard at Wainscott SD			6.85				
200-1-2.1	Strong/Orchard at Wainscott SD			.366				
200-01-03.6	Monaco		3.8					
200-01-09.4	Dankowski	17.7					*	
200-1-15.2	Osborne Farm			.849				
200-1-15.3	Osborne Farm			.779				
200-1-15.4	Osborne Farm			.665				
200-1-15.5	Osborne Farm			.917				
200-1-15.6	Osborne Farm			1.01				
200-1-15.7	Osborne Farm			.665				
200-1-15.8	Osborne Farm			.769				
200-01-15.10	Osborne Farm			.803				
200-01-15.11	Osborne farm			.114				
200-01-15.6	Lauder						1.9	
200-01-15.8	Lauder						1.7	
200-01-15.9	Osborne Farm		24.1				*	

PRESERVED AGRICULTURAL LAND AND METHOD OF PRESERVATION TOWN OF EAST HAMPTON OPEN SPACE PLAN, SEPTEMBER 1995

SCTM # 300-	Location	Develop. Rights	Agricult. Resrv Area	Agricult. Easement s	Private Conservation	Total Permanentl Y Committed	State Agricult. District Indiv. Commitment	TOTAL All Techniques
200-01-21.4	Conklin Acres			0.86				
200-01-21.5	Conklin Acres			1.08				
200-01-21.6	Conklin Acres			0.21				
200-01-21.7	Conklin Acres			0.74				
200-02-24.1	Lauder						3.9	
200-02-24.2	Lauder						3.8	
200-02-28.11	Lauder		10.53				* (4.7)	
200-02-48.3	Lauder						20.1	
200-02-51.1	Lauder						38.0	
200-03-40.5	Meyer Beach La. SD		7.1					
200-03-46	Wilson						6.8	
TOTAL WAINSCOTT		29.90	65.93	20.56	0.00	86.49	80.07	166.56
	East Hampton							
73-03-06.4	Country Estates, Sec.II SD			2.28				
157-03-01	Damiecki						36.2	
157-03-02	Northwind Farms	8.7						

PRESERVED AGRICULTURAL LAND AND METHOD OF PRESERVATION TOWN OF EAST HAMPTON OPEN SPACE PLAN, SEPTEMBER 1995

SCTM # 300-	Location	Develop. Rights	Agricult. Resrv Area	Agricult. Easement s	Private Conservation	Total Permanentl y Committed	State Agricult. District Indiv. Commitment	TOTAL All Techniques
157-03-07.3	Heritage Farms			0.08				
157-03-07.4	Heritage Farms			0.10				
157-03-07.5	Heritage Farms			0.98				
157-03-07.10	Heritage Farms		18.4					
157-03-08.2	Osborne Produce (Long Lane)	13.2		1.0				
157-03-10.1	Schwenk Farms	28.2					*	
157-03-10.2	Schwenk Farms	25.8					*	
157-03-10.3	Schwenk						2.1	
157-03-10.4	Schwenk						2.0	
157-03-10.5	Schwenk						2.1	
157-03-10.6	Schwenk						2.3	
157-03-10.7	Schwenk						2.3	
157-03-11.4	Jemkap	28.7						
157-03-12.2	Osborne	25.4						
159-01-03.14	Heritage Farms		11.6					
159-01-07	Aquila Properties	13.7						
159-01-12.3	Kalish	10.3						

PRESERVED AGRICULTURAL LAND AND METHOD OF PRESERVATION TOWN OF EAST HAMPTON OPEN SPACE PLAN, SEPTEMBER 1995

SCTM # 300-	Location	Develop. Rights	Agricult. Resrv Area	Agricult. Easement s	Private Conservation	Total Permanentl y Committed	State Agricult. District Indiv. Commitment	TOTAL All Techniques
159-01-12.4	Kalish	11.0						
159-04-16.1	Bennett			1.21				
159-04-45.1	Hedge Row Estates			2.82				
159-04-45.2	Hedge Row Estates			1.51				
184-06-07	Kaplan Homestead SD, Section I, Map #7710 -		5.3					
185-01-02.9	Talmage		3.4					
185-01-20.1	Schwenk						42.2	
185-01-20.4	Schwenk	20.2					*	
185-01-20.5	Schwenk	20.2						
189-06-11.3	Mann			3.79				
TOTAL EAST HAMPTON		205.40	38.70	13.77	0.00	257.87	89.20	347.07
	Montauk							
021-02-02.6	Deep Hollow Estates, Map #7078		2.8					
021-02-03.3	E.H. Livestock Corp.	17.8						
TOTAL MONTAUK		17.80	2.80	0.00	0.00	20.60	0.00	20.60

PRESERVED AGRICULTURAL LAND AND METHOD OF PRESERVATION TOWN OF EAST HAMPTON OPEN SPACE PLAN, SEPTEMBER 1995

SCTM # 300-	Location	Develop. Rights	Agricult. Resrv Area	Agricult. Easement s	Private Conservation	Total Permanentl y Committed	State Agricult. District Indiv. Commitment	TOTAL All Techniques
	Springs							
063-02-01	Miller Farm			2.66				
063-02-02	Miller Farm			4.41				
063-02-03	Miller Farm			3.69				
063-02-04	Miller Farm			3.59				
063-02-05	Miller Farm			1.60				
063-02-14.45	Talmage Farms Lane, Sec II		0.83	2.09				
063-03-16	Miller			1.70				
063-03-17	Miller			1.58				
063-03-21.1	Miller			1.50				
063-03-22.2	Miller			2.30				
063-04-p/o 7.1,8.1	Briarcroft, Sec II			5.07				
063-04-p/o 7.1,8.1	Briarcroft, Sec II			4.17				
TOTAL SPRINGS		0.00	0.83	34.36	0.00	35.19	0.00	35.19
TOTAL TOWN		265.00	155.20	120.54	192.50	733.24	169.27	902.51

SECTION XI

ENERGY FACILITIES, ICE MANAGEMENT,

& OFFSHORE ENERGY DEVELOPMENT

POLICIES #27-29

A. INTRODUCTION

These policies address the siting of major energy facilities, ice management practices, and the development of off-shore energy resources.

B. ENERGY FACILITIES, ICE MANAGEMENT, & OFFSHORE ENERGY DEVELOPMENT POLICIES

POLICY 27 DECISIONS ON THE SITING AND CONSTRUCTION OF MAJOR ENERGY FACILITIES IN THE COASTAL AREA WILL BE BASED ON PUBLIC ENERGY NEEDS, COMPATIBILITY OF SUCH FACILITIES WITH THE ENVIRONMENT, AND THE FACILITY'S NEED FOR A SHOREFRONT LOCATION.

Explanation of Policy:

Demand for energy in New York will increase, although at a rate slower than previously predicted. The State expects to meet these energy demands through a combination of conservation measures; traditional and alternative technologies; and use of various fuels, including coal, in greater proportion.

A determination of public need for energy is the first step in the process for siting new facilities. The directives for determining this need are set forth in the New York Energy Law. With respect to transmission lines Article VII of the State's Public Service Law requires additional forecasts and establishes the basis for determining the compatibility of these facilities with the environment and the necessity for a shorefront location. (With respect to electric generating facilities, environmental impacts associated with siting and construction will be considered by one or more State agencies or, if in existence, an energy siting board.) The policies derived from these proceedings are entirely consistent with the general coastal zone polices derived from other laws, particularly the regulations promulgated pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. The Act is used for the purposes of ensuring consistency with the State Coastal Management Program and with this Local Waterfront Revitalization Program.

In consultation with the Town of East Hampton, the Department of State will comment on State Energy Office policies and planning reports as may exist, and will present testimony for the record during relevant proceedings under State law; ensure that State SEQRA and DOS regulations are followed with regard to decisions on other proposed energy facilities (other than those certified under the Public Service Law) which would impact the waterfront area, and that these decisions are made consistent with the polices and purposes of this Local Waterfront Revitalization Program.

Existing Facilities in the Local Waterfront Area

Within the coastal area, major energy facilities consist of electrical substations and transmission lines and are located in the following reaches: Reach 4, Reach 5, Reach 6 and Reach 9. These facilities all reduce a 23,000 volt transmission source to 4,000 volts in order to supply the local area's electrical demand. In addition, the substation on Fort Pond is equipped with internal backup combustion diesel engines that generate electricity during extreme peak load or emergency conditions. The LIPA Fort Pond substation is sited in an NFIP A- flood zone, and according to the Army Corps of Engineers SLOSH model, could be overwashed in a Category 2 or greater hurricane. As this substation is designed to supply emergency power for the Montauk peninsula in just such an event, its present location is inconsistent with good coastal zone management and hazard mitigation, and it should be relocated out of the flood hazard zone. The Town has so recommended in **Flooding and Erosion Policies #11-17**.

As the coastal area provides habitat to many rare and endangered species, recreational opportunities and scenic vistas important to a tourist dependent economy, and nursery grounds vital to the shellfishing and finfishing industry, it is not a suitable area to situate non-renewable energy facilities. In the future, where no viable alternative sites are available, any energy facility required to be sited in the Waterfront Area should be situated so as to maximize the setback distance from the waterfront, provide a maximum depth to groundwater, and should be well buffered.

Siting of any new non-renewable energy facilities in the East Hampton waterfront area should be limited to those necessary to serve the needs of the residents of East Hampton only. Due to the environmental sensitivity of the Town, its location at the extreme eastern end of Long Island and the configuration of the peninsula, it would at best be an inefficient utilization of resources to generate non-renewable energy to serve residents of other localities to the west.

Existing Town of East Hampton regulations encourage energy conservation in residential and commercial development. Subdivision regulations encourage a layout of streets and lots that provide an opportunity for building envelope selection that provide an opportunity for building envelope selection based on the availability of solar energy and for southern orientation of windows in structures. In compliance with the New York State Uniform Fire Prevention and Building Code, which incorporates the New York State Energy Conservation Construction Code, the Town of East Hampton Building Department implements standards for energy conservation in new public and private construction.

Local zoning code regulations require that lighting be minimized to that required for safety and convenience and that all lighting be contained onsite. It is required that outdoor illumination of signs, building facades, lawns, yards, pools, tennis courts, walks, driveways, and parking areas not be visible across property lines, including from streets.

In accordance with the New York State Energy Plan, the Town of East Hampton will continue to expand the role of renewable energy resources to ensure a sustainable and environmentally sound energy future. Historically windmills provided a source of energy for essential services of the Town's agricultural economy, ranging from pumping water to grinding grain. In addition to prevailing winds in the waterfront area, daily onshore breezes are generated by thermal upwelling overland, and offshore breezes when the temperature differential between land and water is reversed. These conditions provide a supply of an efficient, renewable source of energy in the Town. The average windspeed at Montauk is the highest on Long Island and among the highest along the eastern coast. The Department of Energy considered Montauk as an alternative site for the prototype wind generator that was eventually located on Block Island.

Technology that avails itself of this renewable source of energy should be pursued in the future, and may be appropriately sited in the coastal zone provided other environmental criteria are met. Possible sites for such activity include the former Town landfill site in Montauk and the adjacent tower farm, and the state owned land of the former Camp Hero.

The Town of East Hampton will also encourage energy conservation in commercial and residential development by periodically updating and revising regulations in order to take advantage of new technology for lighting and construction.

POLICY 28 ICE MANAGEMENT PRACTICES SHALL NOT DAMAGE SIGNIFICANT FISH AND WILDLIFE AND THEIR HABITATS, INCREASE SHORELINE EROSION OR FLOODING, OR INTERFERE WITH THE PRODUCTION OF HYDROELECTRIC POWER.

Explanation of policy:

Ice management is not usually a significant issue in the Town, and practices are limited to the provision of air bubble systems at some marinas to minimize damage to bulkheads, piles, docks, and vessels left in the water during the winter. Air bubble systems do not adversely affect fish and wildlife and their habitats, increase shoreline erosion or flooding nor do they affect the production of hydroelectric power, which is not generated in Eastern Long Island.

For residential properties and adjacent underwater lands, the only authorized docks, piers or wharfs are removable floating structures. Floating docks that are removed during the winter months facilitate ice movement out of bays and harbors during spring thaw, do not adversely affect fish and wildlife habitats, and are less likely to be dislodged and damaged during severe storms.

The Town Trustees also have a policy of prohibiting new dock construction on Trustee-owned bottomlands, which includes most private docks. Alternatives, such as rigged line and pulley mooring or use of existing marina facilities, are frequently recommended in response to new dock applications. Nothing in this LWRP should be construed to abrogate, dilute, limit or abridge any rights the Town Trustees may possess, either now or in the future, to regulate and manage properties within their control.

POLICY 29 ENCOURAGE THE DEVELOPMENT OF ENERGY RESOURCES ON THE OUTER CONTINENTAL SHELF, IN LAKE ERIE AND IN OTHER WATER BODIES, AND ENSURE THE ENVIRONMENTAL SAFETY OF SUCH ACTIVITIES.

Explanation of Policy:

The state recognizes the need to develop new indigenous energy sources. It also recognizes that such development may endanger the environment. Among the various energy sources being examined are those which may be found on the Outer Continental Shelf (OCS).

Matters pertaining to the OCS are the responsibility of the New York State Department of Environmental Conservation (NYS DEC). In 1977, the NYS DEC, in cooperation with regional and local agencies, completed a study which identified potential sites along the marine coast for on-shore OCS facilities. To date, these sites have not been developed for this purpose. The NYS DEC also actively participates in the OCS planning process by reviewing and voicing the State's concerns about federal OCS oil and gas lease sales and plans. In its review of these proposed sales and plans, the NYS DEC considers a number of factors such as effects upon navigational safety in the established traffic lanes leading into and from New York Harbor; the impacts upon important finfish and wildlife populations and their spawning areas; economic and other effects upon commercial and recreational fishing activities; impacts upon public recreational resources and opportunities along the marine coast; the potential for hazards; impacts upon biological communities; and water quality.

The Town recognizes the need to develop new energy sources. However, the development of oil and gas or other resources on the outer continental shelf could result in accidents such as oil spills which would devastate the Town's fishing and resort economy and the high environmental quality of the Town's shoreline and surface waters. The development of OCS oil and gas resources would be in direct conflict and inconsistent with the objectives and policies of the East Hampton LWRP, particularly **Significant Habitat Policy #7**, since many offshore areas are part of or near State and Locally designated Significant Coastal Fish and Wildlife Habitats (SCFWH). Such development would also most likely conflict with and **Water and Air Resources Policies #30-44**, and with national and international policies to reduce output of gasses that contribute to global warming. The development of such resources should therefore only occur as a last resort, if essential to maintain national security. Development of non-polluting, renewable energy sources, such as solar, wind or tidal power and the use of energy conservation measures should be encouraged before development of off-shore oil and gas resources is considered.

Furthermore, there are no longer any sites within the Town of East Hampton which meet the criteria for OCS support sites. Fort Pond Bay, the site identified as acceptable in 1977 is no longer available for industrial use. A portion of the site is a State, County and Town-owned Park and is classified as a New York State SCFWH. The former sand mining area is now a 13-lot residential subdivision and the former Ocean Science Laboratory is now a 150-unit resort/condominium. Only small, scattered vacant parcels remain. The 1977 study should be updated before any decisions are made regarding the development of OCS resources.

SECTION XII

WATER RESOURCES POLICIES #30-40, 44

A. INTRODUCTION

This section of the LWRP comprises twelve policies that address surface waters, wetlands and groundwater protection.

Water resources, both groundwater and surface waters, have been a critical focus of the LWRP. As an island waterfront community, existing on a sole-source aquifer and bounded on three sides by marine environments crucial to its resort and commercial fishing economy, East Hampton Town has an overwhelming interest in preserving and protecting its water resources.

Early development paid little attention to water resources, which originally must have seemed limitless. However, as development has increased, abundant supplies of pure drinking water can no longer be taken for granted, and formerly pristine harbors have had shellfish closures imposed because of pollution.

Ensuring a viable future of clean drinking and surface waters will be difficult. Groundwater must be carefully monitored, as pipelines carry water from one end of the Town to the other to alleviate shortages, maintain quality, and address salt water intrusion in low-lying areas. Increasing numbers of new golf courses, swimming pools and other high-volume users may contaminate or deplete groundwater tables, and stress on local aquifers is unlikely to diminish.

Non-point sources of pollutants enter ground and surface waters from septic systems, road and agricultural run-off, boats and other sources. They must be halted or mitigated to reverse the progressive trend of shellfish closures, wetland degradation, decreasing finfish populations, algal blooms and a perceived decline of recreational attractiveness. Remediation of polluted groundwater and surface waters, restoring damaged wetlands and terrestrial and marine ecologies, are daunting tasks. Yet they must be undertaken to avoid even more costly and complex solutions in the future.

This report surveys the Town's water resources and suggests policy initiatives to further these objectives. It includes an Inventory and Analysis of the extent, function and importance of the Town's surface water, wetland and groundwater resources within the waterfront study area. Existing standards and legislation for protecting water resources are inventoried, as are present sources of pollution and pollution abatement efforts. Results and recommendations of a 1990 boater and marina survey conducted as part of the LWRP were also used in preparing the report.

The Town is putting great effort and substantial resources into improving water quality. Several LWRP recommendations have been implemented or are in the process of being translated into local law or new initiatives. A *Harbor Protection Overlay District (HPOD)* was adopted in 1995 to reduce pollutants entering harbors (Appendix C). A bill is being considered for the State Legislature to permit localities to offer tax abatement incentives for pollution related improvements to private property. The Town applied for a *No-Discharge Zone* in July 1997 to reduce boat pollution in the enclosed harbors, and is pursuing a variety of non-point pollution abatement projects to reduce road run-off and other overland and subsurface pollutants.

These and other initiatives will continue as part of the LWRP implementation (see **Projects**).

B. SURFACE WATERS, TIDAL AND FRESHWATER WETLANDS, TOWNWIDE OVERVIEW

1. Distribution and site types

The Town of East Hampton is surrounded on three sides by water: the Atlantic Ocean to the south, Block Island Sound to the east and Gardiners Bay, Napeague Bay and Block Island Sound to the north, as the easternmost extension of the Peconic/Gardiners Bay system. There are 69 miles of outer coastline and 36 miles of protected harbor shorelines. In addition, the numerous coastal embayments, lagoons and creeks create vast tidal and freshwater wetland systems.

Several surface water and wetland systems exist throughout the Town. Of the twelve site types identified in the Comprehensive Plan (see **Significant Habitats Policy #7**), four of them, *Estuarine, True Groundwater Table Pond, True Groundwater Table Streams, and Perched Water Table*, are directly related to surface water, freshwater wetland and tidal wetland systems. Two others, *Moorlands and Downs*, are commonly associated with seasonal ponds and wetlands.

With the exception of Georgica Pond, and the water bodies located on Gardiners Island, *Estuarine* site types are distributed mainly along the north shore. Some of the more extensive *Estuarine* waters, from west to east, include: Northwest Harbor and Northwest Creek, Gardiners Bay, Three Mile Harbor, Accabonac Harbor, Napeague Bay and Napeague Harbor and Lake Montauk. *Groundwater Table Ponds* and *Perched Water Table* ponds are dispersed throughout the Town and include: Wainscott Pond, Scoy Pond, Fresh Pond (Hither Woods), Fort Pond, Tuthill Pond, Big Reed Pond and numerous smaller ponds. Brackish and fresh *Groundwater Table Ponds and Streams* may be located farther inland from coastal systems, but are related hydrologically to the current or former shoreline.

Tidal Creeks are distributed in much the same manner as the estuarine waters. They are located mainly along the north shore of the Town with extensive distributions in Northwest Creek, Alewife Brook, Accabonac Harbor, Three Mile Harbor, Napeague Harbor and Lake Montauk. These systems are made up of littoral zones, coastal shoals, mud flats and salt marshes and are subject to tidal flow twice a day.

Fresh Ponds, Coastal Ponds, Streams, Springs and Seeps are linked to both the saltwater/tidal interface and to the underground aquifers, the sole source of drinking water for the Town. *True Groundwater Ponds*, including *Fresh Ponds and Coastal Ponds*, and *True Groundwater Table Stream* systems occur throughout the Town in low lying depressions in the immediate coastal environment. *Perched Water Table* systems occur over areas of impermeable clay deposits.

The New York State Department of Environmental Conservation (NYS DEC) has identified tidal and freshwater wetland boundaries according to the Tidal Wetlands Act (Article 25 of the NYS Environmental Conservation Law) and the Freshwater Wetlands Act (Article 24 of the Environmental Conservation Law) respectively. Wetlands are found in all twelve reaches of the Town. Their characteristics and dominant vegetation are defined in Table 1, and their locations noted on Map XII-1. Note that additional categories, brackish meadows (Johnson, 1985), floating aquatic, and seep communities are defined in Table 1 to include other systems not defined by NYS DEC, but found in the Town.

Maps that describe the distribution of these wetland systems are referenced in each reach discussion. These maps were produced in various Town and County studies of the watersheds in each reach. In addition to these studies, the reader is referred to the NYS DEC Tidal and Freshwater Wetland Inventory Maps and to the Department of the Interior National Wetland Inventory, presented on Map XII-1.

2. Function, Importance and Use

The Town's surface waters link wetland and upland habitat, and support a myriad of biological activity. Wetland systems are tremendously fertile and productive habitats. Their ability to filter pollutants, recycle nutrients, produce primary food sources and shelter breeding and larval marine life is essential to the coastal food chain. Numerous endangered, threatened and special concern species identified by state and federal agencies depend on the Town's aquatic and wetland habitats (see **Significant Habitats Policy #7**).

Inner harbors and coastal embayments connect the wetland systems to the oceans and sounds surrounding Long Island. These coastal environments are characterized in *Aquatic Site Types* in **Significant Habitats Policy #7.** Such systems also provide the pathways for nutrients, plant and animal organisms to circulate, and buffer wetland and upland habitat from the direct influences of storms.

WETLAND TYPE	CHARACTERISTICS
MARINE	
Intertidal Marsh	lies between daily tides
	dominant vegetation: salt marsh cord grass (Spartina alterniflora)
High Marsh Wetland	just inland of tidal fluctuation, only inundated by Spring tides
	dominant vegetation: saltmarsh hay (Spartina patens)
Formerly Connected Wetlands	roadways or impoundments block normal tide flow
	marine plant community often infiltrated by common reed
	(Phragmites communis)
Brackish Meadow	slightly higher margins of salt marsh to dune heath
	grassy community dominated by switch grass (Panicum
	virgatum), other species

Table XII-1: Local Wetland Types

FRESH	
Coastal Freshwater Marsh	transition zone where tidal species are interspersed among freshwater wetland vegetation
	typical vegetation: freshwater cord grass (Spartina pectinata)
Emergent Freshwater Marsh	standing water/waterlogged soils near edges of freshwater surface waterbodies
	rich diversity of species; e.g. <i>Typha</i> and many others.
Flooded Deciduous	flooded or saturated soils or open water with deciduous trees
	and/or shrubs (often occurs behind salt marsh as well)
	predominant vegetation: red maple, tupelo, swamp azalea,
	sweet pepperbush
Cranberry Bog	acidic, oxygen depleted "peaty" soil
	bog mat vegetation, predominant species include cranberry
	and red maple
Floating Aquatic	pond and sluggish streams with floating and/or submergent vegetation
	6
	(Nymphaea, Nuphar), water lilies
Seep Communities	groundwater seepage along banks or bluffs
	Juncus, Equisetum, speckled alder, iris

The Town's waters support valuable commercial and recreational fin and shellfisheries, and also serve as breeding and nursery grounds that provide an essential link in the marine food chain. The local fishing industry is of county, state and national importance, and all levels of government endeavor to conserve and maintain the resource. East Hampton and New York State cooperate through the Town Shellfish Hatchery and its restocking program to maintain hard clam, oyster and scallop populations in Town waters and the State waters of the Peconic Estuary (see **Commercial Fishing Policy #10**).

New York State has included many of the Town's surface waters in the list of State Significant Coastal Fish and Wildlife Habitats (see **Significant Habitats Policy #7**). Other unique attributes of Town waters include alewife spawning areas, harbor seal "haulout" areas, a smallmouth bass fishery, and a blue claw crab fishery.

Surface waters support several sectors of the Town's economy. In addition to their food chain importance, the Town's waters provide safe harbors and moorings for the commercial and recreational fishing and boating fleets. The Town's resort status also fuels popular waterborne recreational activities like boating, swimming, windsurfing, and surfing (see **Public Access and Recreational Resources Policies #9 & #19-22**).

3. Standards and Legislation

Legislation exists at the Town (Zoning, Natural Resource Special Permit, Site Plan Review, Subdivision Review, Trustee Review); County (Health Services, Planning Commission); State (Wetlands Permits, Coastal Erosion Hazards Area Permits, Environmental Quality Review, Waterfront Revitalization consistency review); and Federal (Army Corps of Engineers permits) levels to protect surface waters and wetlands. However, with increasing development pressure the quality and quantity of surface water and wetland resources are becoming increasingly compromised.

NYS DEC has classified the marine and fresh waters of the state according to their potential best usage, has adopted water quality standards for each classification, and has identified Priority Water Bodies. Table 2 summarizes these water quality standards. These classifications are referenced in the discussion of surface waters for each Reach, and are denoted on Water Resources Maps XII-2A/-2B. NYS DEC has a coliform testing program used to maintain water quality standards under the National Shellfish Sanitation Program (NSSP), discussed below.

Permit review procedures are intended to ensure that designated standards are maintained. However, many pollution sources predate the review procedures, variances can be obtained, and violations are not uncommon. NYS DEC often issues permits for uses incompatible with the assigned water quality classification, e.g. intensive resort development or excessive residential dock construction in SA waters. In addition, non-point discharges of pollutants are difficult to control.

Table XII-2: NYS DEC Water Quality Classifications

CLASSIFICATION

FRESH WATER AA	BEST USAGE source of water supply for drinking, culinary or food processing purposes and any other usages.
А	source of water supply for drinking, culinary or food processing purposes and any other usages.
В	primary contact recreation and any other use except as a source of water supply for drinking, culinary or food processing purposes
С	suitable for fishing and fish propagation; the water quality shall be suitable for primary and secondary contact recreation even though other factors may limit the use for that purpose.
D	secondary contact recreation, but due to intermittent of flow, water conditions not conducive to propagation of game fishery; stream bed conditions will not support the propagation of fish.

<i>MARINE WATER</i> SA	BEST USAGE fishing, primary and secondary contact recreation and shellfishing for market purposes; water quality standards are the highest for any marine waters
SB	primary or secondary contact recreation and any other use except for the taking of shellfish for market purposes.
SC	fishing; not suitable for primary contact recreation or shellfishing; dissolved oxygen standards are the same as SA; permissible coliform levels substantially higher than for SA
SD	all waters not primarily for recreational purposes, shellfish culture or the development of fish life and because of natural or manmade conditions cannot meet the requirements of these uses

Classes are defined according to best usage

Primary contact recreation examples:swimming, diving, surfingSecondary contact recreation examples:fishing, boating

4. **Pollution Sources and Abatement Efforts**

(a) Water quality overview

While the Town contains an abundance of intact wetland systems and arguably the cleanest surface waters on the East End, overall water quality has deteriorated, as indicated by numerous area closures to shellfishing. Shellfish closures due to coliform bacteria contamination, as of January 1998 have removed 36% of the Town's harbor bottomlands from the shellfish resource base (see Table 3, and Water Resources Maps XII-2A/-2B). As pollution increases, these ecosystems are under increasing stress and their ability to maintain equilibrium is decreased. Pollution abatement projects, described below and in **Projects**, have begun to reverse this trend, and some improvements to water quality have been detected.

However, another stress on shellfish populations has been the Brown Tide, an algal bloom of *Aureococcus anophagefferens* which decimated the bay scallop population and eelgrass beds from the mid-80's through the mid-90's. Although the Brown Tide has not returned consistently every year and some harbors have been reseeded with scallops, the harvest has not recovered. Although extensive research has been undertaken, the causes of Brown Tide have not been established and future events may well recur.

Reach	Waterbody	Total Acreage	Closure	%
1	Sag Harbor	50	50 acres year round	100%
1	Northwest Creek	137	59 acres year round 78 acres conditional harvest	43% 57%
1	Alewife Creek	32	32 acres year round	100%
2	Three Mile Harbor (incl Hands Creek)	1025	10 acres year round 352 acres seasonal	1% 34%
2	Hog Creek	37	3 acres seasonal	8%
3	Accabonac Harbor	310	10 acres year round 102 acres seasonal (incl some conditional)	3% 33%
3	Fresh Pond	12	12 acres year round	100%
4	Devon Yacht Club	3	3 acres seasonal	100%
4	Napeague Harbor	885	0	0%
6	Lake Montauk	1085	150 acres year round 130 acres seasonal	14% 12%
7	Oyster Pond	115	115 acres year round	100%
11	Georgica Pond	350	350 acres year round	100%
	TOTAL	4,041.0	788 acres year round <u>668</u> acres seasonal or conditional 1456 Total acres	19% <u>17%</u> 36%

Table XII-3: Areas Closed to Shellfishing due to Coliform Bacteria ContaminationTown of East Hampton, January 1998

Source: NYS DEC

There is considerable debate and uncertainty over specific causes of the algal bloom and increased concentrations of coliform bacteria. Non-point sources of pollution and nutrients are by definition diffuse, diverse and, upon release, can undergo complex interactions that are poorly understood. Nitrogen loading in particular has been identified as a primary ingredient in surface water degradation.

A number of these interactions are being studied as part of the Peconic Estuary Program (PEP, see below), and new standards are expected to be presented in the Comprehensive Conservation and Management Plan (CCMP). Brown Tide has been a principal concern of the PEP and a Brown Tide initiative is bringing together research efforts of several institutions and levels of government.

Within the Town, a number of pollutant sources have been identified: leaking fuel storage tanks, waste leachates, pesticides, fertilizers, stormwater runoff, chemical residues from treated wood structures, siltation, faulty septic systems and boats. Boat wastes include: human wastes, paints, cleaners, fuel and petroleum derivatives. More visible and region-wide threats include ocean current-borne medical and other waste, and the sewage treatment plant (STP) effluent that enters the

Peconic/Gardiners Bay system from point sources at the following six facilities: Brookhaven National Lab, former Grumman Aerospace at Calverton, Riverhead Town, Sag Harbor Village, Shelter Island Heights Association, and Plum Island Animal Disease Center. The Sag Harbor STP is probably the most immediate point source of nutrient loading for Town waters, affecting Northwest Harbor in Reach 1.

The surface water quality programs described below cover only some of the known sources of pollutants. The ability to test for all pollutant parameters, or to determine precise pollutant sources is limited by insufficient resources. Town efforts to control surface water pollutants are not intended to place blame or emphasize particular sources, but to identify programs and the best available technology to improve water quality townwide. For example, the amount of discussion about boaters in this report does not imply they have a proportionately larger impact on surface water quality, but simply that there are readily available means to remediate boating impacts.

(b) Coliform bacteria analysis

Coliform bacteria derive from decaying organic matter, soil, and feces contributed by plants, wildlife and humans. Septic systems, the most common source of human fecal coliform bacteria, use surrounding soil to filter out contaminants. When septic systems are too near wetlands or surface waters (horizontally), or the vertical distance to groundwater is insufficient, they do not adequately filter contaminants and act as sources of coliform pollution. Coliform bacteria counts are used as an indicator for pathogens.

The National Shellfish Sanitation Program (NSSP) defines acceptable bacteria levels for waters where shellfish are harvested for human consumption. Regulations allow shellfishing if samples from a water body are consistently below the following standards: 70 MPN/100ml for total coliform and 14 MPN/100ml for fecal coliform bacteria. In addition, the New York State Department of Health Services regulates swimming and other "primary contact recreation", and allows beaches to stay open where the log average of a minimum of five samples collected within a thirty day period is less than 2,400 MPN/100ml for total coliform and less than 400 MPN/100ml for fecal coliform bacteria. Shellfish closures in the Town are identified on Water Resources Maps XII-2A/-2B.

There is an extensive database documenting coliform bacteria levels in Town surface waters. In all Town harbors there are consistently high values between May and August and consistently low values between January and April. Individual analyses of coliform bacteria concentrations within each harbor are provided in the reach discussions below.

Other water quality indicators such as nitrates, heavy metals, suspended sediment, hydrocarbons, viruses and phosphates are not commonly measured in NYS DEC water testing protocols, although some correlations can be drawn between contaminants. For instance, where coliform levels are high, nitrates and viruses are often at similarly elevated levels. However, high nitrate levels may also derive from overland runoff of excess fertilizers. These other contaminants are omitted from further discussion because of a lack of data. However, they may pose significant contributions to water quality problems.

Town efforts to control coliform sources include proper siting and maintenance of septic systems (discussed in the Groundwater Regulation and Protection section below), stormwater abatement projects control of hazardous materials, a continuous water quality monitoring program, and *No-Discharge Zones* and accompanying pumpout facilities for boaters. For instance, in its *Harbor Protection Overlay District* the Town requires more restrictive standards for septic systems than the Suffolk County Department of Health Services (SCDHS). These efforts are discussed in the sections that follow.

(c) Water quality monitoring

A consistent water quality monitoring program is essential to prevent additional productive bottomlands from being lost to shellfishing, for two reasons. First, NYS DEC assumes that waters must be closed to shellfishing if they are not tested. This leaves areas of bottomlands in the Town vulnerable to closure for no other reason than lack of NYS DEC testing resources. In January 1990, shellfish closures were imposed by the NYS DEC due to lack of testing and compliance requirements of the NSSP. Second, some measure of evaluation is needed to determine if water quality protection policies and regulations are effective. If they are effective, presently closed areas can be reopened to shellfishing; if they are ineffective, other means of improving water quality should be investigated. NYS DEC should continue the current practice of sampling all of East Hampton's high priority shellfish growing areas. The Town and Town Trustees will continue to offer assistance in collecting water quality data.

(d) Boater pumpout facilities

Table 4 provides a list of existing boater pumpout facilities located within the Town as of 1997. A pilot study (Cameron Engineering, 1991) has confirmed that a modification to the Town's scavenger waste treatment plant will allow this facility to process pumpout waste even though it may contain high concentrations of formaldehyde and phenols. This modification addresses phenol processing even though they are banned in New York State, because phenols are allowed in other states and there is a high population of transient boaters in Town waters.

To assist scavenger waste plant operation, however, the use of enzymes, bacterial cultures or other biodegradeable treatments for marine sanitary devices is strongly recommended for private and public marinas during the various permit review processes and in educational material distributed to boaters by the Town. Regulation at the Federal level to require biodegradeable marine sanitary device chemistry is the most direct way to eliminate this problem.

The Town has also substantially increased its capacity to store marine sanitary waste, both at the two municipal pumpout facilities in Three Mile Harbor and Lake Montauk, and at the Town scavenger waste treatment facility. In late 1997, the Town Trustees purchased a pumpout boat and, in 1998, initiated free pumpouts in Three Mile Harbor. The boat operates primarily during the summer months when boat traffic is greatest. It has a 300 gal. tank which is emptied at the Town pumpout facility.

Location	Hours of operation	Facilit y fee	Wate r dept h	Draft limitatio ns	Pumpout capacity and disposal/treatment
Three Mile Harbor		1	1		
Town Dock, Gann Road	24 hrs self service 8am-4pm with attendant	Free	6 ft	0%	2,725 gal capacity. 1 fixed + 1 portable pumpout unit. Waste is emptied and disposed of by contractor.
Harbor Marina	8 ³⁰ am-4 ³⁰ pm daily	\$25	7 ft	0%	30 gal. portable unit. Trickle feeds waste from pumpout into on-site Bio-Robi septic system. Pumpouts performed as part of marina's boat care and cleaning service on hourly rate. Adjacent to free municipal facility.
Maidstone Harbor (Duck Creek)	9am-5pm wknds 5/1- 10/31	\$20	7 ft	0%	Fixed unit, 500 gal. sealed septic tank. Waste is emptied and disposed of by contractor.
East Hampton Point Marina	8 ³⁰ am-4pm daily May- Oct	\$5	7 ft	0%	50 gal. portable unit emptied into 1000 gal. sealed septic tank. Waste is emptied and disposed of by contractor.
Shagwong Marina	9am-5pm daily	\$5	6 ft	0%	60 gal portable unit emptied into 1000 gal. sealed septic tank. Waste is emptied and disposed of by contractor.
Montauk Harbor					
Town Dock, Star Island	24 hrs self service 8am-4pm with attendant	Free	10 ft	0%	2,725 gal capacity. 2 fixed pumpout units. Waste is emptied and disposed of by contractor.

 Table XII-4:
 Summary of Vessel Discharge Facilities, Town of East Hampton

Town of East Hampton LWRP

Water Resources Policies #30-40,44

Location	Hours of operation	Facilit y fee	Wate r dept h	Draft limitatio ns	Pumpout capacity and disposal/treatment
Gone Fishing Marina	8am-5pm daily	\$5	6 ft	5%	60 gal portable unit emptied into 1000 gal. sealed septic tank. Waste is emptied and disposed of by contractor.
Captains Cove Marina	Daily, by appointment	Variab le	5 ft	10%	Contracts with a local septic waste hauler to pumpout docked boats on request into a septic pumpout truck. Fee set with boat owner by contractor.
Montauk Sportsman's Dock	9am-5pm daily	\$5	6 ft	5%	60-80 gal portable unit emptied into 1000 gal. sealed septic tank. Waste is emptied and disposed of by contractor.

Source: TOEH Application for No-Discharge Zone, April 1997

(e) Boater and marina survey

Shellfish closure areas around marinas are determined by the NSSP established by the Food and Drug Administration. The NSSP formula is based on assumptions describing the worst case scenario for generation of contaminated waters. In an effort to test these assumptions as well as the efficacy of boater pumpout facilities, a marina and boater survey was conducted at Town marinas in the summer of 1990.

The main conclusion drawn from the survey is that actual boat occupancy at marinas is significantly lower than the NSSP assumptions suggest, with less potential for coliform pollution. Proportionately less area should therefore be closed around them. Although the number of people per boat is higher in the survey, all other occupancy factors are much lower.

The survey also indicated several ways to reach the boating population with effective education that could significantly decrease pollutant discharges. These include the following:

- Distribution of educational pamphlets at local marinas (the Town is distributing 20,000 copies of a "Boaters Guide to Water Protection in East Hampton Town").
- Public service announcements in local media.
- Prominently displayed signs at harbor entrances and marinas.
- Increase the number of Harbor Masters.
- Create a new pamphlet that specifically targets boat fueling practices.
- Increase availability of shoreside sanitary facilities and signage directing people to them.

Regarding the use and availability of pumpout stations, the survey indicated that the location of existing facilities should be more prominently advertised and that additional public facilities were needed (two municipal pumpouts have since been installed in Three Mile Harbor and Lake Montauk, see Table 4 above). As noted, additional shoreside sanitary facilities are also needed, and the existing infrastructure to treat scavenger waste requires a SPDES permit to accept boater pumpout waste.

With proper management and enforcement, marine pollution can be corrected. Environmentally safe cleaning products and head products exist. The first steps have been implemented with the distribution of public education flyers and letters to marina owners. Most survey respondents indicated a willingness to keep surface waters clean.

These recommendations and others have been incorporated into **Policies #31 and #34** covering surface water quality classifications and discharge of vessel wastes.

(f) No-Discharge Zones

Although boat discharges are not the principal contributor to coliform pollution, the Town and the local marine industry are working to limit all possible sources of surface water pollutants. As part of this effort the Town has received designation of its enclosed harbors as *No-Discharge Zones* from US EPA.

Existing federal law already prohibits the discharge of untreated vessel wastes within the three mile jurisdictional limit. However, federal law allows the discharge of wastes treated by federally approved marine sanitation devices. In addition to allowable levels of fecal coliform bacteria (1000 per 100 ml for Type I and 200 per 100 ml for Type II Marine Sanitary Devices), treated wastes may contain chemical additives such as formaldehyde, phenyls, and chlorine which can adversely affect water quality. Within *No-Discharge Zones*, the discharge of any vessel septic waste, *treated or untreated*, is prohibited.

Although the *No-Discharge Zone* prohibits discharge of marine septic waste from any type of marine head or marine sanitary device (MSD), it does not otherwise affect regulation of other vessel discharges such as clean bilge water, gray water, fuel spills, boat cleaners or other waste.

The federal Clean Vessel Act (CVA) of 1992 (P.L. 102-587, Subtitle F) established a five year \$40 million matching (75% federal/25% participant) grant program for construction, renovation and operation of vessel waste pumpout and dump stations for holding tanks and portable toilets. A New York State Clean Vessel Act Plan (August 1996) implements the CVA, and a number of grants have been received by the Town and local marinas under this program to install pumpout facilities in Town waters.

Under Section 312(f)(3) and (4)(A) of the federal Clean Water Act the Environmental Protection Agency (US EPA) may approve the designation of vessel waste *No-Discharge Zones* where the State has identified the need for a *No-Discharge Zone*, and where there are sufficient pumpout facilities to support the designation. East Hampton Town was deemed to have a sufficient number of such facilities in the State Clean Vessel Act Plan.

Recent legislation (1995) amending the State Navigation Law (Section 33-c.10) provides that if the State petitions the US EPA for a determination regarding the adequacy of the number of vessel waste pumpout facilities in a water body to support a *No-Discharge Zone*, and the US EPA determines that the water body meets the criteria for a *No-Discharge Zone* or contains an adequate number of pumpouts, it is automatically a State designated *No-Discharge Zone*. In July 1997 the Town applied to the NYS DEC to obtain a federal *No-Discharge Zone* designation for Town harbors from US EPA. It was approved in January 1999. A local law implementing the *No-Discharge Zone*, **§149-60** to -67 et al of Town Code, was approved by the Town Board in June 1999.

An extensive public awareness campaign including brochures, signage, public meetings and advertisements in various media has commenced to educate the boating public. In anticipation of increased usage the Town has augmented capacity of its stationary public pumpout facilities, and is trying out various public and private enterprise strategies for pumpout boats.

The No-Discharge Zones cover all of the Town's enclosed harbors, including the following:

- Reach 1 Northwest Creek
- Reach 2 Three Mile Harbor, Hog Creek
- Reach 3 Accabonac Harbor
- Reach 4 Napeague Harbor

Reach 5Fort Pond BayReach 6Lake Montauk

The Town is an active participant in the Peconic Estuary Program (PEP, see below), and expects that as part of the Comprehensive Conservation and Management Plan (CCMP) for the Estuary, *No-Discharge Zones* will be established for the entire Peconic/Gardiners Bay system including the open waters of the Town, Northwest Harbor, Gardiners Bay, Napeague Bay, and Block Island Sound. As these waterbodies encompass multi-jurisdictional boundaries and include State waters, *No-Discharge Zones* would be better designated on a regional basis. Depending on the time frame of a PEP *No-Discharge Zone*, the Town may on its own initiative seek to extend the *No-Discharge Zone* to its jurisdictional boundaries.

(g) Septic systems

Leachate from sewage waste may have an adverse affect on coastal waters through subterranean flow of nutrients, pathogens and toxins into surface water and groundwater. Soils in the waterfront areas of Reaches 1, 2, 3, 4, 10 and 11 are generally highly permeable sand over a shallow and fluctuating groundwater table. Contamination in these areas results primarily from vertical migration of septic effluent to groundwater and groundwater recharge into coastal embayments. Soils in remaining Reaches 5, 6, 7, 8, 9 and 12, the Montauk peninsula and Gardiners Island, can contain large quantities of clay with resulting perched water tables. Contamination in these areas results primarily from lateral migration of septic effluent between confining layers of clay.

Alternatives to the standard septic tank/leaching pool system used throughout Suffolk County range from a zero discharge approach to better management of existing systems. Holding tanks for all wastes generated on site is the most extreme example and constitutes zero discharge. However such systems are costly due to the volume of discharges that would require pumping and hauling.

Separation of blackwater (toilet waste) from graywater (other wastewater) by using holding tanks for blackwater or composting toilets could significantly decrease pollutant loading of nitrogen and pathogens. Widespread adoption of such an approach would require planning for additional scavenger waste treatment capacity. In certain sensitive areas of the Town, such as Louse Point Road in Reach 3, an innovative septic system approach may be necessary if any meaningful improvements in water quality are to be realized.

While composting toilets and septic holding tanks are possible solutions for septic waste infiltration into surface waters from low lying parcels, 10NYCRR Appendix 75-A, "Wastewater Treatment Standards - Individual Household Systems", as cited by NYS Department of Health, does not allow the use of holding tanks, except for temporary use, and composters, where water is not available or too scarce to economically support flush toilets or where there is a need or desire to conserve water. According to the Department of Health, if a composter is used it must be in conformance with Appendix 75-A requirements, which includes National Sanitation Foundation Standard 41 or equivalent and also the installation and use of a greywater system. Since most of the State has more than adequate water resources it is unlikely that prevalent use of composters would be allowed. In the sand spit or wetland areas typical of the Town the problem is not a dearth of water, but

insufficient distance to groundwater, with the result that septic contaminants migrate more rapidly into surface waters than in normal recharge areas. These regulations may need to be reexamined to solve such septic waste problems. The New York State Building Code may also need to be revised to allow general and less restricted use of composters.

Suffolk County Department of Health regulations have recently been amended to allow for installation of innovative septic treatment systems. However, the regulations require a conventional system as backup, rendering the cost of such double-plumbed systems prohibitive. The Health Department standards for development and use of innovative sanitary waste systems should be periodically reviewed to determine whether they are needlessly restrictive, or whether any deleterious or beneficial effects have resulted from use of innovative septic systems. Whatever regulations are adopted or proposed, permitting of innovative septic systems should not be construed so as to allow new development in areas where requirements for conventional systems cannot be met.

Other recommendations to improve regulations and reduce impacts of septic waste treatment systems on water quality include:

- As recommended by several researchers (see Brown, 1980) and as adopted by other jurisdictions a minimum of 4 feet between septic system discharge points and the groundwater table should be required to protect shellfish resources and bathing beaches from coliform bacteria contamination. This standard has been adopted by the Town as as requirement for new construction within the *Harbor Protection Overlay District*. It should also be considered as a condition of granting a Natural Resource Special Permit in other sensitive areas surrounding wetlands or other waterbodies. Where this separation cannot be achieved, an innovative sanitary system should be investigated.
- Utilize innovative systems for public toilet facilities in sensitive areas where public access to the waterfront is provided. With partial funding from the Peconic Estuary Program the Town is constructing a public composting toilet facility for its municipal beach at South Lake Drive in Montauk, which may serve as a model for future installations.
- Investigate expansion of community facilities for treatment of scavenger waste, boat pumpout waste and recreational vehicle waste. The Town has installed a holding tank for boat pumpout waste, and has experimented with using the scavenger waste plant to accept boater pumpout waste.
 - Investigate an impact fee + incentive system for septic system upgrades. Fees could be used to fund low interest loans to individuals who can meet a set of need-based criteria for low or fixed incomes to help them install innovative or upgraded septic systems. State legislation should be considered to permit municipalities to offer property tax incentives for septic system improvements and other water quality measures on private property.

(h) Stormwater abatement program

Precipitation that falls on land is redistributed in the following ways. About 50% of it reenters, and is dispersed, in the atmosphere by the processes of evaporation and evapo-transpiration, 40 to 50% infiltrates down into the aquifer and recharges the groundwater, and from 10% to less than 1% runs off into nearby surface waters. The runoff carries with it a variety of chemical contaminants including nitrogenous products and other nutrients, heavy metals, petroleum residues, pesticides and herbicides. These chemical contaminants degrade the receiving surface waters to varying degrees. Runoff also carries particulate matter that suspends in the receiving surface water increasing turbidity, taking up oxygen and shading out bottom vegetation. When these suspended particles settle out, they coat aquatic animal membranes and aquatic plant surfaces causing further damage. Runoff also carries with it microbes (viruses, bacteria, protozoans, fungi, etc.) that can be harmful to aquatic regimes, and can be biomagnified in filter feeders eaten by humans, especially shellfish, creating a health hazard.

Ideally, this contaminant-laden runoff should be filtered or otherwise pretreated before it enters any surface waters. The Town's *Open Marsh Water Management (OMWM)* program is designed to pretreat and filter runoff before it reaches receiving waterbodies. Such pretreatment and filtration may not be economically feasible or practical, in which case the most efficacious method of keeping runoff from directly entering surface waters is to first retain it, and then discharge it into the ground by way of leaching catchment basins (LCB's). For all new development or redevelopment situated in the immediate watersheds of Town harbors, and especially those parcels within the *Harbor Protection Overlay District (HPOD)*, and around embayments, tidal creeks and coastal ponds, LCB's or appropriate substitute devices (e.g., sumps), with sufficient capacity to handle all on-site runoff, are required under Town law.

Prior to 1980 runoff from residential subdivisions, commercial sites and roadways was, unfortunately, often handled in a different matter. Runoff was collected from roads and adjacent surfaces, parking lots and other hard surfaces and shunted by way of pipes, ditches, swales or a combination of such hydraulic devices into the nearest depression or sink. In coastal areas these sinks were usually the surface waters, the majority of which were tidal. Consequently every coastal water body in the Town is ringed with one or more up gradient pipes or ditches that carry runoff into it. Most roads peripheral to coastal waters contain one or more culverts that allow runoff to pass under on its journey downgrade.

In 1988 the Town initiated a Townwide runoff pollution abatement program in order to trap runoff from all of the roads situated in proximity to its seven major tidal embayments. Coliform levels of shellfish growing waters in those embayments were regularly exceeding safe thresholds to the degree that more and more waters were becoming closed to shellfishing because of unsanitary conditions. Since that time the Town has installed approximately 100 new LCB's in road right-of-ways surrounding six embayments, all tributaries of the Peconic Estuary. Of these six, Three Mile Harbor has received the most relief from runoff by way of LCB installation. In July 1998, 156 acres of Three Mile Harbor formerly closed were reopened by NYS DEC to shellfish harvesting. Runoff abatement for Lake Montauk has gone more slowly because of the difficulty of terrain and soil conditions, but is the next priority area. The money from two recent grants, a State Clean Air/Clean

Water grant for \$100,000 to be matched by the Town, and a Federal ISTEA grant for \$170,000 to be matched with \$75,000 from the Town, have been specifically earmarked for alleviating runoff problems around Lake Montauk.

The Town's runoff abatement program is complicated by the fact that about a third of the road runoff running into Town coastal water bodies is generated from State and County roads. The State has recently installed LCB's at several spots along its two arteries in the Town, NYS Route 27 and NYS Route 114. Catchment installations on the latter road will handle runoff running into Little Northwest Creek and Northwest Creek in Reach 1. The few LCB's installed on NYS Route 27 in the vicinity of Georgica Pond (Reach 11) will handle only a small amount of the runoff generated along that stretch of highway. Runoff from other sections of NYS Route 27 reaches Napeague Harbor, and Fort Pond and Lake Montauk in Montauk. The ISTEA funded project at the south end of Lake Montauk will handle most of NYS Route 27's contribution of runoff to that body of water. Presently there is no provision to provide relief from State-highway generated runoff to Napeague Harbor and Fort Pond, although a Town plan for alleviating the State highway runoff to Fort Pond has recently been drafted and awaits funding and implementation.

Suffolk County has three major arteries peripheral to Town coastal waters: Three Mile Harbor Road along the south and east sides of Three Mile Harbor, Edgemere and Flamingo Avenues along the east side of Fort Pond and Flamingo Avenue, and West Lake Drive along the west side of Lake Montauk. The Town has installed a sufficient number of LCB's to handle runoff generated by Three Mile Harbor Road, and almost enough LCB's to handle runoff generated on the eastern part of Flamingo Avenue draining into Lake Montauk. West Lake Drive's chronic runoff problems are to be addressed with State Clean Air/Clean Water Act grants awarded to the Town and County, and funds to be matched by them, as part of the Lake Montauk Runoff Pollution Abatement Plan.

There are no funds presently earmarked to alleviate runoff from Edgemere and Flamingo Avenues into Fort Pond. A Town Fort Pond Pollution Abatement Plan addresses the Edgemere-Flamingo runoff problem, but awaits funding. In 1997 the Town completed an inventory of road-ends (see **Projects**), resulting in a series of recommendations and prototype designs for mitigating stormwater runoff at a number of locations.

(i) Harbor Protection Overlay District

The Town established a *Harbor Protection Overlay District (HPOD)* in 1995 to protect the surface waters of the Towns inner harbors by regulating the most immediate contributing areas surrounding them. The eventual goal of the HPOD is no additional losses of bottomlands to shellfish closures and reopening of as many areas as possible that are closed to shellfishing at present. The *HPOD* covers an area approximately one lot deep around the harbors (see Water Resources Maps XII-2A/-2B). Requirements include measures to control runoff, improve septic systems, provide vegetative buffers, and to reduce use of fertilizers and pesticides in affected areas. *HPOD* also incorporates a public education component which is important to fulfilling the voluntary goals for individual homeowners and property owners. See **Appendix C** for the full text of the *HPOD* local law.

Harbors included in the HPOD are:

Northwest Harbor, Northwest Creek
Three Mile Harbor, Hog Creek
Accabonac Harbor
Napeague Harbor
Fort Pond
Lake Montauk
Georgica Pond, Wainscott Pond

If *HPOD* measures prove effective in improving water quality, the Town should consider expanding the district areas to cover the primary and contributing watersheds of all Town waterbodies, including the open harbors and bays.

Among the measures included in the *HPOD*, or otherwise recommended to prevent additional losses of bottomlands to shellfishing, and to reopen as many areas as possible that are presently closed to shellfishing, are the following:

- (a) Distribute educational materials to all property owners regarding proper maintenance of septic systems including use of biodegradable cleaners, water conservation fixtures, removal of garbage disposals, regular inspections and service and opportunities for septic system upgrades.
- (b) Limit the use of inorganic fertilizers, biocides and other persistent toxic chemicals such as oils for driveway maintenance.
- (c) Designate native or other appropriate species for bank and bluff stabilization that do not require pesticides, excessive irrigation or fertilization.
- (d) Require a minimum buffer area of 50 feet of native vegetation to remain in place or be re-established upland of wetlands or surface waters when a site is reviewed for development.
- (e) Require drywells for all swimming pool discharges and locate drywells and pool chemical storage structures no closer than 100 feet upland of wetlands and surface waters. Prohibit the discharge of pool cleaning acid wash which has not been neutralized.
- (f) For building materials in contact with surface waters, only permit chemically treated wood when structurally sound alternatives do not exist (see appendix 9).
- (g) Check existing underground residential fuel tanks for leaks, and replace defective tanks.

- (h) Utilize clearing and turf restrictions similar to the Water Recharge Overlay District.
- (i) Investigate an impact fee/incentive program to upgrade septic systems to current standards, and encourage use of innovative or alternative sanitary systems. Such a program could be established in the following fashion:
 - (1) Inspection of current system (using a dye test or other method) by Sanitation Inspector to establish need for upgrade to current standards.
 - (2) If at current standards, no impact fee is assessed.
 - (3) If below current standards, a two year deadline after inspection is provided to upgrade and if upgraded, property tax credit or reduction would be given to property owner. If system is not upgraded, an annual impact fee is assessed.
- (j) When a variance to wetland setback requirements is considered on pre-existing single and separate lots, the septic system would be inspected and if it is below current standards, brought up to current standards or replaced with an innovative or alternative system.

(j) Hazardous material spills

In addition to pathogens, metals and hydrocarbons in the stormwater runoff waste stream, other hazardous materials pose direct risks to ground and surface waters and wetlands. These include fuels (storage, spills and fuel dispensing on land and over water on the docks), waste oil, pesticides and herbicides, and chemicals and solvents, both households and commercial, used for painting, refinishing, cleaning and degreasing all manner of natural and synthetic materials.

Regulatory controls on the release of these materials into surface waters and groundwater come from several sources. Regulations of the Suffolk County Sanitary Code, Article 12, which went into effect in 1980, established standards for noncorroding, secondary containment for all hazardous material storage facilities. All single walled underground fuel and other hazardous materials storage tanks were required to be upgraded or removed by January of 1991. With stiff daily fines and no extensions being offered to operators not in compliance, all single walled tanks were systematically replaced by double walled fiberglass below ground tanks or by single walled above ground tanks. Existing heating oil tanks did not required replacement, but those over 1,100 gallons require testing every five years. According to the Hazardous Waste Management Division of the Suffolk County Department of Health Services (SCDHS), plain steel heating tanks do not corrode or leak, pose no threat to groundwater, and are therefore not regulated by Article 12. In East Hampton this has been found not to be the case, and heating tanks have been known to corrode and leak, and have consequently been regulated in the HPOD. Further testing and study is recommended.

Data compiled by the Town of reported hazardous material spills between 1987 and 1990 indicate that the majority of reported spills are petroleum related and have occurred predominantly in the

Montauk portion of the coastal area. This pattern of spill incidents may reflect the exclusion of other central business areas from the coastal area in the western portion of the Town, as well as the concentration of commercial activity and marinas around the water in Montauk.

As noted in **Flooding and Erosion Policies #11-17**, certain flood hazard areas in Montauk such as Industrial Road between Fort Pond and Fort Pond Bay, and the area surrounding the docks in Coonsfoot Cove, should be inventoried for hazardous materials and remedial measures taken to insure they do not pose unacceptable risks for release of such materials in the event of storm flooding. Other locations may also require specific remediation. At the former military installations at Camp Hero, where a leaking fuel tank caused a devastating spill into Oyster Pond in January, 1991, potential hazards should be surveyed and remediated by New York State as part of a management and reuse plan (see also **Significant Habitats Policy #7, and Public Access and Recreation Policies #9 & #19-22**). Given this and other data the Town decided to regulate fuel tanks in the HPOD.

(k) Peconic Estuary Program (PEP)

In 1995 the Peconic/Gardiners Bay Estuary was approved for nomination into the National Estuary Program (NEP) by the US EPA. The Peconic Estuary Program was initiated by a coalition of federal, state, county and local government agencies and citizens in April 1996, and with federal financial assistance, has assembled an array of scientific information designed to culminate in a Comprehensive Conservation and Management Plan for issue in mid-1998. PEP has emphasized water quality and related land use and natural resources issues, especially related to the Brown Tide, and expects to recommend a series of actions to the county and five local town governments encompassing the Peconic/Gardiners Bay system.

East Hampton Town has been an active participant in the PEP. The Town Supervisor chairs the PEP Local Government Committee, the Town Planning Director chairs the PEP Technical Advisory Committee, and a number of citizens are active on the PEP Citizens Advisory Committee. The Town expects a spectrum of regional water quality measures to be implemented as a result of PEP, including upgrades of the Riverhead and Sag Harbor Sewage Treatment Plants, non-point source remediation, regional vessel waste *No-Discharge Zones*, stormwater runoff remediation, upland land use reforms, and extensive public education to encourage best management practices (BMP's) by homeowners and recreational and commercial users of the estuary.

(l) Other Town water quality initiatives

In addition, the Town and Town Trustees have undertaken a number of projects to improve and monitor ground and surface water quality, and others are proposed in **Section XIV**, **Projects**. Some of these initiatives are:

Open Space Plan

Completed September 1995, this report provides recommendations for remaining undeveloped parcels, many bordering enclosed harbors. Open space accomplishes a multitude of planning objectives including water recharge and filtration, habitat preservation and recreation. The plan proposes a variety of public and private planning alternatives including acquisition, open space cluster development, easements, management agreements, etc.

Open Space Acquisitions

The Town has acquired large amounts of open space, much of it in watershed areas of its harbors and bays, by direct purchase funded by local bond issues, or purchased in cooperation with other levels of government. Examples of larger tracts include the Grace Estate and Barcelona Neck in Northwest, Hither Woods in Montauk, and many smaller parcels including sensitive pieces surrounding Northwest Creek, Three Mile Harbor, and Accabonac Harbor. The Town also works closely with non-governmental organizations such as The Nature Conservancy and Peconic Land Trust, and has an active Open Space Committee engaged in identifying and prioritizing open space purchases and funding.

Open Marsh Water Management (OMWM)

The Town Natural Resources Department (NRD) has constructed small dams to block mosquito ditches through saltmarsh areas surrounding the harbors, in order to impound pollutants and allow them to be naturally filtered through the saltmarsh. Reintroduction of natural predators also is an effective and more desirable method for mosquito control, and helps to restore the nursery productivity of the harbors.

Stormwater Abatement

Stormwater abatement work (see above) has been performed for many locations around Accabonac and Three Mile Harbors. The Town has received funding for stormwater remediation around Lake Montauk under the State Clean Water/Clean Air Bond Act. Catchment and marsh filtration areas, including for the poorly flushed marina area of Coonsfoot Cove, are being designed by the Town in a cooperative effort by the Natural Resources and Highway Departments and the Town Engineer.

Marsh Pond Filter System for South Lake Montauk (Oceanside Drain Project)

This project is designed to impound and filter pollutants emanating from the low lying Oceanside subdivision at Ditch Plains, which has been a documented source of coliform in South Lake Montauk. Design, engineering and permitting for the project is largely complete and work is projected to be completed in 1998.

Composting Toilet, South Lake Drive, Montauk

Utilizing partial funding from the Peconic Estuary Program, the Town is designing and constructing a composting toilet at a public bathing beach to demonstrate use of waterless toilets in preventing pollutants from entering the harbors.

Road-ends Survey and Redesign Project

Under an Environmental Protection Fund matching grant obtained through the NYS Department of State, the Town Natural Resources Department surveyed road-ends leading to surface waters, and designed prototype solutions to control stormwater runoff, flooding and erosion.

Water Quality Testing Program

In response to shellfish closures based on inadequate water quality testing, the Town has conducted its own water testing program in conjunction with Cornell Cooperative Extension and NYS DEC Stony Brook. The objective is to quantify water quality in order to maintain open shellfish areas, to identify sources of pollutants and problem areas in the harbors.

Boater Education

The Montauk Harbor Association, in cooperation with the Concerned Citizens of Montauk, has published brochures promoting environmentally sound boating practices, e.g. using pump-outs, bio-degradable detergents, etc. In 1997, in anticipation of establishing a *No-Discharge Zone*, the Town published 20,000 copies of a Boater's Guide to Water Protection. Town Harbormasters also conduct regular presentations to students and other groups on safe boating and other boating procedures. A *Clean Waters, Better Boating* promotional campaign has been inaugurated in 1998 to publicize the *No-Discharge Zone* and other Town clean water initiatives. The Town intends to amplify and continue these efforts in coordination with the local marine industry and the Peconic Estuary Program.

C. Surface Waters and Wetlands, Reach Inventory and Analysis

Reach 1 - Northwest

In 1983, the Generic Environmental Impact Statement Concerning Future Development at Northwest Harbor noted that "the Northwest Harbor has one of the most extensive and pristine salt and freshwater wetland systems in Suffolk County." This remains true today and was further assured due to the Town acquisition of the Grace Estate property in 1986, NYS DEC purchase of Barcelona Neck in 1989, and The Nature Conservancy's Mashomack Preserve on Shelter Island.

A detailed descriptive inventory of the surface waters and wetlands in this reach is provided in the above mentioned study. The shoreline is relatively undisturbed with minimal development. There are, as a result, hundreds of acres of undisturbed tidal and freshwater wetlands. The upland surface and subsurface freshwater are divided into three watershed systems which flow into two separate receiving basins.

The watersheds are summarized as follows:

UPLAND WATERSHED	RECEIVING BASIN	REPRESENTATIVE WETLAND TYPES
Little Northwest Creek	Sag Harbor Bay	intertidal marsh high marsh coastal freshwater marsh
Northwest Creek	Northwest Harbor	intertidal marsh high marsh coastal freshwater marsh brackish meadow
Alewife Pond-Scoy Pond	Northwest Harbor	all marine and freshwater types except seep communities

Water quality classifications in Reach 1 are generally of a high standard. The waters of Sag Harbor Bay, Northwest Harbor and Northwest Creek are all classified as SA waters (see overview), the highest for any marine waters. However, measurements of coliform bacteria have exceeded NSSP standards for shellfishing in portions of Northwest Creek and Alewife Brook. Following NSSP regulations, Northwest Creek is designated as Uncertified for shellfishing by NYS DEC. The northern portion is open conditionally to shellfishing and the boat basin and the southern portion are closed year round (see Water Resources Maps XII-2A/-2B. The opening of the northern portion is conditioned on not more than .25 inches of rainfall recorded in a 24 hour period, after which the area is closed for a week. The Alewife Brook/Alewife Pond system is also closed year round to shellfishing. For these reasons, the highest drainage abatement priorities recommended for Reach 1 are to address significant stormwater runoff inputs to Northwest Creek and Alewife Brook.

Little Northwest Creek and the Alewife Brook/Alewife Pond system are classified SC. Except for an unnamed pond south of Scoy Pond, classified as D, the other freshwater bodies in this Reach, Rattlesnake Creek, Little Northwest Creek, Scoy Pond and tributaries to Alewife Pond are classified as B.

Several of the areas of poor water quality in Reach 1 are adjacent to Suffolk County parklands. Possible sources of contamination in these areas include drainage ditches, culverts, illegal dumping, parkland activities and toilet facilities, wildlife and a small cemetery on Swamp Road. With very limited flushing in the Alewife Brook and Northwest Creek systems, even small sources of contamination may have dramatic impacts on water quality.

To test the contribution of coliform bacteria from the vector control ditches leading to the harbor, Cornell Cooperative Extension has been gathering data on total and fecal coliform levels in the ditches of Northwest Creek (Reach 1) and Accabonac Harbor (Reach 3). This data has been used to pinpoint areas that require drainage abatement structures, septic system upgrades or some type of *Open Marsh Water Management (OMWM)*. Approximately eighteen ditches leading to Northwest Creek have been dammed by the Town Natural Resources Department. Whereas vector control ditches shunt water quickly from wetlands to the harbor, these dams have allowed the wetlands to collect and filter the water with high coliform bacteria levels before reaching the harbor. The dams have allowed the water to remain in the wetlands which has effectively reduced the coliform bacteria levels in the harbor. In other instances, ditches may be connected to increased flushing of high coliform areas (Hasbrouck, 1991).

The secondary sewage treatment plant (STP) in Sag Harbor has an effluent outfall pipe leading into Sag Harbor Bay. This plant, having a 150,000 gallon daily capacity, is the only sewage treatment plant that discharges into surface waters within the boundaries of East Hampton. During summer months when sewage generation is high the system exceeds treatment capacity in heavy rain events. At these times, an additional 50,000 gallons of untreated liquid waste can be retained in an equalization tank as part of an emergency backup system. Upgrades are needed for this plant to reduce the nitrogen loading in the effluent and to accommodate the waste flow. On the ebb tide effluent from the Sag Harbor STP is released into Northwest Harbor.

Prior to the Brown Tide algae bloom of 1985, 1986 and 1987, which decimated scallop stocks, the Peconic/Gardiners Bay typically accounted for about one-quarter of all bay scallops harvested in the United States (Suffolk County Planning Department [SCPD], 1987). As part of the Peconic/Gardiners Bay system, Northwest Harbor was one of the best scallop producing areas on the east end. The relatively undisturbed uplands in Reach 1 contribute to otherwise high water quality in the harbor. On this basis bay scallop reseeding activities of the Green Seal Management Committee have focused on sites in Northwest Harbor and Northwest Creek respectively (U.S. Army Corps., 1989). Many of the planted scallops successfully overwintered in 1988/89 and produced offspring in the 1989 and 1990 summer seasons. Unfortunately, cell counts of Aureococcus anophagefferens, the Brown Tide algae, reached 500,000 cells per milliliter from mid June through early July of 1991 and the scallops were threatened once again. In an effort to protect the scallops from the 1991 Brown Tide, 30 bushels were transplanted from Northwest Harbor to Lake Montauk on July 4th, 1991. Scallops were also relayed by NYS DEC to Moriches Bay (18 bushels) and Shinnecock Bay (20 bushels). The data provided by the SCDHS regarding the high level of Aureococus anophagefferens helped to develop a timely response for relaying the scallops.

Although bay scallops are the most important fishery, Northwest Harbor also supports oysters, hard clams, conch, eels, mussels and a variety of finfish. Human and natural impacts also affect these fisheries.

Reach 2 - Three Mile Harbor/Hog Creek

This reach encompasses the westernmost basin of Gardiners Bay within Town jurisdiction as well as the Three Mile Harbor and Hog Creek watersheds. Three Mile Harbor is a 1,125 acre embayment fringed by 83 acres of tidal wetlands (SCPD, 1983). Hog Creek is a considerably smaller waterbody, 37.2 acres, with a thin wetland fringe along its border that is situated on residential properties and has been partially bulkheaded (see **Flooding and Erosion Policies #11-17**). Both water bodies are tidally connected to Gardiners Bay.

The largest freshwater wetland in this reach, an emergent marsh, is located south of Soak Hides Dreen. The majority of the wetlands in this reach are tidal. The natural resources inventories prepared for the Three Mile Harbor Watershed (SCPD, 1983) and the Accabonac Watershed (SCPD, 1987) describe the extent and distribution of the wetlands in Three Mile Harbor and Hog Creek respectively. Although not noted in the 1983 study, *Seep communities* (see Table 1) are found along the steep banks of the Springy Banks and Hands Creek areas.

Water quality in the reach has historically been very good. Gardiners Bay, Hog Creek and Three Mile Harbor are classified as SA. Hands Creek, a tidal creek contiguous with Three Mile Harbor, is designated as SC, and Soak Hides Dreen, a freshwater tributary that drains into the southern portion of Three Mile Harbor, is designated as B. Good water quality contributes to prime habitat for wintering waterfowl, nesting shorebirds and the threatened osprey. See **Significant Habitats Policy #7**. However, pollution evidenced by coliform bacteria levels and the recurrent Brown Tide have placed the ecosystem in jeopardy, and although Brown Tide has receded, eelgrass beds and bay scallop populations have yet to rebound in Three Mile Harbor.

Water Resources Maps XII-2A/-2B denotes the areas in Reach 2 now closed to shellfishing under NSSP guidelines. **Policy #34** provides recommendations on how this closure may be diminished or avoided.

Coliform data for Three Mile Harbor show that coliform bacteria reach their maximum levels in the summer season in the areas where there is both poor flushing and a concentration of marinas and stormwater runoff. These areas include the head of the harbor north of Soak Hides (Tan Bark) Creek and the southeastern side of the harbor. Many sources contribute to coliform contamination including stormwater runoff, marine head waste, poor flushing of tidal creeks, and malfunctioning septic systems situated in filled wetland areas that rest in the groundwater.

The Town is pursuing all available means of remediating pollution. Table 4 lists pumpout stations located throughout Three Mile Harbor. Acquisition of sensitive lands at the head of the harbor has contributed to the reduction of septic leachate by removing marginal land from development. Stormwater abatement efforts to date in Reach 2 have included installation of catchment basins to collect and filter stormwater runoff. Three Mile Harbor is surrounded by extensive residential development with many sources of stormwater runoff. Many of these inputs have either had remedial drainage work completed or are targeted for future drainage abatement projects.

The portion of Hog Creek is surrounding the Clearwater Beach marina is closed seasonally to shellfishing from April 1 to December 14 (NYS DEC, 1998). See Water Resources Maps XII-2A/-2B. The remainder of the Creek is open. As in the Three Mile Harbor watershed, Hog Creek is surrounded by dense residential development and high volume stormwater runoff, a high priority for drainage abatement requirements, and considerable abatement work has been completed to date.

Reach 3 - Accabonac

Reach 3 extends from Hog Creek Point to Devon and includes the eastern basin of Gardiners Bay to where it connects with Napeague Bay to Block Island Sound. It includes Accabonac Harbor and

Fresh Pond. Two upland watersheds drain into Accabonac Harbor, with the Fresh Pond drainage system to the south. The 14.7 acres of Fresh Pond were given the highest rank among several environmental criteria that assessed water quality in the 1984 Town Comprehensive Plan (TOEH, 1984) and is designated as a Locally Significant Coastal Fish and Wildlife Habitat (Significant Habitats Policy #7). NYS DEC has classified Gardiners Bay and all of Accabonac Harbor under a water quality standard of SA.

The 306.0 acres of Accabonac Harbor is surrounded by approximately 275 acres of relatively undisturbed wetland habitat (SCPD, 1987). Over 634 acres surrounding Accabonac Harbor has been permanently protected by acquisition by New York State, Suffolk County, the Town, and The Nature Conservancy.

The areas directly influenced by the daily tides contain intertidal, high marsh and formerly connected wetlands. Four categories of freshwater marsh occur as well, including coastal freshwater, emergent and flooded deciduous wetlands, and cranberry bog wetlands. All wetlands types are described in the overview above. The extent of the tidal and freshwater wetlands is mapped in the 1987 Accabonac Harbor Area Study (SCPD, 1987).

The water quality in the harbors and ponds of this reach is generally very good. However, coliform bacteria data from Accabonac Harbor show several areas of fair to poor water quality including the area receiving discharge from Pussy's Pond, East Harbor and the area receiving stormwater runoff from Landing Lane. Fecal coliform values consistently exceed standards in these areas. In accordance with NSSP standards, NYS DEC has closed the entire southern end of the harbor seasonally (May 1 to November 30) to shellfishing. From December 17 to April 30, East Harbor is open conditionally, depending on rainfall. If more than .30 inches of rain falls within a 24 hour period the conditional area is closed for a seven day period following (NYS DEC, 12/97). See Water Resources Maps XII-2A/-2B.

High coliform counts in the above areas result from a number of factors. Due to restricted outflow, contaminants are circulated on the daily tides within, rather than flushed out of, the harbor, (SCPD, 1987). Complete flushing has been estimated to take from five days (Pritchard and Gomez-Reyes, 1986) to ten days (SCPD, 1987), up to 14 days (Welker, 1976/77). In addition, contaminants reach the harbor through stream flow, stormwater runoff, boat waste, vector control ditches and groundwater seepage that entrains septic effluent.

Drainage improvements have been installed to collect and filter stormwater before it reaches Accabonac Harbor at Landing Lane, Louse Point Road, Shipyard Lane, School/Cross Street and Springs Fireplace Road. Priority projects, both completed and pending, are concentrated at the southern end of the harbor where shellfish closures are already in effect. As noted in the Reach 1 discussion above, the vector control ditches of Accabonac Harbor are being tested by Cornell Cooperative Extension for sources of coliform bacteria contamination (see Reach 1 discussion). A pilot *Open Marsh Water Management (OMWM)* project to dam up the vector control ditches and impound contaminants, has met with some success (see **Projects**).

The land immediately surrounding Fresh Pond is entirely owned by the Town and is designated parkland. However, high coliform counts in Fresh Pond, as taken by NYS DEC in January, 1986, resulted in a year round closure of the pond to shellfishing. Contamination can be attributed to several factors including limited interchange between the bay and the pond, a public restroom leaching field in proximity to the pond, and pollutants from the up-gradient residential area, which are directed into the pond by Vector Control ditches traversing a large wetland system. With such a long term water quality problem in an area surrounded by parkland, the Fresh Pond watershed is a high priority for drainage abatement.

Reach 4 - Napeague North

Reach 4 is defined by the north shore of a sandy isthmus that connects the Montauk headland with the rest of the south fork at Amagansett. This area, along with Reach 10, is known as Napeague, a Montauk Indian word meaning "waterland". The surface waters in the reach include Napeague Bay and Block Island Sound; Napeague Harbor, a large shallow embayment; Napeague Pond (Pond of Pines), a brackish pond tidally associated with Napeague Harbor; and Fresh Pond, a true groundwater table pond situated to the east of Napeague Harbor.

Water quality in this Reach is very good and supports several diverse plant and animal communities of commercial, ecological and recreational importance. The NYS DEC designates all waterbodies in the reach with "SA" classifications, except for Fresh Pond, a fresh/brackish coastal pond designated "C".

Coliform bacteria sampling in Napeague Harbor indicates the best water quality in any of the Town's harbors. Napeague Harbor supports the largest self-sustaining bay scallop population in the Town. However, the coliform data suggest that several areas should be monitored closely to protect against future contamination. These include the southeast corner of the harbor adjacent to several septic systems, road end stormwater runoff areas, the area adjacent to Crassen Boulevard and the mooring area.

The wetlands in this reach are also extensive and diverse. There are many freshwater cranberry bogs and a large salt marsh known as Napeague Meadows. This marsh is located between the bay and ocean dune lines and open to the tides from the southwest corner of Napeague Harbor. Two sources, Johnson (1985) and TOEH (1989), provide a map of the extent and distribution of these wetlands and surface waters.

The tidal wetlands of the Napeague Meadows were ditched and drained in the 1930's and sprayed with DDT for mosquito control. The ecological response for two decades (end of World War II to mid-1960) was the near disappearance of the osprey in the 1960's. While the ditches are still maintained by Suffolk County Vector Control, DDT was banned in the early 1970's, and by 1983 the ospreys started nesting again at Napeague.

Reach 5 - Hither Woods/Fort Pond Bay

The wetlands and surface waters in this reach are primarily associated with the northern shoreline of the Montauk headland starting at the east end of the Napeague isthmus, and extending to Culloden

Point at the north end of Fort Pond Bay. In addition, several freshwater ponds collect surface runoff and groundwater seepage from the surrounding upland and drain into Fort Pond Bay.

The NYS DEC has classified the marine surface waters in this Reach as "SA". However the freshwater ponds, Fort Pond and Tuthill Pond are classified as "B" and "C" respectively. Tuthill Pond is frequently subject to overwash by saltwater in storm conditions.

Fort Pond Bay is an exceptionally pristine body of water that is very deep near shore (47') and well flushed by open tidal connection to Block Island Sound. For these reasons, the Town chose Fort Pond Bay for the site of a municipal aquaculture facility for hatching and growing out shellfish. The shellfish are used to stock Town and nearby State waters.

The majority of the Fort Pond Bay shoreline is steeply sloped, resulting in few areas of tidal marsh. There are freshwater wetlands associated with Tuthill Pond and Fort Pond located primarily downgradient, i.e. between the ponds and Fort Pond Bay. Other freshwater wetlands are found in this reach in kettlehole depressions near Culloden Point.

Opportunities exist along the southernmost curve of Fort Pond Bay for reclamation and creation of wetland habitat previously lost by regrading and fill deposition during construction of roads, the railroad, and other structures.

The greatest threat to surface water ecosystems in Reach 5 is degradation due to increased pressures for commercial and marina development. Existing zoning in this area allows for Residential, Commercial Industrial, Neighborhood Business, Central Business, Waterfront and Resort uses.

Reach 6 - Lake Montauk

Reach 6 includes the 1102.0 acres of Lake Montauk, and its watershed, which includes Big Reed and Little Reed Ponds, Stepping Stone Pond, and numerous freshwater and tidal wetlands. It extends into Block Island Sound to include Washington Shoal and Shagwong Reef. The north end of Lake Montauk, Montauk Harbor, is best known as the heart of the commercial and recreational fishing industry in East Hampton.

NYS DEC has classified all the marine surface waters in this reach as SA. However as shown on Water Resources Maps XII-2A/-2B, several areas of Lake Montauk are closed to shellfishing. Coonsfoot Cove is closed year round and areas east of Star Island and at the southern end of the Lake are closed seasonally (NYS DEC, 12/97).

Tidal flushing in Lake Montauk occurs through the 500-foot wide inlet at the lake's northern end. While the northern two-thirds of the lake are generally well mixed, Star Island is situated directly south of the inlet and directs currents to the east, limiting flushing of the south end of the Lake. Coonsfoot Cove, to the west of Star Island, is rendered virtually stagnant due to the Star Island causeway that connects the former island to the western mainland. In addition to this poor circulation, pollution sources in Coonsfoot Cove include boat cleaners and waste, stormwater runoff, septic waste from malfunctioning systems, dredging that can resuspend contaminants in the water column, fuel spills, leaking fuel tanks and bilge evacuation.

Several studies of water circulation patterns within Coonsfoot Cove have shown that without providing a significant new opening into the Cove (such as replacing the filled causeway with a bridge) only minor improvements, if any, would result to water quality. Should a project be undertaken to improve water circulation and water quality of Coonsfoot cove be considered in the future, a full impact analysis of the changes in water quality in the southern portion of the lake should be conducted.

The coliform bacteria data show that areas within Lake Montauk have the highest levels of fecal and total coliform bacteria Townwide. Bacterial contamination at the southern end of the lake is highest, exceeding standards year round. Contributing sources are stormwater runoff and high density upland use, coupled with sluggish tidal circulation which limits flushing. Faulty septic systems, boat wastes and wildlife all contribute to deteriorating water quality.

A proposal for natural treatment for stormwater runoff from the Oceanside-Ditch Plains Drainage System subdivisions into the south end of the Lake will redirect runoff to a pre-treatment marsh system before it enters Lake Montauk. However, this system has been in the design phase for some years and awaits construction. Meanwhile, this runoff continues to flow directly into southern Lake Montauk. Correction of this problem is assigned the highest priority for drainage abatement because of the severity of the coliform bacteria contamination in this area. Adjacent areas, contributing to stormwater runoff at the southern end of the Lake are also given high priorities for drainage abatement efforts.

High levels of coliform bacteria also exist in Coonsfoot Cove, the east side of Star Island and the northeastern shore of the Lake resulting from dense commercial development, particularly marinas, and high volume overland runoff. Some levels exceed standards well into November at sampling stations closest to Star Island. A proposed *No-Discharge Zone* for the Town's harbors, in conjunction with planned upland drainage remediation, is expected to substantially alleviate these problems.

Tidal wetlands, as defined in the overview, border the perimeter of Lake Montauk, the majority of which are of relatively recent origin. As noted below in the section on dredging, the northern inlet of the Lake was permanently opened to Block Island Sound in the 1920's. Consequently, there is relatively little peat buildup in the tidal wetlands. The most extensive tidal wetlands are located in the outwash delta of the Oceanside drainage system. In addition, the east shore of the Lake is subjected to wave action associated with the prevailing summer winds. The tidal wetlands on the west side of the Lake are, therefore, likely to increase more rapidly than on the east (Inter-Science Research Associates, 1983).

Freshwater wetlands are abundant in this area, as may be seen on Map XII-1, and on the Natural Resources Map in the County study (SCPD, 1981). These wetlands occupy streams, drainage

ditches, and kettle depressions and are connected overland or through underground seepage (Inter-Science Research Associates, 1983).

Peter's Run, a *True Groundwater Stream* entering the west side of Lake Montauk, has historically been one of the tributary sources of contaminants into the Lake. Tests by the Suffolk County Health Services Department and the Town Natural Resources Department indicate high coliform levels and high concentrations of nitrates coming into Lake Montauk from Peter's Run. In 1996 the Natural Resources Department and the Concerned Citizens of Montauk sampled Peter's Run monthly and found similarly high coliform and nitrate levels. However, tests for pesticides presumed to come from the Montauk Downs Golf Course were inconclusive.

On the east side of Lake Montauk, Big Reed Pond and its associated freshwater wetlands provide important habitat for waterfowl and other wetland species. This pond feeds Little Reed Pond through a *True Groundwater Stream*, but Little Reed Pond is itself an *Estuarine* waterbody tidally linked to Lake Montauk.

Reach 7 - Oyster Pond/North Montauk Point

The surface waters in Reach 7 include Oyster Pond, a large *Coastal Pond*, and the easternmost extent of Block Island Sound before it merges with the Atlantic Ocean at Montauk Point. Oyster Pond drains the upland *Downs* in this Reach and is intermittently opened to the Sound across a bay mouth sand bar.

The sandbar that separates Oyster Pond from the Sound influences the ecology and water quality of this coastal pond. The wetlands fringing the *Estuarine* pond are brackish and fresh rather than intertidal or *High Marsh Wetland* (see the overview descriptions). As a result, there is an abundance of rare and endangered species (see TOEH, 1991 and **Significant Habitats Policy #7**). With only sporadic tidal flushing, the pond is predominantly fresh. Not only do coliform bacteria survive longer in fresh water than in saline, but coliform input to the pond derives from several sources. There is considerable upland use by horses, recreational vehicles, and campers throughout the summer, abundant waterfowl in the pond itself throughout the year, and episodic septic waste overflow from the Camp Hero treatment plant.

In 1984 and 1985, the community septic system serving the 27 homes in the Camp Hero affordable housing neighborhood failed. The pumps designed to transport the liquid waste to the leaching fields broke down and sewage overflowed into a stream leading to Oyster Pond. Following the second incident, an overflow tank was installed to contain septic wastes in the event of a malfunction of the system. The East Hampton Department of Sanitation now maintains the sewage system serving Camp Hero and there have been no further failures.

Another episodic event occurred in February of 1991 when approximately 2500 gallons of heating (No. 2) oil from a disused fuel tank in the southwest quadrant of the former Camp Hero military base leaked into the watershed and headwaters of Oyster Pond. Some oil was cleaned up by the East Hampton and eventually State Haz-Mat teams, but a large amount of oil contaminated the

headwaters and entered Oyster Pond. More than 50 reptiles and amphibians were killed and large amounts of oil were trapped in the bottom sediments of these streams (Penny, 1993).

Oyster Pond is designated under a water quality classification of SA but was permanently closed to shellfishing in 1985 due to high coliform levels. Notwithstanding this closure, the Town of East Hampton still uses the pond as a seed farm for oysters. Every second year the Town Shellfish Hatchery, Natural Resources Department, Bay Constables and Town Baymen harvest between 250-500 bushels of oysters from the pond and "relay" them to the various harbors throughout the Town. Once relocated in cleaner waters, a depuration period is required for the oysters to flush bacteria from their systems before any harvest is allowed.

Reach 8 - Montauk Bluffs

Reach 8 extends from Montauk Point to the westerly limit of Montauk Shores trailer condominium at Ditch Plains. The upland area is almost entirely *Moorlands* underlain by thick clay lenses of up to 75 feet. The unusual surface geomorphology produces a complex drainage network and a land surface that is almost 60-65% *Perched Water Table* wetlands including ponds, bogs and streams. These wetlands systems are diverse and fragile. They support an abundant variety of plant and animal species including many rare and endangered plants and animals (TOEH, 1981, 1991; see **Significant Habitats Policy #7**).

The shoreline is exposed to the open Atlantic Ocean with resultant erosive forces. Additional erosion occurs as a result of freshwater seepage from the face of the bluffs (see **Flooding and Erosion Policies #11-17**). Wetland *Seep Communities* exist at the freshwater sources but heavy rains can also cause loss of clays, silts and sometimes large boulders. Old *Perched Water Table* wetlands near the edge are drained as the bluff face erodes landward. Offshore fishery resources are abundant and ocean water quality is excellent; it is classified "SA" by the NYS DEC.

Reach 9 - Hamlet of Montauk

Starting at the western end of the eroding bluffs, Reach 9 extends along the southern ocean beach shoreline to the eastern boundary of Hither Hills State Park, and includes the downtown Montauk business district.

Perched Water Table wetlands are associated with the *Moorland* topography at the eastern end of Reach 9 (TOEH, 1988). Drainage from these and many other wetland systems in the reach has been altered with development of the Ditch Plains/Oceanside subdivisions, the Montauk Central Business Area, resort and residential development south of Old Montauk Highway, and along the shorefront. So much of the natural drainage pattern has been changed that the Generic Environmental Impact Statement concerning Surfside Estates (TOEH, 1988) recommended all remaining wetlands be preserved in their natural state.

There are fewer wetlands between the western edge of the Hamlet of Montauk and the western boundary of Reach 9 due to lesser amounts of clay in the subsurface.

As in Reach 8, offshore fishery resources are well utilized and the ocean waters are classified SA, the highest water quality for marine waters.

Reach 10 - Napeague South

Reach 10 extends from the east boundary of Hither Hills State Park along the ocean shore of the Napeague isthmus, westward through Amagansett to the east boundary of East Hampton Village. It includes the Atlantic Double Dunes system, an unusual complex of primary and secondary dunes, swales, wetlands and bogs.

The wetlands found along the inter-dunal swales in this reach are generally freshwater. Characteristic vegetation includes the common reed, freshwater rushes, sedges and grasses, sphagnum moss and cranberry (TNC, 1978; Johnson, 1985). Distinct from the *Perched Water Table* wetlands to the east, these wetlands are *True Groundwater* systems. Not only do these systems provide important habitat for fish and wildlife (see TOEH, 1991), they also serve to absorb flood waters and thereby dissipate the impact of significant storm events.

The two most significant threats to the ecological systems in this reach are the extension of public water to the area and sea level rise. The most generalized impact of both events will be an overall increase in the amount and extent of existing wetlands. However, intrusion of salt water from sea level rise may transform freshwater wetlands to marine.

Recharge of imported public water to this area is likely to result in a higher freshwater table thus producing new freshwater wetlands and expanding existing ones. Many other impacts of the input of public water to Reach 4 are addressed in the Final Environmental Impact Study (TOEH, 1986) concerning extension of public water to Napeague. The reader is directed to that study for specific impacts to water quality, wetlands and other issues.

Reach 11 - Wainscott

Reach 11 includes Wainscott and Georgica Ponds and extends along the ocean beach from the western boundary of the Village of East Hampton to the Town line. Wetlands in Reach 11 include *Flooded Deciduous, Emergent Freshwater Marsh* and *Floating Aquatic* systems concentrated in the Georgica Cove area.

Wainscott Pond is a largely fresh *Coastal Pond* and is classified as C by the NYS DEC. This lower standard may result from surrounding agricultural land use. Approximately 80 per cent of the pond is surrounded by farmland with an *Emergent Freshwater Marsh* and wetland buffer most richly expressed along the southeastern shore.

Like Oyster Pond in Reach 7, Georgica Pond is a *Coastal Pond* separated from the ocean by a barrier beach which is breached periodically by storms, in addition to semi-annual openings by the Town Trustees. Unlike Oyster Pond, Georgica Pond is surrounded by developed property and the manmade channel is cut through the barrier beach, or gut, periodically to improve flushing, allow migration of anadromous fish and shellfish and, incidentally, to prevent flooding. If this channel were not opened periodically, Georgica Pond would be a predominantly freshwater system. The

channel provides at least twice yearly exchange with the ocean. The surface water quality is, therefore, classified as marine and is designated as SA.

Some of the drainage inputs to Georgica Pond are not within the Town's jurisdiction and are either in the Village or on private roads. One such input that is particularly large is the outflow pipe into Georgica Cove that drains from Route 114. The town should explore a multi-jurisdictional effort to reduce, improve or otherwise reduce this input (see **Projects**).

Of particular concern in the Town are road ends and pipes at the north end of the pond where the hydraulic gradient is very steep and culverts from the Georgica Association Road may be draining agricultural runoff into the Pond. The Wainscott Citizens Committee has identified additional sites in need of road runoff control before entering Wainscott or Georgica Ponds.

Reach 12 - Gardiners Island

Gardiners Island comprises Reach 12 and is surrounded by Gardiners Bay and Block Island Sound.

The surface waters and wetlands on the island are virtually untouched by development. Four *Coastal Ponds*, Great Pond, Tobaccolot Pond, Home Pond and Bostwick Creek are classified SA by the NYS DEC. Such high water quality supports rare and endangered fauna and provides migratory stopover, over-wintering and pristine breeding areas for varied wildlife species. Ten other *Estuarine* ponds and associated tributaries are found on the island and are all classified as SC by the NYS DEC.

Fifteen *Fresh Ponds and Streams* on the island are classified as D by NYS DEC. This low rating reflects the unsuitability of such shallow ponds to human-related recreation rather than poor water quality for wildlife. For instance, the *Perched Water Table Ponds and Streams* and the *Downs* site types on Gardiners Island were given the highest ratings for unique or exceptional habitat, migratory stopover areas, areas of scientific interest or research and observably pristine communities in the 1984 Comprehensive Plan (TOEH, 1984).

D. DREDGING - INVENTORY AND ANALYSIS

1. Introduction

Dredging within the waterfront area is performed for both public and private interests. Dredging of navigation channels deemed in the public interest is conducted by Suffolk County or, in the case of the Lake Montauk federal channel, by the US Army Corps of Engineers (ACOE). In the harbors and inlets basins of private marinas are dredged by the affected landowners. In addition to navigation, dredging is done to increase flushing and turnover of inner harbors, to remove contaminants or dilute existing contaminant loading, and to increase salinity. In all cases, environmental impacts associated with the dredging operation and the dredge spoil removal must be weighed against the social and economic impacts associated with not dredging, for example, navigational hazards, resuspension of contaminants and introduction of predatory saltwater species. The Town Trustees are the owners of the dredge spoil removed from their bottomlands. Any dredging project proposed for Trustee bottomlands requires Town Trustee approval.

2. Public Interest Dredging Operations

Suffolk County has developed several criteria for determining whether public or private interests benefit from a dredging project (SCPD, 1985). These criteria include, but are not limited to, public access points and public uses such as utilities and industry. Five sites in the Town of East Hampton presently meet these criteria and are dredged through the use of public funds. They are Accabonac Harbor, Lake Montauk, Napeague Harbor, Northwest Harbor and Three Mile Harbor. Two of these sites, Lake Montauk and Three Mile Harbor, are designated as high priority projects. However, dredging operations by the County have been curtailed in recent years, and even though the Three Mile Harbor channel, in particular, has severe shoaling, the County has not performed maintenance dredging there in over twenty years.

Table XII-7, page XII-34, (adapted from SCPD, 1985, and updated 1998) summarizes the public dredging operations conducted in the Town of East Hampton since the County began dredging in 1949. The quantities of material dredged have generally decreased in the last two decades as compared to the 1950's and 1960's. This is a reflection of stricter regulations protecting tidal wetlands from becoming dredge disposal sites, less available upland and a shift from channel modification to channel maintenance.

3. Private Interest Dredging Operations

Dredging operations conducted by private interests are concerned with marina or boat basin depth and small inlet maintenance. Quantities of dredge spoil approved for disposal under the Town's Natural Resources Special Permit process range from a few hundred cubic yards to 10,000 cubic yards over a ten-year period. However, the average amount removed is less than 1,500 cubic yards. It is anticipated that these average amounts will decrease in the future with installation of stormwater retention basins that trap sediments before they reach surface waters (see Stormwater Abatement in Introduction).

Methods of spoil disposal vary according to site conditions. Spoil is regularly tested for contamination as part of the Natural Resources Special Permit review process, particularly from marina basins. When contaminated, spoil must be disposed of offsite outside the Town.

Uncontaminated spoil is used in a number of ways including regrading and fill, backfill behind bulkheads, or for beach and dune nourishment. Clean spoil deposits have been used to augment habitat areas for shorebirds including the piping plover. Some spoil applications require planting of appropriate vegetation to minimize further erosion and siltation.

4. Environmental Impacts of Dredging and Dredge Spoil Disposal

Dredging and disposing of dredge spoil has physical, chemical and biological impacts on the environment. Physical impacts include changes in bottom topography, increased turbidity, and changes in the properties of sediments at the dredging and spoil disposal location. Chemical impacts include release of contaminants that may have been trapped in sediments, decreased oxygen levels in the water column and increased concentrations of nutrients. Biological impacts include destruction of habitats such as wetlands, shellfish beds, fin and shellfish spawning grounds and eel grass beds. Benthic sessile organisms can be buried, and filter feeders which consume suspended

contaminants can bioaccumulate them throughout the food chain. Physical and biological impacts can also interact, for example, accumulation of macrophytic vegetation in a deeper basin, ultimately resulting in anaerobic conditions.

For these reasons, dredging conducted with public funds and permitted by the Town by private interests should be the minimum necessary to maintain navigational safety, increase natural flushing and/or remove contaminants. The timing of dredging operations should be synchronized with the least critical periods of biological productivity; e.g., nesting or spawning. The period between September 15 and April 15 is usually the time of lowest sensitivity for reproduction. However, site specific conditions should be assessed on a case-by-case basis. For instance, winter flounder spawn in Lake Montauk between late January and June. Finally, the choice of spoil sites should take critical habitat and resuspension of contaminants into consideration. The Town should consider organizing an inter-agency workshop to consider environmental impacts of dredging with regulators, contractors and harbor interests.

Table XII-8 provides a descriptive comparison of dredge spoil disposal alternatives. The costs and constraints associated with each alternative are provided along with an indication of their frequency of use in East Hampton. Water Resources Maps XII-2A/-2B, identifies the location of recommended future dredge spoil disposal sites in the Town.

5. Dredging Analysis by Reach

Reach 1 - Northwest

Dredging in Reach 1 is confined to the inlet that provides access from Northwest Harbor to the estuary of Northwest Creek. A Town boat ramp, a Trustee mooring area, and a County dock are located in the inner harbor. This area is considered a public interest project by Suffolk County and is dredged by the Department of Public Works.

In 1961, the inlet was moved from a location at the east side of the harbor mouth to its present location on the west side of the channel; 357,000 cubic yards were dredged. The dredge spoil was used to close the original inlet and also placed on the barrier spit. Maintenance dredging has occurred twice since then, in 1965 and 1971, and the spoil has been placed on the barrier spit to the east and on the beach to the west. The spoil is clean sand and both spoil sites provide nesting habitat for colonial waterbirds.

Maintenance dredging was performed by the County in 1995 on the Northwest Creek channel, which had shoaled to the point of near impassability. The Town and County should consider reopening the original east channel, or instituting a two-channel inlet as at Hicks Island in Napeague Harbor, to improve circulation and prevent the rapid shoaling that has occurred in recent years (see **Significant Habitats Policy #7 and Flooding and Erosion Policies #11-17**). As shown on Water Resources Maps XII-2A/-2B, future spoil should not be placed on the spit, which is already built up, but placed on the west side of Barcelona Neck to lessen erosion and nourish the beach. Any disposal of dredge spoil at that site requires Town Trustee approval.

Reach 2 - Three Mile Harbor/Hog Creek

Public dredging projects in Reach 2 are required to maintain a navigable inlet to Three Mile Harbor, the channel within the harbor, and to maintain water quality with adequate flushing. Three Mile Harbor is the Town's second busiest center for the marine industry, and harbors a large number of resident and transient recreational boats in a wide range of sizes.

The channel goes all the way to the southern end of the harbor and periodic dredging is conducted where shoaling occurs. The Town proposed that the next County dredging project also deepen the channel to the east at the north end, known as Goose Creek, to increase flushing and circulation in the northeast portion of the harbor.

The south end of the channel was dredged in 1996, and in 1997 the Town contracted with the County to dredge the boat basin around Town Dock at the head of the harbor. At the time, the Town also requested the County to perform emergency dredging of the channel in the area opposite the Town Commercial Dock at Gann Road, where shoaling has caused several boats to run aground. Numerous complaints of shoaling in the channel near the mouth of the harbor have been heard in recent years, with requests to the County for maintenance dredging. The channel was dredged in the late spring and early summer of 1999, with spoil deposited in a large basin dug at Sammy's Beach.

In the past, spoil from the channel has been deposited on both sides of the inlet, at Sammys Beach and Maidstone Park, and at a designated spoil site at Marina Lane. This site receives spoil from the rest of the dredging projects in the harbor, and the Town is considering other compatible uses for it (see **Projects**). After the material has drained, the spoil from this site has been used for beach nourishment or dune enhancement. Some sand has been sold for this purpose by the Town Trustees, and it is sometimes used by the Town Highway Department. Future sites for spoil deposition are noted on Water Resources Maps XII-2A/-2B.

Private dredging is conducted at 12 marinas in Reach 2, 10 in Three Mile Harbor and 2 in Hog Creek. Two of the marinas in the reach are operated by the Town, at the Town Dock and the Commercial Dock. Maintenance dredging is conducted periodically to maintain sufficient draft for vessel use. The marinas are concentrated along the southern and eastern shores of Three Mile Harbor in areas of limited flushing and intensive upland residential use. Dredging is limited to periods of low biological productivity and according to site specific conditions, as evaluated in the Natural Resources Special Permit process.

Reach 3 - Accabonac Harbor

Publicly funded dredging of the Accabonac Harbor channel and boat basin are the only dredging activities in the reach. Fresh Pond is not dredged, although the Trustees have opened the gut to Gardiner's Bay periodically to improve water quality, and have applied to dredge the gut and remove or shorten the inlet groins to reduce shoaling.

In 1959 public funds were used to relocate the Accabonac Harbor inlet from 1/4-mile south of its present location near the present-day boat ramp on Louse Point Road. 205,000 cubic yards of dredged spoil was used to fill in the old channel and to extend Louse Point northward.

Maintenance dredging is conducted periodically (see Table XII-7) to remove material in Accabonac Harbor that is deposited at a shoaling rate of 3,850 cubic yards/annually (SCPD, 1987). Approximately two-thirds of the spoil from a 1985 channel dredging operation was added to two diked areas on Gerard Drive in order to create an area suitable for tern and piping plover nesting. The remaining third was added to Louse Point for the same purposes. Permits restrict dredging during the April to mid-August nesting period for least terns and piping plovers. Future spoil from Accabonac Harbor dredging should be used to nourish beaches south of Louse Point (see Water Resources Maps XII-2A/-2B). Any disposal of dredge spoil at that site requires Town Trustee approval.

Remnants of a sluice that formerly connected the northern section of Accabonac Harbor to the bay, under what is now Gerard Drive, are also indicative of the changes wrought by humans around this harbor. There should be a study to consider relocating the channel, and opening or reopening a sluiceway in the northern portion of the harbor to improve flushing. Further study is also warranted to determine whether dredging the silty muck sediments from the northern portion of Accabonac Harbor would increase flushing, circulation and biological productivity. Town Trustees support restoring the Accabonac Harbor channel to its original location and reopening the north end sluice along Gerard Drive.

Reach 4 - Napeague North

There are two current dredging locations in Reach 4, publicly funded dredging of the channel to Napeague Harbor, and private dredging of the boat basin and channel serving the Devon Yacht Club.

Access to Napeague Harbor is maintained by dredging the western inlet at Hicks Island. Spoil is used for beach nourishment on Hicks Island, and in the past, has been deposited on Goff Point to the east. Hicks Island has historically been a breeding area for the federally endangered roseate tern and the federally threatened piping plover. In future maintenance dredging projects, spoil should be considered for beach nourishment along Shore Road at Lazy Point (see Water Resources Maps XII-2A/-2B).

The inlet gives access to and from the harbor and allows boaters to use the Town boat ramp at Lazy Point. The channel should be dredged to a depth no greater than six feet below mean low water due to the environmental sensitivity of this area and the shallow draft of most boats using it.

Maintenance dredging is conducted by Devon Yacht Club on a regular basis. Dredge spoil has been placed to the south of the channel for beach nourishment, but should be available for use in other more essential areas, such as immediately to the north along Cross Highway (see **Flooding and Erosion Policies #11-17**).

Reach 5 - Hither Woods/Fort Pond Bay

There is no channel in Fort Pond Bay, as adequate deep water exists near shore for a wide variety of boating activities. In addition, the north shore of Hither Woods, at the west end of Reach 5, is entirely public parkland. Thus, there is no dredging in Reach 5 nor is any anticipated.

Reach 6 - Lake Montauk

Lake Montauk, or Great Pond, was historically a freshwater embayment subject to infrequent saltwater influx. Severe storms periodically breached the barrier spit that protected the northern shoreline. This northern spit was permanently opened in 1926 when two parallel stone jetties were installed 500 feet apart to make a permanent inlet. In 1927, the entrance channel between these jetties was dredged to a depth of 15 feet. A yacht basin in present day Coonsfoot Cove was also dredged at that time to a depth of 15 feet, and the spoil used to build up Star Island and connect it to the mainland.

Maintenance dredging of the Montauk inlet was conducted by Suffolk County between 1949 and 1974. Since that time the inlet has been maintained by the Army Corps of Engineers as a federal channel (see Table XII-7). Reach 6 has the highest concentration of private and commercial marinas in the Town, and dredging is conducted frequently in boat basins and adjacent to piers and bulkheads to maintain sufficient draft for yachts.

There has been no dredging south of Star Island for many years. The south Lake area is a designated State Significant Coastal Fish and Wildlife Habitat (see **Significant Habitats Policy #7**) dredging to allow deeper draft boats south of Star Island should be prohibited, due also to the restricted water circulation patterns in this portion of the Lake and deteriorating water quality conditions.

Although in the past spoil deposits have been placed on Star Island and the beach east of the jetties, the only active spoil disposal site for the Lake Montauk area is along the beach just to the west of the western jetty. This site should continue to receive any available spoil. Spoil nourishes the beach and spoil disposal easements have been granted by property owners for west of the jetty. There is virtually unlimited capacity at this site due to the scouring effect of the jetty. See **Flooding and Erosion Policies #11-17**. Spoil from public dredging of the channel is placed west of the jetty, as well as that from some private marina basin dredging on contaminant levels, in an acceptable landfill.

Reaches 7, 8, 9 and 10 - Atlantic Shoreline

These reaches comprise the Atlantic Ocean shoreline. There are no inlets, barrier beaches or embayments to be dredged. No public or private dredging projects are contemplated in Reaches 7, 8, 9 or 10.

Reach 11 - Wainscott

The barrier beach separating Georgica Pond from the Atlantic Ocean is opened semi-annually by the Town Trustees and is periodically breached by storms. These openings increase flushing, decrease flooding on surrounding properties, and allow for spawning and migration of anadromous fish species, blue claw crabs, etc. (TOEH, 1991). See also **Significant Habitats Policy #7** and Flooding and Erosion Policies #11-17.

A proposal to dredge 150,000 cubic yards from flats near the Georgica Pond gut was proposed by the Town Trustees and approved by the Town Board, by resolution dated August 18, 1989. The Suffolk County Department of Public Works proposed to undertake the project, to dredge 150,000

cubic yards of sand flat and channel at the south end of the pond in order to facilitate the seasonal "letting" of the pond. Dredge spoil was to be used as beach nourishment for approximately 3,000 feet to the west. The project has not been funded. If it is reactivated, a SEQRA review should be undertaken.

Reach 12 - Gardiners Island

The only regularly dredging on Gardiners Island is a boat basin to the southeast of Home Pond. The most recent dredging operation occurred in 1989 and dredge spoil was deposited on the south side of the inlet. Spoil has previously been deposited on the north side of the harbor inlet and southeast of the inlet in the upland resulting in the creation of wetlands. All dredging on Gardiners Island has been private.

Project Name	Dates Dredged	Cu. Yds. Dredged	Method of Spoil Disposal	Types of Water Dependent Facilities
Reach 1 Northwest Creek	1961 1965 1971 1995	357,000 49,000 18,000 20,000	Modified inlet orientation and placed spoil on barrier spit	Town launch ramp and informal mooring
Reach 2 Three Mile Harbor	1958 1961 1965 1974 1975 1996	82,000 35,000 106,000 83,000 90,000 21,000	Beach nourishment on both sides of inlet, upland spoil site at Marina Lane	10 marinas, Towncommercial fishing dock,3 Town launch ramps,slips at Town facility
Reach 3 Accabonac Harbor	1959 1965 1971 1976 1985 1989 1993 1996	$\begin{array}{c} 205,000\\74,000\\17,000\\30,000\\30,000\\15,000\\11,000\\14,000\end{array}$	Modify inlet location Beach and dune nourishment	2 Town launch ramps
Fresh Pond	Proposed	?	Fresh Pond inlet	Pond flushing

Table XII-5: Summary of Public Dredging Projects in the Town of East Hampton

Town of East Hampton LWRP

Water Resources Policies #30-40,44

Project Name	Dates	Cu. Yds.	Method of Spoil	Types of Water
	Dredged	Dredged	Disposal	Dependent Facilities
Reach 4	1967	342,000	Upland on Hicks	Town launch ramp
Napeague	1987	35,000	Island, beach	
Harbor	1989	26,000	nourishment	
Reach 6 Lake Montauk Inlet Entrance chnl. Yacht Basin Inlet Boat Basin Inlet Inlet Inlet Inlet Inlet+CG Sta Inlet	1926 1927 1949 1959 1969 1974 1976 1984 1987 1991 1995	? 40,000 100,000 110,385 65,000 25,933 21,876 5,800 15,307 46,175	Star Island ? ? Upland on Suffolk Cty parkland and offshore; beach nourishment west of jetty Upland (east of jetty) Upland (west of jetty) Upland (west of jetty) Upland (west of jetty) Upland (west of jetty) Upland (west of jetty)	2 stone jetties, 500' apart Town commercial fishing dock, commercial docks, 12 marinas, charter boat operations, Town launch ramp
Reach 11 Georgica Pond	Proposed	150,000	Beach nourishment	Anadromous fish migration; pond flushing; flood control

Туре	Alternative Sites	Costs/Constraints	Frequency of Implementation in East Hampton
Open Water	a) deep oceanb) near shorec) in river/harbor	depends on transport distance; resuspension of sediments; transport barges often too large for local waterways; wastes clear resource	rare
Upland (excluding beach)	 a) no further use intended b) for construction c) for habitat/recreation development 	compatibility and future site management; legal right to use site; transport costs; cost of dikes; weir containment structures; dewatering requirements' contamination in dredge spoil; for habitat may require revegetation (e.g. no vegetation required for nesting habitat enhancement); erosion and siltation	common on dunes and after temporary disposal and curing
Beach Restoration		requires clean or detoxified material of sufficient grain size to limit resuspension; transport distance; must be similar in grain size to receiving beach	commonly used for public harbor inlet dredging projects and clean private spoil
Landfill		high cost; large quantities use up valuable space in lined cells of landfill; local landfills closed	sometimes required for contaminants from marina basins

Table XII-6: Alternative Dredge Spoil Disposal Options

Alternative Methods

Containment	a) construction b) for habitat or recreation	cost of dike and weir construction; generally limited to large projects	sometimes used for private disposal (e.g. as backfill behind a bulkhead after curing and drying)
Incineration		extremely high cost	rare
Resource Reclamation	a) duck sludge b) chemical	high costs associated with chemical nutrient recovery, waste lagoons landfill cover, soil enhancer	uncommon in East Hampton

E. GROUNDWATER RESOURCES - INVENTORY AND ANALYSIS

1. Introduction

The sole source of drinking water in East Hampton is its groundwater. On the South Fork, groundwater is recharged singularly by infiltration of precipitation through the unsaturated zone to the water table. From an approximate yearly rainfall of 45 inches, roughly half is recharged into the groundwater reservoir and the remainder is lost to evapotranspiration, seepage into waterbodies, subsurface outflow, flow of coastal springs and surface runoff. These proportions vary over time and space depending on precipitation type, frequency and intensity; slope of the land surface; soil permeability and soil moisture content; amount and kind of vegetative cover; and air temperature (Nemickas and Koszalka, 1982).

At the onset, this overview describes the basic principles of groundwater hydrology including aquifers, recharge and movement of groundwater and the location of the fresh water to saline water interface as predicted by the Ghyben-Herzberg principle. Major threats to groundwater quality and, to a lesser extent, quantity are described. Finally, a review of existing means to protect and regulate groundwater is provided.

It is important to recognize that theoretical relationships about groundwater location, movement and quantity are not as strictly applicable on the South Fork as on the main body of Long Island. For instance, the reliability of the Ghyben-Herzberg relationship, that predicts the thickness of the freshwater lens, breaks down completely in many of the low lying coastal areas found in the town. In addition, the aquifer in the Montauk Point area is relatively thin and extends only 90-100 feet below mean sea level. (AIPG, 1985).

2. Aquifers

Aquifers are geologic formations (rock layers), that can yield economic quantities of water. Aquifers can be very thin or hundreds of feet thick and can underlie a few acres or thousands of square miles.

On Long Island, these formations are composed primarily of sand and gravel. Water is stored between the particles that make up the formation and can move easily through it. Long Island has three major aquifers that are separated by layers of clay and silt. Water moves so slowly through the clay layers that they effectively separate the three aquifers from one another. The three aquifers serve as a storage area for large quantities of water and as a very slow-moving conduit which transmits water from areas where it enters the ground to points of discharge.

In descending order, the major aquifers on Long Island are the Upper Glacial, located in the Ronkonkoma moraine (in places there are two aquifers in this formation), the Magothy, located in a sand layer deposited during the Cretaceous, and the Lloyd, another sand layer that overlies bedrock.

3. Recharge: Fresh/Saltwater Interface

On the South Fork, only the upper two aquifers contain fresh- water and, in many areas of the town, only the Upper Glacial aquifer contains significant quantities of freshwater. The lower aquifer, the Lloyd, contains freshwater on western Long Island and salt water here. This difference results primarily from the properties of freshwater, the relative heights of the land above sea level in the two areas, and thus the location of the freshwater to saline water interface. This interface can be predicted by the Ghyben-Herzberg principle which predicts the height of the freshwater table above and below sea level based on the relative densities of fresh and salt water. This principle predicts that freshwater will extend 40 feet below sea level for every foot that the water table rises above sea level. The height of the water table tends to mirror the height of the surface of the land. Thus the areas of highest elevation on the land surface contain the deepest lens of freshwater. Land elevation on western Long Island that penetrates the deepest aquifer, the Lloyd.

The deepest groundwater recharge in East Hampton extends part way into the Magothy aquifer. Thus drinking water supplies are limited to the Upper Glacial and portions of the Magothy aquifers. The deep flow recharge areas are located in the central portion of the South Fork. Movement within the aquifers is lateral and vertical. In the deep recharge areas, water moves predominantly downwards and to a lesser extent laterally. Since the quantity of water is great and the movement slow, this water, if contaminated, would remain so for decades. Closer to the coastal areas, elevation drops, the lens is thinner and movement is predominantly lateral. Freshwater moves toward shallow flow streams and discharges directly to the ocean and bays across the freshwater-saline interface.

As noted above, the thickness and depth of the freshwater lens does not conform to theoretical norms in coastal areas. For instance, where the edge of the freshwater lens is low and gently sloped, the area of contact between freshwater and saline is broad and thick. Thus, in areas like Sammy's Beach (Reach 2) and Gerard Drive (Reach 3), this kind of low, gently sloping freshwater lens is highly susceptible to salt water intrusion especially when many wells are pumping from the aquifer. Where the lens is steep and high, the area where freshwater mixes with saline is more sharply defined and located closer to the sea. Thus, in Wainscott (Reach 11), a steep and thick freshwater lens meets saline water in a narrow band seaward of the dunes.

Most of the Town's waterfront areas obtain drinking water from private wells. In the Town's Water Resources Management Plan (TOEH, 1987) on-site wells servicing one residence are classified as private wells. On-site wells serving at least five connections to non-residential or seasonal residences are classified as non-community wells. Non-community wells serve a variety of land uses including: motels, hotels, cooperatives, recreational facilities, government structures, commercial uses and industrial uses. Most of the 84 non-community wells inventoried in East Hampton for the Water Resources Management Plan are located within the coastal zone. Parts of East Hampton north of the airport and along Route 114, and of Montauk and Amagansett are served by public water. Public mains have been extended through the Napeague area to Montauk, and to the Landfall area of Northwest to remedy chronic salt water intrusion and contamination problems, respectively.

4. Threats/Contamination

Further west on Long Island, the Upper Glacial and portions of the Magothy aquifers have been contaminated by high density development and improper waste disposal practices of the past. Drinking water must be drawn from the areas of the Magothy aquifer that remain uncontaminated and from the Lloyd aquifer. On the South Fork the lower portions of the Magothy contain salt water. Drinking water must be drawn from aquifers that are relatively near the surface. Contamination cannot be isolated from lower reservoirs in the aquifer, because there are no lower freshwater reservoirs.

Several areas of the upper aquifer are already contaminated with agricultural pesticides. Fortunately, most agricultural activity has occurred on the outwash plain where the aquifer is relatively shallow and flows toward the ocean. Water quality improvement districts in these areas are the preferred course of action, and are preferable to public water. However, in the future the extension of public water mains may still be required, at a considerable cost to the taxpayer.

Existing threats of contamination to the groundwater resources in East Hampton include nitrates and coliform from septic waste, pesticides, fertilizers, household toxic chemicals, landfill leachates, commercial and industrial discharges, leaking underground fuel storage tanks and salt water intrusion.

In coastal areas this groundwater contamination poses a threat to surface water quality because research indicates that nitrogen is generally not removed by conventional on-site septic systems (Nixon, 1982). In addition bacteria and viruses are capable of traveling rapidly over considerable distances in the highly permeable soils (Heufelder, 1988) such as those found along the sandy shorelines.

Near the waterfront, the shallower lens of freshwater holds less water. In these areas, the Upper Glacial aquifer is in direct contact with the ocean or bay floor at the shore and extends seaward, in contact with seawater offshore. Ordinarily, freshwater moves through the aquifer toward the sea, but if pumping on land is too great, salt water is drawn toward wells on the land. This phenomena, known as salt water intrusion, is a problem in portions of Reaches 1, 2, 3, 4, 5, 6, 8, 9 and 10.

5. Regulation/Protection

Several hydrogeologic zones define groundwater flow and its quality across Long Island. The major store of potable water is located in the western portion of the town in Hydrogeologic Zone V. This zone has been designated as deep flow recharge by the Suffolk County Sanitary Code, Article 7 Regulations. The remainder of the East Hampton groundwater supply is located in Hydrogeologic Zone IV. The entire LWRP coastal area is contained within Hydrogeologic Zone IV. In this zone, almost all of the freshwater is situated above the Magothy within the Upper Glacial aquifers. Potable freshwater is plentiful in regions where morainal deposits have created high elevations, ranging to virtually non-existent in low-lying areas close to sea level.

Particular areas of the Town are designated as Water Recharge Overlay Districts. They are illustrated on the official Town Zoning Map and on Water Resources Maps XII-2A/-2B. Regulations in these districts limit clearing of existing native vegetation, amount of fertilization and the use of certain chemicals, and mandate clustered development.

Certain regions of the Town have been designated as Pine Barrens and are under the jurisdiction of the Suffolk County Planning Commission. The Suffolk County Planning Commission reviews development within the designated Pine Barrens areas to protect the underlying water supply and ecology.

When proposals for new development are reviewed, septic systems must meet minimum setback requirements (150 feet from wetlands and surface waters) and SCDHS regulations require a minimum of three feet separation between the water table and the bottom of the discharge points. However, studies (Reveau, 1978; Brown et al, 1977; Hagedorn et al, 1978; Aulenback et al, 1975) reviewed in Brown, 1980 concluded that in Pinelands soils a minimum of 120 cm (approximately four feet) is required between the discharge point and the groundwater table.

The high sand and low clay content of Pinelands soils are very similar to the sandy soils near the shore in Reaches 1, 2, 3, 4, 10 and 11 of the coastal area. These coarse-textured soils facilitate movement of contaminants, bacteria and viruses. In addition, groundwater elevations in coastal areas fluctuate with daily and monthly tidal cycles and seasonal and annual precipitation trends. Maintaining adequate separation between leaching pools and the water table according to the range of anticipated conditions is not always achieved. The increased coliform bacteria contamination found in the harbors of these Reaches and resultant closures of bottomlands to shellfishing suggest that the three foot separation distance required by the Health Department is insufficient to keep septic effluent from reaching groundwater and contaminating adjacent surface waters. Consequently, the Town requires a four foot separation to groundwater within the *Harbor Protection Overlay District* (see **Appendix C** and **Development Policies #1-6**).

When lots with existing septic systems are reviewed for redevelopment, old faulty septic systems are often relocated to an area that maximizes wetland setbacks. On some of these lots and on other undeveloped lots that cannot meet current setback standards there is a need for innovative sanitary systems that do not discharge septic waste to the subsurface. In many of these cases depth to seasonal high groundwater is less than the 4 feet needed to protect groundwater, and surface water

setbacks cannot be realized either. Public funding is insufficient to purchase all such parcels, and innovative systems are needed to minimize current and future inputs of nitrates and coliform bacteria to surface waters. This approach must be pragmatic and not be allowed to encourage new development in sensitive, waterfront environments. Rather, it should be utilized to correct and limit sources of pollutants. Innovative sanitary systems are also needed for public facilities in areas near the shore such as bathing beaches and public access points to the waterfront.

6. Groundwater Analysis by Reach

Reach 1 - Northwest

Reach one is mostly parkland, contains very little development and is bordered on the south by a Town Water Recharge Overlay District. As a result, water is of good quality in this region. However, the water table is shallower on the northern half of the South Fork than the Ghyben-Herzberg relationship would indicate (Nemickas and Koszalka, 1982). Thus, if density permitted under current zoning were to increase, the water supply would be vulnerable to salt water intrusion.

Indeed, test wells in Northwest Harbor County Park (located at the Northwest Creek boat launching ramp) indicated high levels of chloride (Cl) manganese (Mn) and iron (Fe) in sampling from 1973 and 1982. Chloride, in particular, was rising steadily between 1978 and 1982, indicating salt water intrusion in the areas around Northwest Creek (LIRPB, 1983).

There are extensive areas surrounding Northwest Creek, Alewife Brook and the shore of Northwest Harbor which have seasonal high groundwater levels less than 4-feet below the surface (LIRPB, 1983). High groundwater levels such as this pose significant constraints for development. For instance, drainage structures and septic systems cannot function effectively and structural foundations must be raised to prevent flooding.

The majority of the groundwater in Reach 1 is recharged in areas inland of the coastal area boundary and discharged into the brackish wetlands surrounding Northwest Creek, several groundwater ponds and the surface waters of Northwest Creek and Alewife Brook. However, the western portion of this Reach contains Barcelona Neck. A potable groundwater lens beneath Barcelona Neck is an isolated island of water surrounded by saline groundwater.

Reach 2 - Three Mile Harbor/Hog Creek

Groundwater which is recharged from the interior region north of the groundwater divide flows north into Three Mile Harbor and Gardiners Bay. This groundwater supplies much of the freshwater reaching the harbor.

There are two areas within this reach where groundwater quality is degraded. These include Sammy's Beach and the headwaters near the southern portion of the harbor (Soak Hides Creek). Sammy's Beach, a baymouth spit at the northern entrance to Three Mile Harbor, is vulnerable to salt water intrusion. In addition, a well on Sammy's Beach Road, exceeded the 10 parts per million (ppm) standard for nitrate with a level of 20 ppm in 1983 (SCDP, 1983). These are significant

constraints, which contribute to the Town's view that new development in such areas should be minimized (see also **Flooding and Erosion Policies #11-17**).

In the Soak Hides/Springy Banks area at the southern end of Three Mile Harbor, coliform contamination affects well water and surface water quality in the harbor. This contamination results from a combination of two factors, dense residential development and a groundwater underflow of very high hydraulic potential. Deep water recharge areas are located upland of the Springy Banks area and the drop in elevation from deep recharge to surface water discharge is steep. The contour lines of the water table that describe the drop in hydraulic potential are very close together indicating a strong hydraulic pressure-head that entrains septic effluent and flushes it through the subsurface into the harbor. A test well, on Treescape Road in this area, exceeded the 2.2 MPN/100 ml standard for fecal coliform with a measured level of 15 MPN/100 ml (SCPD, 1983), reflecting the above description of contamination.

Closer to the head of the harbor, the depth to groundwater in the area surrounding Soak Hides Dreen is less than 4 feet. Older septic systems in this area sometimes sit directly in groundwater, carrying effluent directly into the harbor.

An additional source of contamination resulted from gasoline leaking from a service station near the intersection of Three Mile Harbor and Soak Hides Roads. Since late 1997, NYS DEC has been conducting a clean up effort to remove residual chemicals from groundwater in the area.

Reach 3 - Accabonac

Fresh groundwater in the area around Accabonac Harbor is entirely contained within the Upper Glacial aquifer. There are no public water mains in this region at present. Significant quantities of groundwater are recharged in the Stony Hill Road morainal deposits east of Accabonac Road. Groundwater flow is east/northeast toward Napeague Bay and Accabonac Harbor.

The groundwater quality is generally good except along the Gerard Drive and Louse Point Road spits that form the mouth of Accabonac Harbor. One private well located in this area exceeded the chloride standard of 250 mg/1 indicating salt water intrusion (SCPD, 1987). Alternative drinking water sources in this area include domestic water treatment systems (filtration), water delivery or bottled water.

A potential source of future contamination to groundwater and ultimately to surface waters in this reach is the leachate plume from the Town landfill on Accabonac Highway. Any migration of the plume would be toward the northeast and could reach Accabonac Harbor and contaminate private wells. To date, the extensive test well data has not indicated migration of the plume or contamination of private wells.

Another concern in this region is contamination from abandoned and antiquated fuel tanks. Three underground fuel tanks were leaking gasoline up-gradient of Pussy's Pond at the intersection of School Street and Springs-Fireplace Road (SCPD, 1987). These tanks were removed August 18, 1986 along with the contaminated soil around them.

Though located outside the coastal area, an unregulated golf course in the Stony Hill recharge area that flows to Springs is a potential source of groundwater contamination, due to the pesticides and fertilizers used for turf management.

Reach 4 - Napeague North

Almost all of Reach 4 is a sandy isthmus of land composed of beaches, stabilized duneland and brackish wetlands. Groundwater elevations are 1 - 3 feet above mean sea level. The freshwater lens is found in the Upper Glacial aquifer and is relatively thin: between 20 and 80 feet thick. It is extremely vulnerable to intrusion of salt water and other contaminants when freshwater is pumped out of the ground.

Water quality problems observed in Napeague during the summer of 1983 included elevated chloride, iron, manganese, ammonia and coliform bacteria levels (SCDHS, 1984). In one non-community water supply system, high levels of volatile organic compounds were observed. These compounds were produced when chlorine was added as a disinfectant resulting from salt water intrusion and septic waste discharge.

In 1987, public water mains were extended across Napeague from the west. Development along the southern portion of Napeague Harbor now utilizes public water. Lazy Point, on the north shore of Reach 4, is now served by public water as well, and Suffolk County Water Authority has constructed a pipeline to the area. An Environmental Impact Statement (EIS) was prepared by the Town to evaluate the potential impacts and identify mitigation measures for this project. Concerns included alteration of the water table and spread of non-native vegetation, especially *Phragmites*. Mitigation measures include monitoring of the areal extent of *Phragmites*, management of the spread of *Phragmites*, and/or management actions to protect the viability of Natural Heritage elements. The Town Board will direct that these activities be undertaken by the Town Department of Natural Resources in cooperation with the OPRHP.

Reach 5 - Hither Woods/Fort Pond Bay

The Montauk headland, rising east of the Napeague isthmus, is composed of morainal deposits, and contains freshwater supplies in the Upper Glacial aquifer. Indeed, Reach 5 contains the largest freshwater storage area in the Montauk region and the second major storage area in the Town. The thickness of the freshwater lens reaches over 100 feet (Nemickas and Koszalka, 1982) and the entire area north of Montauk Highway is now protected from any future development through public acquisition for watershed protection purposes. Suffolk County Water Authority has proposed a well field in this area, although a pipeline to the mainland through Napeague has been installed to increase the Montauk water supply. The findings statement for the SEQR review of the pipeline extension issued by the East Hampton Town Board requires the Suffolk County Water Authority to continue to maintain and replace its Montauk infrastructure and to develop a well field at Hither Woods, as economically feasible and reasonable, by the end of 2002.

Significant potential pollution to groundwater in Reach 5 could result from the former Montauk landfill. A leachate plume would flow northeast from the landfill into Block Island Sound. However, no plume or contamination has been detected to date from test well monitoring. At the eastern end

of Reach 5, there is fairly dense residential and commercial development surrounding Fort Pond. A tertiary sewage treatment plant discharging wastes to the subsurface from the Rough Riders condominium complex on Fort Pond Bay, and a tertiary disposal system at Montauk Manor are also potential sources of contaminants. Much of the area is served by public water.

Reach 6 - Lake Montauk

In Reach 6, freshwater is available only in the Upper Glacial aquifer and is entirely underlain by a zone of saline water (SCPD, 1981). Perched freshwater is common on the surface and at shallow depths (from 5 - 35 feet) due to the widespread layers of clay and silt. However, the major source of freshwater is an artesian aquifer below the clay layers (Nemickas and Koszalka, 1982).

The area west of Lake Montauk is generally served by public water obtained from several public wells (SCPD, 1981). As the population nearly triples in the peak summer season in Montauk, the operation of the Montauk public water supply system must be carefully managed. In 1997 the Suffolk County Water Authority issued a phase one water alert for Montauk. However, this measure alone was not sufficient to prevent the overpumping needed to meet Montauk's potable water supply. Since the development and implementation of the Town's Water Resources Management Plan (TOEH, 1987), there has been significant deterioration in the water quality in Montauk public water supply wells as indicated by increases in the levels of chlorides and iron. To supplement the water required to meet this peak demand and to prevent further deterioration of the Montauk wells from overpumping, the Suffolk County Water Authority has installed an approximately four-mile pipeline connecting the water lines in Montauk to the water supplies in western East Hampton.

Groundwater contamination may also have occurred from fertilizers used on the Montauk Downs Golf Course. NYS OPRHP, which manages the course, has introduced more native species [which require less fertilizer] and a program of integrated pest management (IPM) to reduce pesticide applications.

The eastern side of Lake Montauk is not served by public water. Although the freshwater lens reaches a thickness of up to 100 feet east of the lake, the regions bordering the shoreline of the lake have a thin freshwater lens.

Freshwater supplies on the entire Montauk peninsula are vulnerable to salt water intrusion due to the proximity of saline water on all sides and in Lake Montauk. Water from private wells in the Montauk area generally contains between 25 and 45 ppm chloride (SCPD, 1981). Concentrations in excess of 45 ppm indicate salt water intrusion and 250 mg/l exceeds the drinking water standard for chloride.

Reach 7 - Oyster Pond/North Montauk Point

The thickness of the freshwater mound is less than 50 feet in most of Reach 7. However, most of this area is parkland and no public water is drawn from the subsurface. Oyster Pond is fed by *True Groundwater Streams* and surface waters.

There is no public water in Reach 7 and no wells have been drilled to test water quality in the subsurface.

Reach 8 - Montauk Bluffs

The freshwater lens is approximately 50 feet thick in Reach 8 and extends roughly 2 feet above mean sea level. Groundwater flows primarily to the south and, to a lesser extent, to the north where it is discharged into Oyster Pond. Widespread thick clay layers in the subsurface have created many *Perched Wetlands* in this area. There are also many *Freshwater Seep Communities* along the bluff face as groundwater flows laterally above the clay layers. Discharge of sanitary wastes to the subsurface is impeded by the extensive clay layers. As a result, development in Reach 8 is restricted to low density residential and often requires extensive septic system excavations. Thus even where development is reduced by the vast network of wetlands in this area, these constraints still pose significant problems for disposal of wastes. Public acquisition of undeveloped parcels in this area will best protect the environmental integrity of wetland systems and also negate the need for public water importation or other services in the future.

Reach 9 - Hamlet of Montauk

In Montauk hamlet and the eastern portion of Reach 9, the freshwater lens varies from 50 to 100 feet thick. This area also contains many *Perched Wetlands* due to the clay layers that are characteristic of the Montauk peninsula. High volumes of stormwater runoff occurs via many manmade ditches and lateral groundwater seepage above confining layers of clay.

West of the hamlet, morainal deposits rise from elevations of between 15 and 50 feet to heights of 50 to 100 feet. The groundwater divide is located just north of the Montauk Highway (in the area known as Hither Woods). Groundwater flow in this area moves south from the divide toward the Atlantic Ocean.

The eastern portion of Reach 9 is predominantly served by public water that is recharged from regions north of Montauk Highway. Likewise, all developments in the hamlet of Montauk are served by public water. To the west of the hamlet, there is no public water service.

Existing threats to groundwater include subsurface contamination from fuel storage tanks and salt water intrusion. However, Article XII of the Suffolk County Sanitary Code required replacement of fuel storage tanks with double walled structures by January, 1991. Salt water intrusion toward public supply wells is minimized by limitations on pumping and maximization of distances between well fields (SCPD, 1981).

Reach 10 - Napeague South

Reach 10 stretches from the western limit of the Montauk headland, across the Napeague isthmus and includes the southern outwash plain of the Ronkonkoma moraine to the Village of East Hampton boundary. Except for the Hither Hills State Park campground which is served by a non-community well, the majority of Reach 10 is served by public water derived from sources west of the Napeague isthmus.

As noted in the discussion of Reach 4, water supply on the Napeague isthmus is limited and subject to contamination from septic systems and salt water intrusion when pumping demand is high. Water supply in the fragile double dunes area south of the outwash plain is also subject to salt water intrusion problems and septic contamination due to high density development. This area is also served by public water.

Reach 11 - Wainscott

The area of deepest groundwater recharge is located in the region north of the Town airport, up-gradient of Reach 11. Groundwater flow southward, toward Reach 11, is approximately 300-feet annually (TOEH, 1987). The freshwater lens is therefore quite thick, up to 350 feet thick, and extends through the Upper Glacial and into the top portions of the Magothy aquifers (Nemickas and Koszalka, 1982).

This high velocity groundwater flow also produces a relatively thick lens of freshwater near the shoreline. Thus, salt water intrusion is of negligible concern in this reach. To the contrary, the high velocity groundwater flow contributes so much freshwater to Georgica Pond that shoreside flooding is a recurrent problem in this area. There are a number of wells in the Wainscott area that are contaminated above EPA threshold levels for aldicarb (Temik), carboflouron and vydate (Holzmacher et al, 1986).

Reach 11 is not presently served by public water. Due to existing low density residential development and the presence of sensitive environmental features, the Water Resources Management Report (TOEH, 1987) has recommended the creation of a water quality treatment district in this area if potable water supplies experience further contamination.

Reach 12 - Gardiners Island

Very little information is available on the quality and quantity of groundwater supplies on Gardiners Island.

According to the Suffolk County Soil Survey, the high prevalence of Montauk soils indicates that Gardiners Island was formed as part of the Ronkonkoma Moraine. It is assumed that available drinking water is found only in the Upper Glacial aquifer. However, amounts have not been verified with field data. Nor is data is available on the quality of the groundwater on Gardiners Island. However, the island contains only one residence, an airstrip and several out buildings. No groundwater quality problems have been reported to date.

Similar to the Montauk subsurface, underlying clay layers have produced several *Perched Water Table Ponds and Streams* on the northeastern portion of the island. The zone of deepest groundwater recharge is located in the region of undulating topography situated on the northern portion of the island. Any future intensification of development would be severely constrained by poor septic drainage, high potential for salt water intrusion and limited pumping capacity due to confining clay layers.

F. WATER RESOURCES POLICIES #30-44

POLICY 30 MUNICIPAL, INDUSTRIAL, AND COMMERCIAL DISCHARGE OF POLLUTANTS INCLUDING BUT NOT LIMITED TO, TOXIC AND HAZARDOUS SUBSTANCES, INTO COASTAL WATERS WILL CONFORM TO STATE AND NATIONAL WATER QUALITY STANDARDS.

Explanation of policy:

Municipal, industrial, and commercial discharges of pollutants include not only "end-of-the-pipe" discharges into surface and groundwater but also site runoff, leaching, spillage, sludge, and other waste disposal, and drainage from raw material storage sites. The designated best use of all groundwater in Suffolk County is for public and private water supply, and of most surface waters for food production, bathing and recreation. The policy of the County of Suffolk and Town of East Hampton is to maintain water resources as near to their natural condition of purity as possible to safeguard public health and the local economy. To that end, all necessary steps shall be taken to prevent water pollution and improve water quality which has degraded.

Point Discharges from Municipal, Commercial or Industrial Sources

In the Town of East Hampton, there are no point discharges into surface waters from municipal, industrial, and commercial sources (excluding the sewage treatment plant in the Village of Sag Harbor) nor are they permitted. There are three point discharges into ground water from: two high density residential sources located in the Town's coastal area which include the tertiary sewage treatment plants at the Rough Riders Condominium (Reach 5) and the Montauk Manor Condominium (Reach 6); and the Montauk landfill (Reach 5) which has not generated a groundwater leachate plume. These discharges are regulated by NYS DEC and the SCDHS.

Non-Point Discharges from Municipal, Commercial or Industrial Sources

Non-point sources of pollution are discussed in the Surface Waters and Wetlands, Inventory and Analysis. Generally, the major contributors of non-point source pollution include:

- Road runoff and drainage containing oil, gas, animal waste, sediments and other organics.
- Overland runoff from residential, agricultural and recreational lands that contain fertilizers, herbicides and pesticides.
- Septic systems including grease traps and denitrification systems.
- Livestock, animal and waterfowl waste.
- Boat waste such as sewage, oil and fuel.
- Marina waste such as fueling facilities, boat maintenance and fish by-products.
- Drainage from vector control ditches.
- Commercial fish packing operations.

Surface waters most affected by this type of pollution and the reaches where they are found are as follows:

Reach Waterbody		Suspected Problem Sources	
1	Northwest Creek	Septic systems, wildlife road runoff	
2	Three Mile Harbor	Septic systems, marina waste, boat waste, wildlife, road and overland runoff	
	Hog Creek	Septic systems, road runoff	
3	Accabonac Harbor	Septic systems, road runoff, wildlife, livestock	
	Fresh Pond	Septic systems, road and overland runoff, wildlife	
6	Lake Montauk	Septic systems, road and overland runoff, marina waste, boat waste, wildlife, commercial fish packing	
7	Oyster Pond	Upland recreational use (campers, horses), wildlife, episodic septic & pollutant spills from Camp Hero	
11	Georgica Pond	Septic systems, overland runoff, wildlife	

POLICY 31 STATE COASTAL AREA POLICIES AND THE PURPOSES OF APPROVED LOCAL WATERFRONT REVITALIZATION PROGRAMS WILL BE CONSIDERED WHILE MODIFYING WATER QUALITY STANDARDS; HOWEVER, THOSE WATERS ALREADY OVERBURDENED WITH CONTAMINANTS WILL BE RECOGNIZED AS BEING A DEVELOPMENT CONSTRAINT.

Explanation of policy:

Pursuant to the Federal Clean Water Act of 1977 (PL95-217) the State has classified its coastal and other waters in terms of best usage (for the public) and has adopted water quality standards for each class of waters. These classifications and standards are reviewable at least every three years for possible revision or amendment. The Town of East Hampton Local Waterfront Revitalization Program and the State Coastal Management policies shall be factored into such a review. However, such consideration shall not be less restrictive than any water pollution control requirement established by the State pursuant to the Federal Clean Water Act.

Good water quality is essential for the continued use and enjoyment of the Town's coastal resources to support recreational and commercial activity and sustain the Town's economy. Water quality in several reaches has already been adversely impacted primarily by non-point source contaminants, particularly malfunctioning septic treatment systems and runoff containing pollutants. Of particular concern are the levels of total and fecal coliform bacteria used as an indicator to determine whether shellfish harvesting will be restricted to protect public health. Improving coastal water quality in areas where shellfish harvesting is restricted is a Town priority. Activities that would cause a decline in existing water quality shall be prohibited. The overall goal of this policy is to minimize additional losses of bottomlands to shellfishing closures, and to reopen as many areas as possible that are presently closed.

Classifications of Saline Waters

Current classifications of all saline waters in the Town of East Hampton are listed in the Inventory and Analysis of Surface Waters and Wetlands and are shown on Water Resources Maps XII-2A/-2B.

Most of the State salt-water classifications are consistent with existing and proposed land and water uses. However, as indicated by shellfish area closures, the water quality in several salt-water bodies does not conform to NSSP standards. These include portions of the following harbors and bays. Existing State classifications are noted in parenthesis.

Reach 1	Northwest Creek (SA), Alewife Brook (SC)
Reach 2	Three Mile Harbor (SA), Hog Creek (SA)
Reach 3	Accabonac Harbor (SA)
Reach 6	Lake Montauk (SA)

Classifications of Fresh Waters

Current classifications of fresh waters in the Town of East Hampton are listed in the Inventory and Analysis of Surface Waters and Wetlands and are shown on Water Resources Maps XII-2A/-2B.

Most fresh-water classifications are consistent with existing and proposed land and water uses.

Water Quality Protection Efforts

Three major efforts are being taken to improve surface water quality so it is consistent with its current classification:

- (1) Designation of vessel waste *No-Discharge Zones* (see **Policy #34**).
- (2) Establishment of a *Harbor Protection Overlay District* (HPOD) to ensure compatible land use activity within watersheds of certain surface waters (see **Policy #37**).
- (3) Establishment of a consistent water quality monitoring program to ensure that no additional areas will be closed for the harvest of shellfish (see **Projects**).

POLICY 32 ENCOURAGE THE USE OF ALTERNATIVE OR INNOVATIVE SANITARY WASTE SYSTEMS IN SMALL COMMUNITIES WHERE THE COSTS OF CONVENTIONAL FACILITIES ARE UNREASONABLY HIGH, GIVEN THE SIZE OF THE EXISTING TAX BASE OF THESE COMMUNITIES.

Explanation of policy:

In the waterfront study area, individual septic tank and leaching pool systems are used to treat sewage waste for nearly all residential and commercial development with the exception of several

residential and commercial denitrification systems and two tertiary sewage treatment plants serving the Rough Rider Condominium complex in Reach 5 and the Montauk Manor Condominium in Reach 6.

A description of physical environments where installation of conventional septic tank/leaching pool systems can be incompatible with soil conditions and can cause adverse impacts is discussed in Groundwater Resources.

The US EPA (1991) describes five management measures, along with their effectiveness and cost, to limit the discharges from conventional on site sewage disposal systems. These measures include:

- (1) limiting phosphate in detergents,
- (2) installing water conservation fixtures,
- (3) eliminating garbage disposal use,
- (4) proper design and maintenance that includes appropriate setbacks based on soil type and periodic pumping and inspection, and
- (5) removal of nitrogen through:
 - (a) intermittent sand filters,
 - (b) upflow anaerobic filter and sand filter,

(c) wastewater separation of toilet waste (in holding tanks) and graywater (in a conventional system), or

(d) site density controls to limit total nitrogen loading. Some of these measures are included in the standards for the *Harbor Protection Overlay Protection District* (HPOD), **Appendix C**.

Other alternatives to conventional on-site septic systems are available or being developed. These include wastewater separation and holding tanks in combination with composting toilet systems, elevated sand mound, shallow pressure dosing trench, alternating fields, sand lined trench, sand filter trench, evapotranspiration systems, artificial wetlands, greenhouse systems, and bermed infiltration ponds (US EPA, 1991, and Coastal Technology Inc., 1991).

There remains a need for greater regulatory flexibility in sewage system design to allow innovative systems. Of particular concern are areas with wet or clay soils, highly permeable soils near wetlands, steep slopes, and in low lying coastal areas where there is insufficient depth to ground water. Conventional septic tank/leaching pool systems, particularly if they are poorly operating systems, can cause contamination to ground and surface waters in these areas. Revised County standards for single-family residence sewage disposal fields recognize that some sites are not suitable for conventional septic systems. The regulations allow use of alternative systems on a limited basis, provided a conventional system is also included, and the system is designed by a professional. These regulations should be further broadened as systems are placed in use, to allow alternative systems without requiring dual-piped standard systems.

In order to encourage the development and use of alternative sanitary waste systems in the Town of East Hampton the following guidelines are recommended:

- (1) As recommended by several researchers (see Brown, 1980) and as adopted by other jurisdictions a minimum of 4 feet between septic system discharge and the groundwater table should be required. See *Harbor Protection Overlay District*, Appendix C.
- (2) Utilize alternative systems for public facilities in sensitive areas where public access to the waterfront is provided.
- (3) Retrofit the Town Scavenger Waste Treatment Plant for boat pumpout waste and recreational vehicle waste.
- (4) When a variance to wetland setback requirements is under consideration within the *Harbor Protection Overlay District* boundary on pre-existing single and separate lots, the septic system should be inspected and where it is below current standards, it shall be brought up to current standards or replaced with an innovative or alternative system.
- (5) Investigate feasibility of a pollution mitigation requirement plus an incentive system for septic system upgrades. Create a revolving fund for low interest loans to individuals who can meet a set of need-based criterial for low or fixed incomes to help install alternative or upgraded septic systems. State legislation may be needed to permit the municipality to offer property tax incentives for septic system improvements and other water quality measures on private property. Lobby for State enabling legislation if required.

This policy shall not be construed to support development or increased density on unsubdivided land in the waterfront region. Rather it is intended to correct existing contaminant sources and to limit the increase of future sources in areas of high existing density and environmental sensitivity.

POLICY 33 BEST MANAGEMENT PRACTICES WILL BE USED TO ENSURE THE CONTROL OF STORMWATER RUNOFF AND COMBINED SEWER OVERFLOWS DRAINING INTO COASTAL WATERS.

Explanation of policy:

The Inventory and Analysis of Surface Waters and Wetlands, Stormwater Abatement Program outlines areas where stormwater runoff enters into surface waters and the types of pollutants being introduced into surface waters from runoff. There are no combined discharges of sewage and stormwater runoff in the Town of East Hampton since there are no municipal sewage systems. There are however, direct discharges of stormwater runoff to surface waters. Areas which would benefit from stormwater abatement efforts are noted for each waterbody particularly in reference to coliform bacteria contamination.

Best management practices to control stormwater runoff are outlined in Policy 37/37A.

POLICY 34 DISCHARGE OF WASTE MATERIALS INTO COASTAL WATERS FROM VESSELS WILL BE LIMITED SO AS TO PROTECT SIGNIFICANT FISH AND WILDLIFE HABITATS, RECREATION AREAS AND WATER SUPPLY AREAS.

POLICY 34A THE FOLLOWING HARBORS AND CREEKS OF THE TOWN ARE DESIGNATED AS STATE AND FEDERAL EPA *NO-DISCHARGE ZONES* AS OF JANUARY, 1999:

Reach 1	Northwest Creek
Reach 2	Three Mile Harbor, Hog Creek
Reach 3	Accabonac Harbor
Reach 4	Napeague Harbor
Reach 6	Lake Montauk

Explanation of policy:

All of the Town's creeks, harbors and bay areas are susceptible to pollution from the discharge of vessel wastes. The discharge of sewage, garbage and other solid and liquid materials from water craft and marinas into State and Town waters is presently regulated by the Federal Clean Water Act, State Navigation Law and Town of East Hampton local laws. In the Town of East Hampton, enforcement of these laws will be a priority in the following areas: shellfish beds, Significant Fish and Wildlife Habitats, beaches, and other areas which need protection from contamination by vessel wastes. The following areas were designated as State and Federal EPA *No-Discharge Zones* in January, 1999:

Reach 1	Northwest Creek
Reach 2	Three Mile Harbor, Hog Creek
Reach 3	Accabonac Harbor
Reach 4	Napeague Harbor
Reach 6	Lake Montauk

A local law, **§149-60 to -67** et al of Town Code, was passed to implement the State and Federal designation. As part of the Peconic Estuary Program the Town expects the Peconic Estuary, including all the Town's northern bays, harbors and creeks, to become a designated *No-Discharge Zone*. If other Peconic Estuary communities do not enact *No-Discharge Zones* expeditiously, the Town will consider expanding its *No-Discharge Zone* to its jurisdictional boundary in the bay. However, a *No-Discharge Zone* for all bays, harbors, and creeks in the entire estuary is preferable because:

• A single regulation would apply throughout the waterbody which joins all five East End towns, simplifying compliance for users, the marine industry and enforcement by Harbormasters, Bay Constables, the US Coast Guard or other marine personnel.

- Public education can be conducted on a regional scale.
- All discharges of vessel sewerage wastes, treated or untreated, would be prohibited, simplifying enforcement, and waste would not circulate across jurisdictional boundaries.
- Federal navigation charts would indicate the *No-Discharge Zone*, giving notice to both local boaters and transient visitors cruising in the area from other regions.

The *No-Discharge Zone* applies only to marine head waste or sewerage, and does not include water discharged from properly functioning engine cooling systems or raw salt water wash down of fishing vessels. However, boaters and marina operators are encouraged to follow best management practices (BMP's), and not to discharge any wastes into Town bays and harbors including: all sanitary waste including "porta-potty" and raw sewage discharges, wastes from marine sanitation devices (MSD's), bilge discharge, dishwasher and clothes washer (gray water) discharge, trash, fuel, oil and cleaning solvent-contaminated rinse water.

To realize the benefits of *No-Discharge Zones* in Town waters will require education and the cooperation of boaters, marina operators and Town officials. The Town intends to rely on public education more than enforcement in implementing the *No-Discharge Zone*. To that end, a public education program has been established in cooperation with the Town Trustees, marina owners, civic and environmental groups to include brochures, signs, media advertising, and public service announcements. In addition, municipal pumpout facilities in the two principal harbors have been expanded, and two pumpout boat services have been instituted. Marina owners are encouraged to voluntarily designate their facility as a No-Discharge Marina in accordance with an Empire State Marine Trades Association Program, and to provide adequate and accessible shoreside sanitary facilities for marina patrons.

Other BMP's for public and private marinas and docks include providing for the collection and proper disposal of waste oil from vessels, collection of solid waste and recyclable materials, and instituting fuel spill prevention measures such as those outlined in **Policy #36** as standard operating practice.

Vessel Mooring and Anchoring

The mooring and anchoring of vessels in Trustee harbors are subject to the supervision and control of the Town Trustees. To maintain water quality and minimize shellfish area closures, the following measures have been implemented for mooring and anchorage of resident and transient boats in Town waters:

• Transient overnight anchoring is prohibited in Northwest Creek (Reach 1), Accabonac Harbor (Reach 3) and Napeague Harbor (Reach 4), except in emergency conditions of extreme weather or equipment failure.

- Mooring areas for transients have been established in both Three Mile and Montauk Harbors, with an associated mooring fee. Once moorings are full, transients are encouraged to use private marinas.
- Floating homes are prohibited within the Town. According to **§149-34** no person shall place, moor, dock, store, use, or occupy a floating home in or on Town waters.

Boater Education

The Town, the marine industry and harbor associations provide educational materials to improve boating stewardship practices, including:

- Signs at harbor entrances discouraging vessel sewerage discharge.
- Brochures distributed at marinas noting location of pumpout stations.
- Promotion of non-polluting boat products including non-toxic cleaners.
- A public awareness campaign utilizing radio, television and newspapers on the special qualities of East Hampton's clean waters. See also *Boater Education* in **Projects**.

Marine Waste Initiatives by the Town of East Hampton

Efforts by the Town of East Hampton to prevent discharge of vessel wastes into coastal waters include:

- Installation of municipal pumpout facilities in Three Mile Harbor and Lake Montauk.
- Increased Harbor Master and Bay Constable personnel.
- Installation of holding tanks at the Town Scavenger Waste Treatment plant for boat and RV waste.
- Future LWRP **Project** initiatives including *Harbor Management Plans, Boater Education and Water Quality Monitoring.*

POLICY 35 DREDGING AND DREDGE SPOIL DISPOSAL IN COASTAL WATERS WILL BE UNDERTAKEN IN A MANNER THAT MEETS EXISTING STATE DREDGING PERMIT REQUIREMENTS, AND PROTECTS SIGNIFICANT FISH AND WILDLIFE HABITATS, SCENIC RESOURCES, NATURAL PROTECTIVE FEATURES, IMPORTANT AGRICULTURAL LANDS, AND WETLANDS.

Explanation of policy:

Periodic dredging is needed to maintain navigation channels at sufficient depths for commercial fishing and recreational vessels. Dredging projects may improve circulation and flushing in enclosed harbors; however, they may also adversely affect water quality, fish and wildlife habitats, wetlands and other important coastal resources as described in the Inventory and Analysis. Often, these adverse effects can be minimized through careful design and timing of the dredging operation and proper siting of the dredge spoil disposal site. Use of clean dredge spoil for beach nourishment or habitat enhancement is encouraged. See also **Flooding and Erosion Policy #15** regarding the effects of dredging on coastal processes and erosion, and use of spoil for beach nourishment.

Publicly Owned Inlets and Channels

Inlets and channels which require periodic dredging:

Reach 1	Northwest Creek	inlet
Reach 2	Three Mile Harbor	inlet and channels
Reach 3	Accabonac Harbor	inlet and channel
Reach 4	Napeague Harbor	inlet and channel
	Fresh Pond	"gut" to Gardiner's Bay
Reach 6	Lake Montauk	inlet and channel
Reach 11	Georgica Pond	"gut" to Atlantic ocean

Publicly Owned Marinas

The following public marinas also require periodic dredging:

Reach 2	Gann Road Dock
	Town dock at Head of Harbor
Reach 6	Commercial Dock

Privately Maintained Inlets and Marinas

There are various privately maintained inlets such as Hog Creek in Reach 2 and marinas such as Devon Yacht Club in Reach 4. Locations of private dredging projects are noted in the Inventory and Analysis.

Dredging Standards and Guidelines

Dredging permits will only be granted upon demonstration that adverse impacts satisfy Federal, State and Town dredging permit standards with respect to protection of coastal resources. For a dredging permit to be issued, the following standards must be met:

- (1) The navigational need must be demonstrated. Dredging to improve water circulation and flushing or habitat improvements will also be considered. See **Projects**.
- (2) Dredging must not be detrimental to beaches, dunes, bluffs, tidal wetlands or water courses and must not unduly interfere with tidal flow, littoral drift, marine life, or habitats.

No new dredging (other than maintenance dredging) shall be permitted to disturb tidal wetlands either by direct removal of vegetation or by alteration of adjacent slopes such that wetlands are disturbed, covered or degraded.

In recognition of the importance of eelgrass (*Zostera marina*) to the marine habitat, no new dredging proposal shall allow destruction of eelgrass in Town waters.

- (3) Dredging shall not undermine existing waterfront structures.
- (4) The amount of dredging for which a permit may be issued, shall be the minimum necessary in terms of channel or basin width and depth, physical effect, and cost. Generally, dredging shall not exceed a depth of 6 feet below the mean low water elevation and the side slopes of channels may not exceed 20% (a 1 foot vertical on a 5 foot horizontal slope). Guidelines for the channels and inlets in each reach are:

Reach 1	Northwest Creek	maintenance dredge to follow natural channel (4-6 feet)
Reach 2 Reach 3	Three Mile Harbor Accabonac Harbor Fresh Pond	accommodate existing usage (12-14 feet) accommodate existing usage (4-6 feet) improve water quality and accommodate existing usage
Reach 4 Reach 6	Napeague Harbor Lake Montauk	accommodate existing usage (4-6 feet) accommodate existing usage (12-14 feet at inlet at north end), maintain existing extent of channel
Reach 11	Georgica Pond	accommodate existing usage (fish migration, water level control)

- (5) Dredging windows (time periods when dredging shall be conducted) shall be established on a case by case basis such that the following site specific conditions are assessed and protected: abundance of bottom flora (e.g. eelgrass), finfish and shellfish habitat; spawning and nesting activity; toxicity and physical characteristics of bottom sediments; neighboring properties; and public use of the water. Dredging will not be permitted during vulnerable periods except in emergency circumstances.
- (6) Dredging will not be permitted for sand mining or for providing fill.
- (7) For any new dredging permit (new dredging does not include maintenance dredging) to be issued, an explicit finding by the agencies reviewing the project must be made that similar results are impossible through project modifications or alternative actions such as relocating or modifying docks or accommodating smaller boats. The Town Trustees will determine whether to approve a dredging project based upon their own standards in effect at the time of application. Any alternatives which would avoid or reduce impacts on marine or coastal resources must be investigated.

(8) The Town and/or Town Trustees shall be consulted on and shall approve the dredge spoil site and method of disposal before any dredging permit is issued.

Dredge Spoil Disposal

Recommended dredge spoil disposal locations are described in the Inventory and Analysis and on Water Resources Maps XII-2A/-2B. The following standards for dredge spoil disposal shall apply in the Town of East Hampton:

- (1) Any contaminated spoil shall be disposed of in accordance with Town and State regulations.
- (2) The use of clean dredge spoil is encouraged for beach nourishment in lieu of constructing hard erosion structures; to augment Town bathing beaches and to improve bird nesting habitat. See Flooding and Erosion Policy #15 for priorities on use of dredge spoil.
- (3) Dredge spoil placed upland, other than for beach nourishment, shall be contained by straw bales, berms, dike and weir or other means to prevent material from washing back into the water or onto adjacent areas not designated for spoil disposal. In no case shall dredge spoil be placed or disposed of over drinking water supply areas.

Dredging Mitigation

Where Dredging Standards (2) and (5) protecting shellfish for new and maintenance dredging projects cannot be met, compensation to the public shellfish resource should be considered to replenish the shellfish resource. Mitigation would correspond to replacing the equivalent of the entire affected shellfish population on-site if they were harvested as adults, or of reestablishing and stocking a similar habitat in open waters.

POLICY 36 ACTIVITIES RELATED TO SHIPMENT AND STORAGE OF PETROLEUM AND OTHER HAZARDOUS MATERIALS WILL BE CONDUCTED IN A MANNER THAT WILL PREVENT OR AT LEAST MINIMIZE SPILLS INTO COASTAL WATERS; ALL PRACTICAL EFFORTS WILL BE UNDERTAKEN TO EXPEDITE THE CLEANUP OF SUCH DISCHARGES; AND RESTITUTION FOR DAMAGES WILL BE REQUIRED WHEN THESE SPILLS OCCUR.

Explanation of policy:

This policy shall apply to commercial storage and distribution facilities and to residential and other users of petroleum products, radioactive, toxic or hazardous materials. Spills, seepage or other accidents which occur on or adjacent to coastal waters or which, by virtue of natural or man-made drainage facilities, eventually reach coastal waters, are included under this policy. The use and storage of petroleum products, radioactive and other toxic or hazardous materials, and the problems related to these materials, are discussed in the inventory and analysis.

Petroleum storage and dispensing to boats, at power generating stations such as the LIPS substation on Fort Pond, or other commercial or industrial sites, potentially threaten to contaminate coastal resources. To minimize potential damage from spills, the following standards and guidelines shall be met:

- (1) Methods of storage and use of petroleum products in waterfront areas shall ensure that there are no discharges to coastal waters.
- (2) Marinas shall provide facilities to collect petroleum, waste oil and other boat waste products generated by marina patrons, which shall be disposed of according to State and Federal law.
- (3) Existing or proposed facilities within the coastal area that dispense, ship or store petroleum products and hazardous materials from marinas or docks shall incorporate best management practices (BMP's) for spill prevention, including:
 - (a) A minimum of two people must be available during fueling from mechanical dispensers and trucks. The boat owner, boat captain or individual responsible for the boat shall remain on the boat during fueling. A second person, trained in the use of containment booms and fuel spills, must remain at the fueling dispenser.
 - (b) Valves and filters in fuel dispensers shall be opened, adjusted and removed by trained marina personnel only.
 - (c) A fuel spill containment boom of a length long enough to encircle the dock or marinas' longest vessel shall be maintained on-site.
 - (d) On-site personnel shall be trained in the use of containment booms.
 - (e) Any spill to coastal waters shall be cleaned up at the expense of the individual or the fueling facility responsible for such spill. To the extent permissible by law, the costs of clean-up activities undertaken by any level of government shall be reimbursed by the originator of the spill.
- (4) Fuel dispensed directly from trucks to vessels shall meet the same spill prevention measures listed in a-e above.

Although this policy addresses petroleum spills on the waterfront, upland dispensing facilities can affect surface water quality. Within the *Harbor Protection Overlay District*, Appendix C, there are also requirements for fuel storage tanks of less than 1100 gallons capacity. All petroleum and hazardous spills must be reported to the NYS DEC. See **Policy #39** for procedures.

The Town has submitted an Oil Spill Contingency Plan to the New York State DEC which provides a plan in the event of an oil spill in or off coastal waters to protect significant fish and wildlife habitats as well as recreational areas. The Oil Pollution Act of 1990 provides for the regulation of commercial carriers in coastal waters. In recognition of the fragility of the coastal environment and navigational hazards existing in Block Island Sound, the Town of East Hampton shall encourage the Department of Transportation to establish a Tanker Free Zone in the Block Island Sound waters between Block Island and Montauk.

POLICY 37 BEST MANAGEMENT PRACTICES WILL BE UTILIZED TO MINIMIZE THE NON-POINT DISCHARGE OF EXCESS NUTRIENTS, ORGANICS AND ERODED SOILS INTO COASTAL WATERS.

POLICY 37A BEST MANAGEMENT PRACTICES WILL BE USED TO ABATE AND ELIMINATE STORMWATER RUNOFF DRAINING INTO COASTAL WATERS.

Explanation of policy:

Problems from non-point sources of contaminants are most acute in the Town's harbors and creeks, and manifest to a lesser extent in the open harbors and bays of the north shore. Excess nutrients, organics and other contaminants emanate from upland sources through surface runoff and groundwater underflow. Identified sources include septic systems, lawn fertilizers and chemicals, stormwater and road runoff, wildlife, swimming pool chemicals, agricultural and landscaping pesticides and nutrients, leaking fuel tanks, and wastes from marinas and boatyards.

The Town has undertaken a number of best management practices (BMP's) to prevent these contaminants from reaching surface waters, including installation of numerous catchments and recharge basins for stormwater and road runoff abatement, open space purchases for water recharge, an open marsh water management (OMWM) program to degrade pollutants in saltmarsh, and a number of other public works projects.

Best management practices for stormwater runoff include both structural and non-structural methods of preventing or mitigating pollution. In both cases the goal is to recharge stormwater to the land and minimize runoff to surface waters. The use of structural approaches such as man-made retention basins or the installation of drainage pools to control all stormwater runoff is not practical nor is it economically feasible. Where structural approaches are not feasible, non-structural approaches such as minimized clearing and soil disturbance, and the avoidance of steep slopes should be used.

In the Town of East Hampton, the following best management practices shall be required for private development and public works projects to minimize the impact of stormwater runoff. Specific measures will be applied on a case by case basis. Additional regulations apply within the *Harbor Protection Overlay District*, Appendix C, or **§153-3-75** of Town Code).

- (1) There shall be no new direct discharge of stormwater into fresh or marine surface waters or into freshwater and tidal wetlands. Stormwater runoff will be controlled, as noted below, so that wetlands or surface waters are not contaminated with sediments, nutrients, bacteria, organic chemicals or heavy metals, nor shall such runoff alter the hydrology of wetlands.
- (2) All stormwater shall be contained on-site to prevent the direct discharge of runoff into coastal waters both during the construction phase when soils are more susceptible to erosion and after the project is complete. The amount and velocity of runoff from a site after development shall be equal to or less than its pre-development characteristics. To achieve this objective, the following measures shall be considered during permit review:
 - (a) When constructing impermeable paved surfaces for site improvements on lands located near surface waters and wetlands, particular attention should be paid to siting and adequate sizing of recharge drywells such that runoff is contained on site. Recharge drywells should also be provided for gravel or "unimproved" surfaces (sometimes called semi-permeable) to collect runoff and sediments that are generated by these surfaces.
 - (b) For development in areas adjacent to the edge of ponds, streams, rivers, bays, and wetlands, buffer areas of a minimum of 50-feet between the development and the protected area shall be established to absorb floodwater and trap sediments. Native vegetation shall be retained in such buffer areas and where it has been cleared, the re-establishment of a vegetative buffer shall be considered during permit review. Removal of non-native invasive species such as phragmites shall be permitted as part of such revegetation projects. The clear-cutting of vegetation is prohibited in buffer areas but this shall not be construed to prohibit or prevent pedestrian access to the water.
 - (c) Stream channels, natural flood plains and drainage swales shall not be altered in a manner which decreases their ability to accommodate and channel stormwater runoff and flood waters, except as part of an approved stormwater abatement plan.
 - (d) Disturbed soils shall be stockpiled and stabilized, or revegetated with quick germination grasses, such as rye and oats as soon as possible. During the interim, erosion protection measures such as straw bales, project limiting fences, temporary vegetation, retention ponds, recharge basins, berming, silt traps and mulching shall be used to ensure that erosion and sedimentation are minimized and mitigated.
 - (e) Project design shall use existing topographic drainage contours for on site recharge so as to minimize regrading requirements. Use of large excavated

sumps, or recharge basins, to accomplish on site recharge is unacceptable. Recharge basins have a number of drawbacks including that they require a substantial amount of vacant and subsequently unusable land. They also form barriers to transit by people and wildlife, are unsightly, and provide havens for invasive species such as bittersweet. Maintenance requirements are an additional burden, particularly if required to be performed as part of the Town Highway budget.

- (3) Existing stormwater systems that currently discharge into surface waters shall be evaluated to determine whether these systems can be upgraded to minimize impacts to surface waters, wetlands and adjacent areas. Road repair and maintenance by the Town shall provide adequate maintenance of leaching pools, increased street cleaning, and reduced use of road salt.
- (4) To control waste runoff from livestock, a buffer of at least 100 feet shall be established between the upland edge of wetlands and areas used for quartering of animals. Where slopes exceed 10% in these buffer areas, the buffer should be increased or runoff should be contained using berms or other retention measures. Manure piles should be setback 200 feet from property lines, wetlands and surface waters.
- (5) Vector control ditches will not be used as drainage ditches for road runoff.
- (6) Use of pesticides, herbicides, fertilizers or road salts shall be minimized within 200 ft. of a fresh water or tidal wetland and organic alternatives employed where such treatment is necessary.

Residential and other private sources of non-point pollutants are being reduced through a *Harbor Protection Overlay District* (HPOD) codified in the Zoning Code in **§153-3-71 through -75**. The HPOD local law essentially covers upland properties one lot deep surrounding the Town's enclosed harbors, and provides regulations for control of stormwater runoff, septic systems, clearing of vegetation, swimming pools, use of treated wood products, fuel storage tanks, and fertilizers, pesticides and herbicides. If HPOD proves effective, the boundary should be reevaluated to include a more comprehensive watershed as well as areas affecting other surface waterbodies including the open bays. The current boundaries of the HPOD are shown on Water Resources Maps XII-2A/-2B, and the text of the *HPOD* law is included in Appendix C. *HPOD* regulations are excerpted as follows:

§ 153-3-75. Regulations.

In addition to any other provisions of this chapter which may apply to them, lots, lands, buildings, structures, uses, and activities within the Harbor Protection Overlay District shall be subject to the following restrictions and regulations:

- A. Control of stormwater runoff. The following regulations shall apply to structures or activities which produce or contribute to stormwater pollution of the Town's surface waters:
 - (1) No parking lot or private driveway shall hereafter be constructed unless it has either an unimproved surface (e.g., dirt, crushed shells) or an improved surface consisting of one or more of the following materials: poured concrete, hot plant mix asphalt, rapid-curing cut-back asphalt, or quartz gravel.
 - (2) No road, private driveway, or parking lot with an improved surface shall hereafter be constructed unless all stormwater generated by the said structure is directed into one or more catchment basins. The said catchment basin or basins shall have a combined volume (in cubic feet) equal to the surface area of the road, driveway, and/or parking area (in square feet), divided by six (6).
 - (3) Any road, private driveway, or parking lot which is hereafter constructed with an improved surface shall be maintained so that all stormwater generated by the said structure is actually directed into the catchment basin or basins required by the preceding paragraph. Any catchment basin required by the preceding paragraph shall be kept clean and maintained so that it recharges stormwater into the ground without overflowing.
 - (4) No pipe, culvert, drain, or similar conduit may hereafter be constructed or installed which discharges stormwater into wetlands (including surface waters).
 - (5) Every principal building or addition to a principal building which is hereafter constructed or erected shall be furnished with gutters and leaders to direct stormwater from roofs into one or more catchment basins. The said catchment basin or basins shall have a combined volume (in cubic feet) equal to the surface area of the roof (in square feet), divided by six (6).
 - (6) During construction work the disturbance of natural vegetation and land contours shall be minimized to the maximum extent practicable. Project-limiting fencing, siltation mesh, straw bales, or similar devices for limiting land disturbance and retarding erosion and siltation shall be used during construction work and during any land clearing or grading in preparation for or associated with construction work.
- B. New sanitary septic systems. The following regulations shall govern the installation of all septic systems after this date, except for septic systems which are installed to replace legally preexisting septic systems:

- (1) No such septic system shall be installed or constructed unless it is set back a minimum of two hundred (200) feet from the surface waters of Accabonac Creek, Fort Pond (including the arm of Fort Pond north of Industrial Road), Georgica Pond, Great Pond (Lake Montauk), Hog Creek, Napeague Harbor, Northwest Creek, Northwest Harbor, Stepping Stones Pond, Three Mile Harbor, Tuthill Pond, and/or Wainscott Pond and from the upland boundary of any wetlands contiguous to the foregoing bodies of water. To the extent that any provision of Article IV imposes a lesser wetland setback for septic systems, the requirements of this paragraph shall be controlling with respect to lands within the Harbor Protection Overlay District.
- (2) No septic system leaching pool shall hereafter be installed unless the bottom of the leaching pool is situated a minimum of four (4) feet above the groundwater table.
- C. Existing sanitary septic systems. Any septic system which legally exists on a residential property on January 1, 1996 shall be replaced or upgraded in the following circumstances and to the following extent:
 - (1) Every septic system regulated by this subsection shall be replaced or upgraded if:
 - (a) A natural resources special permit is required for work to be performed on the lot or parcel containing the septic system; and
 - (b) The work to be performed will increase the habitable floor area of a principal building on the lot, or will increase the number of bathrooms within a building on the lot; and
 - (c) The septic system in question does not meet the minimum requirements of the SCDHS for vertical separation to groundwater, for setback to surface waters, or for septic system capacity, or lacks a septic tank.
 - (2) Where this subsection requires that an existing septic system be replaced or upgraded, the new or upgraded septic system shall meet the following requirements:
 - (a) It shall comply with the requirements of SCDHS for new septic systems and shall be installed under the supervision of the Sanitation Inspector; and
 - (b) It shall be set back a minimum of one hundred fifty (150) feet from the upland boundary of all tidal wetlands (including tidal surface

waters) or, if that is not feasible, it shall be set back the maximum practicable distance from the surface waters of Accabonac Creek, Fort Pond (including the arm of Fort Pond north of Industrial Road), Georgica Pond, Great Pond (Lake Montauk), Hog Creek, Napeague Harbor, Northwest Creek, Northwest Harbor, Stepping Stones Pond, Three Mile Harbor, Tuthill Pond, and/or Wainscott Pond and from the upland boundary of any wetlands contiguous to the foregoing bodies of water, taking into consideration such factors as the physical constraints of the site and the location of nearby water supply wells.

- D. Limited clearing of lots. Clearing of lots or parcels of land within the Harbor Protection Overlay District shall be restricted as set forth herein.
 - (1) The total area of a lot which may be cleared of indigenous natural vegetation shall not exceed the following amounts for any lot located wholly or partly within the overlay district:

Lot Area (square feet)	Maximum Clearing Permitted
In Residence Districts:	
Up to and including 39,999	10,000 square feet or 35% of lot area, whichever is greater
From 40,000 to and including 280,000	10,000 square feet + (lot area X 12.5%)
Greater than 280,000	45,000 square feet
In Commercial Districts:	
All lots	10,000 square feet or 50% of lot area, whichever is greater

In calculating the amount of clearing permitted on a flag lot by this subsection, the area of any flag strip shall be excluded from lot area. Likewise, any clearing for driveway purposes within the flag strip shall not be counted into the permissible amount of clearing.

- (2) Clearing in excess of forty-five thousand (45,000) square feet on any lot in a residence district is prohibited unless the following requirements are met:
 - (a) The area of the lot, excluding the area of any flag strip but otherwise determined as set forth in § 153-1-20 hereof, exceeds three hundred thousand (300,000) square feet; and
 - (b) Site plan approval and a special permit have been first obtained from the Planning Board.
- E. Swimming pools. The following regulations shall govern the construction or installation of swimming pools:
 - (1) No swimming pool shall hereafter be constructed or installed unless it is furnished with a system to reduce the use of chlorine disinfectant, such as an ozonator, ionizer, or ultra violet disinfectant system.
 - (2) No swimming pool shall hereafter be constructed or installed unless the bottom of the swimming pool is situated a minimum of two (2) feet above the groundwater table. The Building Inspector shall require proof of compliance with this provision before issuing a Certificate of Occupancy.
 - (3) No swimming pool shall hereafter be constructed or installed unless it is provided with one or more dry wells which are easily accessible for the evacuation of water from the swimming pool. In the case of a gunite or other evacuable swimming pool, such dry wells shall have a total volume at least equal to ten percent (10%) of the volume of the pool, and in any case not less than four hundred fifty (450) gallons (or approximately the volume of a three (3) foot deep by five (5) foot wide dry well). In the case of a vinyl-lined swimming pool, the total volume of dry wells shall be at least equal to one-half (1/2) the dry well volume required for a gunite pool of the same size.
 - (4) No swimming pool shall be drained or have its water discharged into a driveway, storm drain, public or private street, or into wetlands (including surface waters), nor shall any swimming pool be drained or have its water discharged into any receptacle other than a dry well installed as required by this subsection.
 - (5) The cleaning of swimming pools or swimming pool surfaces by means of an acid wash is prohibited unless the acids used are completely neutralized before discharge from the swimming pool.
- F. Fuel storage tanks. On lots having one (1) or more fuel storage tanks, whose combined capacity does not exceed one thousand one hundred (1,100) gallons, the

installation of each fuel storage tank shall hereafter be subject to the following requirements and restrictions:

- (1) If installed belowground, each tank shall be of double-walled fiberglass manufacture.
- (2) If installed aboveground, each tank shall either:
 - (a) be installed within the cellar of a building having a poured-concrete floor, or
 - (b) be installed atop an impermeable flat surface, e.g., a concrete pad, which extends at least six (6) inches laterally beyond the outermost sides of the tank and any associated piping, and be installed so that it is open and accessible for inspection on at least three (3) sides.

In addition to HPOD the following BMP's are recommended to eliminate or reduce non-point discharges from agriculture and development:

Agricultural Cultivation Practices/Best Management Practices to Minimize Non-point Discharges

- (1) Plow in the direction, usually parallel to the shoreline, that maximizes water retention.
- (2) Where land is under cultivation directly adjacent to the wetland boundary, soil will be retained by a 50-foot buffer zone of indigenous vegetation (where possible), or by straw bales or silt cloth.
- (3) Encourage the planting of crops with deep root systems in the upland area of wetlands (200-300 feet).
- (4) Minimize the use of fertilizers, herbicides and pesticides.
- (5) Implement controls noted in **Policy #33** for quartering of livestock.

Development Controls/Best Management Practices to Minimize Non-point Discharges.

- (1) Limit impervious surfaces (see **Policy #33**).
- (2) Minimize stormwater runoff (see **Policy #33**).
- (3) Minimize vessel discharges and provide treatment services (see **Policy #34**).

- (4) Minimize marina waste discharges from fueling facilities, boat maintenance and repair, and fish waste (see **Policies #34 and #36**).
- (5) Upgrade faulty septic systems and encourage use of alternative sanitary systems (see **Policies #32 and #38**).
- (6) Ensure proper techniques for road construction, maintenance and repair (see **Policy** #33).
- (7) Discourage use of chemically treated wood in watershed tributary areas.
- (8) Maintain and reestablish indigenous plant species within buffer areas.

POLICY 38 THE QUALITY AND QUANTITY OF SURFACE WATER AND GROUNDWATER SUPPLIES, WILL BE CONSERVED AND PROTECTED, PARTICULARLY WHERE SUCH WATERS CONSTITUTE THE PRIMARY OR SOLE SOURCE OF WATER SUPPLY.

POLICY 38AMAINTAIN WATER RESOURCES AS NEAR TO THEIR NATURAL
CONDITION OF PURITY AS REASONABLY POSSIBLE TO
SAFEGUARD PUBLIC HEALTH.

Explanation of policy:

Groundwater is the principle source of drinking water in the Town and therefore must be protected. Since Long Island's groundwater supply has been designated a "sole source aquifer", all actions must be reviewed relative to their impacts on the Long Island aquifer. Recharge areas and groundwater drinking supplies in the Town of East Hampton are discussed in the Inventory and Analysis of Groundwater and are shown on Water Resources Maps XII-2A/-2B.

The designated best use of all groundwater of Suffolk County is for public and private water supply. The entire waterfront study area is located in Hydrogeologic Zone IV, which is a water supply sensitive area established by Suffolk County. As a result of geological conditions in this zone, groundwater in most of the Town's waterfront area is vulnerable to salt water intrusion. Given the vulnerability of the Town's ground water supplies and its value as a sole source of drinking water, all available practical methods of preventing and controlling water pollution shall be utilized.

There are three potential point sources of pollution to groundwater in the Town: contaminants from the Montauk landfill (Reach 5) and the discharges from tertiary sewage treatment plants, one located in Reach 5, the other in Reach 6. All other potential pollution sources are considered "non-point" and include septic systems, recharge or catch basins receiving stormwater runoff and swimming pool discharge, agricultural chemicals, lawn and landscaping chemicals, leaking underground storage tanks, and incidental spills. The Inventory and Analysis summarizes the status of underground tank

removal and replacement, and spill clean-up. All other sources are associated with residential and commercial development as depicted on the land use map of the Town.

In addition to the other standards of the Water Resources Policies relative to ground water resources and the goals and objectives of the Water Resources Management Report (TOEH 1987), the following guidelines should apply throughout the Town's waterfront area:

- (1) Test hole or test well data that is provided to determine depth to groundwater should be accompanied by the time and date so that it can be checked against tidal conditions. This is a requirement within the *Harbor Protection Overlay District* (HPOD).
- (2) A minimum of four feet should be required between the bottom of any septic system discharge point and the groundwater table, except if this cannot be met in the waterfront zone. This is a requirement within HPOD.
- (3) All construction should be equipped with water conserving fixtures, per State law.
- (4) To the maximum extent practicable, native species requiring the minimum application of fertilizers, biocides and water shall be utilized for lawns and landscaping. This is a requirement within HPOD.
- (5) When improved lots are redeveloped, existing septic systems should be upgraded to current standards and, where necessary, relocated such that setbacks from sensitive features are maximized. This is a requirement within HPOD.
- (6) Where only minimum standards for septic systems can be met or cannot be met, alternative or innovative sanitary facility design should be considered. This is required within HPOD.
- (7) Application of the Water Recharge Overlay District clearing restrictions and limitations on allowable fertilized turf in the Town's waterfront area. This is required within HPOD.
- (8) Discourage the siting of commercial or industrial facilities with the potential for ground or surface water pollution. This is implemented generally through Town Zoning and Site Plan Review requirements.
- POLICY 39 THE TRANSPORT, STORAGE, TREATMENT AND DISPOSAL OF SOLID WASTES, PARTICULARLY HAZARDOUS WASTES, WITHIN COASTAL AREAS WILL BE CONDUCTED IN SUCH A MANNER SO AS TO PROTECT GROUNDWATER AND SURFACE WATER SUPPLIES, SIGNIFICANT FISH AND WILDLIFE

HABITATS, RECREATION AREAS, IMPORTANT AGRICULTURAL LANDS AND SCENIC RESOURCES.

Explanation of policy:

The definition of terms "solid wastes" and "solid wastes management facilities" are taken from New York's Solid Waste Management Act (Environmental Conservation Law, Article 27). Solid waste means all putrescible and non-putrescible materials or substances that are discarded or rejected as being spent, useless, worthless or in excess to the owners at the time of such discard or rejection, including but not limited to garbage, refuse, industrial and commercial waste, sludge from air or water treatment facilities, rubbish, tires, ashes, contained gaseous material, incinerator residue, construction and demolition debris, discarded automobiles, and offal.

Hazardous wastes are unwanted by-products of manufacturing processes generally characterized as being flammable, corrosive, reactive, or toxic. More specifically, hazardous waste is defined in Environmental Conservation Law (Section 27-0901 (3)) as "waste or combination of wastes which because of its quantity, concentration, or physical, chemical or infectious characteristics may: 1) cause, or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or 2) pose a substantial present or potential hazard to human health or the environment which if improperly treated, stored, transported, disposed or otherwise managed." A list of hazardous wastes has been adopted by NYS DEC (6NYCRR Part 371).

Examples of solid waste management facilities include resource recovery facilities, land fills, and solid waste reduction facilities. A major problem associated with the disposal and treatment of solid wastes is the contamination of ground and surface water resources.

Sites for the storage, treatment or disposal of solid waste in the Town of East Hampton are identified in the Town's Solid Waste Management Plan and GEIS (E and A Environmental Consultants, 1990). Two are located in Reach 5: the inactive Montauk landfill and the active Montauk transfer facility.

In order to facilitate best management practices to protect our ground and surface waters, the Town of East Hampton employs the following practices:

- (1) Has halted land filling of solid waste and undertaken a program to promote complete recycling according to the Town's Solid Waste Management Plan (SWMP).
- (2) Actively seeks markets for all its recycled refuse.
- (3) Prohibits incinerators.
- (4) Prohibits disposal or treatment of solid waste within the watershed of coastal waters.
- (5) Disposes of contaminated soils in accordance with State and Federal regulations.

- (6) Collects and disposes of "red bag" medical waste in accordance with State and Federal regulations.
- (7) Prohibits the siting of new facilities with the potential for generating hazardous wastes (PCB's, petroleum by-products, pesticides and other chemical contaminants) within the coastal zone and encourages upgrading or relocating existing hazardous waste generating facilities.

Designated areas in the Town of East Hampton for the handling or transport of hazardous wastes are regulated by the NYS DEC. Under New York State 364 regulations, the handling or transport of hazardous or large amounts of solid wastes is prohibited by an individual without a license or permit.

Commercial users of hazardous materials should be encouraged to store such materials outside of the coastal zone. The Town should survey and monitor such activities involving hazardous waste storage to prevent surface or groundwater contamination in the event of a spill or a catastrophic storm.

Often, temporary or small quantity generators of hazardous waste such as photo processors, garages, landscapers farmers and homeowners are not regulated or scrutinized to the same degree as permanent larger facilities. A temporary storage facility, similar to those provided through the New York State Stop Throwing Out Pollutants (STOP) Program, is needed in the Town so small generators can dispose of their wastes.

The Town of East Hampton has acquired a permit to construct a S.T.O.P. facility. Until such time as funding permits its construction, the Town will be responsible for conducting two S.T.O.P. collection days per year on consecutive days at two collection stations, the Montauk Recycling Transfer Station in Reach 5 and the Town Recycling Center on Springs-Fireplace Road upland of Reach 3. All measures will be made to reclaim, reuse and recycle the substances collected. Examples of these substances include paint, photochemicals and oil pesticides, fertilizers and herbicides.

POLICY 40 EFFLUENT DISCHARGED FROM MAJOR STEAM ELECTRIC GENERATING AND INDUSTRIAL FACILITIES INTO COASTAL WATERS WILL NOT BE UNDULY INJURIOUS TO FISH AND WILDLIFE AND SHALL CONFORM TO STATE WATER QUALITY STANDARDS.

Explanation of why policy is not applicable:

This policy does not apply because there are no steam electric generating or industrial facilities existing in or planned for siting in the Town of East Hampton coastal area. Nevertheless, **Policy #27** concerning siting and construction of energy facilities contains recommendations for siting of non-renewable energy facilities and the encouragement of renewable energy facilities.

Should a major steam electric generating or other major industrial facility be proposed in the future, a Special Permit should be required designating standards for storage, and delivery of toxic chemicals, including fuel, oil, waste oil and transformer oil as well as discharges for waste heat, waste water, solid waste, particulates and noise.

POLICY 44 PRESERVE AND PROTECT TIDAL AND FRESHWATER WETLANDS AND PRESERVE THE BENEFITS DERIVED FROM THESE AREAS.

Explanation of policy:

The benefits derived from the preservation of tidal and freshwater wetlands include but are not limited to:

- (1) Providing habitat for wildlife and fish, including rare and endangered species and a substantial portion of the State's commercial finfish and shellfish resources;
- (2) Providing the foundation of and vital contributions to aquatic and terrestrial food chains;
- (3) Controlling erosion and storm flooding through absorption of flood waters and dampening of wave action;
- (4) Limiting pollution through absorption and filtering of contaminants;
- (5) Groundwater protection;
- (6) Recreational opportunities;
- (7) Educational and scientific opportunities; and
- (8) Esthetically pleasing open space in otherwise densely developed areas.

Tidal Wetlands

Tidal wetlands in the Town of East Hampton are extensive in Reaches 1, 2, 3, 4, 6, 7, and 12 in the protected harbors and streams tributary to Gardiners Bay, Napeague Bay and Block Island Sound. Steep topography in Reach 5 and exposed dunelands in Reaches 8, 9, 10, and 11 provide less hospitable conditions for saltmarsh formation, although these areas may nonetheless remain within the regulatory definition of tidal wetlands. Descriptions of these wetlands are provided in the Inventory and Analysis of these policies and **Significant Habitats Policy #7** and principal locations are illustrated on Freshwater and Tidal Wetlands Map XII-1.

In the Town of East Hampton tidal wetlands are defined as follows:

All lands lying in the area inundated by tidal action and/or peak lunar tides exhibiting salt marsh peat and saline or brackish soils at their undisturbed surface; all estuaries, salt meadows, tidal flats and littoral zones; and all lands upon which grow one or more of the following plant species or associations: salt marsh hay (*Spartina patens*), spike-grass (*Distichlis spicata*), black grass (*Juncus gerardi*), salt water cordgrass (*Spartina alterniflora*), saltwort, glasswort (*Salicornia species*), sea lavender (*Limonium carolinianum*), salt marsh bulrush or chairmaker's rush (*Scirpus species*), sand spurry (*Spergularia marina*), groundsel bush (*Baccharis halimifolia*), high tide bush or marsh elder (*Iva frutescens*), cattail (*Typha species*), spikerush (*Eleocharis species*), bent grass (*Agrostis species*), rockweed (*Fucus species*), common reed (*Phragmites communis*), marsh pink (*Sabatia species*), sea blite (*Suaeda species*), umbrella sedges (*Fimbristylis species*), marshmallow (*Hibiscus palustris*), and *Triglochin* species. Lands lying within or beneath tidal waters shall also be deemed to be "tidal wetlands" regardless of the type or amount of vegetation growing thereon or the absence of same.

Vector control ditches are considered wetlands and wetland setbacks are applicable.

Fresh Water Wetlands

Freshwater wetlands in the Town of East Hampton are widely distributed in Reaches 4, 5, 6, 7, 8, 9 and 10 on the Montauk peninsula and Napeague Beach due to the high clay content of the soils and low lying topography. However freshwater wetlands are also well represented in the remaining Reaches. Their distribution and the causes of their formation are described in detail in the Inventory and Analysis of surface waters and wetlands, and on Map XII-1.

In the Town Code of East Hampton in §153-1-20, freshwater wetlands are defined as:

All lands lying within the boundaries of any watercourse; all fresh marshes, swamps, bogs, kettlehole bogs and the like, regardless of the particular types or amounts of vegetation growing thereon or therein or the absence of same; and all lands upon which grow one or more of the following plant species or associations: red maple (Acer rubrum), tupelo (Nyssa sylvatica), black willow (Salix nigra), shining willow (Salix lucida), Atlantic white cedar (Chamaecyparis thyoides), swamp cottonwood (Populus heterophylla), swamp azalea (Rhododendron viscosum), sweet pepperbush (Clethra alnifolia), winterberry holly (Ilex verticillata), leatherleaf (Chamaedaphne calyculata), swamp sweetbells (Leucothoe racemosa), sheep laurel (Kalmia angustifolia), cranberry (Vaccinium macrocarpon), skunk cabbage (Symplocarpus foetidus), jack-in-the-pulpit (Arisaema triphyllum), cinnamon fern (Osmunda cinnamomea), royal fern (Osmunda regalis), marsh fern (Thelpteris palustris), chain ferns (Woodwardia virginica), sensitive fern (Onoclea sensibilis), wetland sedges (Carex species), wetland bullrushes (Scirpus species), wetland spikerushes (Eleocharis species), wetland soft rushes (Juncus species), wetland beak rushes (Rhynchospora species), wetland grasses (e.g. Phragmites communis), wetland and aquatic herbs, cattails (Typha angustifolia), and sphagnum moss. Freshwater wetlands are also deemed to include all

freshwater wetlands designated on the Freshwater Wetlands Map for Suffolk County promulgated by NYS DEC, effective May 26, 1993, and as may subsequently be amended.

Standards for Development Near Tidal and Freshwater Wetlands

Developments near wetlands are regulated by **§153-4** of the Town Code. The following standards shall be used to protect and preserve wetlands:

- (1) All structures and uses, other than erosion protection structures shall be located on upland sites and in a location so that no wetland will be diminished in size, polluted, degraded or lost, or placed in peril in order to establish the structure or use (see minimum setback standards enumerated in item 4 below). If there is inadequate upland for the structure or use proposed, minimal exceptions to these requirements may be authorized, but only after:
 - (a) Public acquisition has been considered, and definitively rejected.
 - (b) Reasonable alternatives to construction of a primary structure are deemed to be an unreasonable use of the property.
 - (c) Alternative designs that consider smaller buildings, residences or structures, reduced yard or other setbacks, or smaller or reconfigured areas of use are not feasible, lawful, or effective in preventing wetlands filling or wetlands damage.
- (2) Erosion protection structures may only be constructed if all criteria in **Policies #11-17** are met, and if the structure and the associated uses are not detrimental to tidal waters, wetlands or watercourses. No structure shall be permitted which would unduly interfere with tidal flow, with marine life or habitat, or which would destroy other than minimally practicable areas of existing wetland vegetation or beach grass.
- (3) A structure will be deemed in violation of the preceding standards and ineligible for a permit if it, and all other structures likely to be sited in conjunction with it, would together cause undue interference with tidal flow, or destruction of marine life, habitat, or wetland vegetation or beachgrass.
- (4) The following minimum setbacks from the upland boundary of all wetlands (including underwater lands) shall be adhered to on all lots:
 - (a) All wastewater disposal system structures including drywells collecting effluent and overflow from swimming pools, 150 feet.
 - (b) All other structures, 100 feet.

- (c) Turf, landscaping or other clearing of natural vegetation: 50 feet for highest and best standard. See item 6 below for relief provision.
- (5) For lots on which the minimum setbacks called for in the preceding standard can be met or exceeded, the setback of a structure, particularly if it discharges effluent to the subsurface, should be increased to the maximum extent practicable provided that it is sited in accordance with all other standards.
- (6) For existing single and separate lots on which the minimum setbacks called for in the preceding standard cannot be met, even through reasonable reductions in yard setbacks or reductions in the size of the proposed structures, the setback of a structure may be less than otherwise required provided that the actual setback is as great as possible and the proposed structure is sited in accordance with all other standards.
- (7) Whenever possible a common driveway shall be used to serve development so that clearing is minimized.
- (8) In no cases shall wetlands be filled. Where no dry access to a property exists the owner shall first seek to obtain alternate access from an adjoining property owner and secondarily pursue a means to traverse the wetlands in accordance with all State and local regulations.

SECTION XIII

AIR QUALITY POLICIES #41-43

A. INTRODUCTION

This section addresses air quality issues.

B. AIR QUALITY POLICIES

POLICY 41 LAND USE OR DEVELOPMENT IN THE COASTAL AREA WILL NOT CAUSE NATIONAL OR STATE AIR QUALITY STANDARDS TO BE VIOLATED.

Explanation of policy:

New York's Coastal Management Program incorporates the air quality policies and programs developed by the New York State Department of Environmental Conservation (NYS DEC) pursuant to the Federal Clean Air Act and New York State laws on air quality. The requirements of the Clean Air Act are the minimum air quality control requirements applicable within the waterfront area. Program decisions with regard to specific sites for major new or expanded energy, transportation, or commercial facilities will reflect an assessment of their compliance with the air quality requirements of the State Implementation Plan.

The types of land use and development permitted by local law in the coastal zone of East Hampton will not violate federal or state air quality policies and programs. As East Hampton Town at present does not contain any primary point sources of air pollution such as heavy industrial or power generation plants, development in the Town does not pose a threat to air quality.

The principal air pollution source within the Town is automobile traffic, particularly the significant congestion that occurs on summer weekends on Montauk Highway, the Town's principal artery. As automobile pollutants are regulated by the federal and state governments through equipment standards and state inspection programs, the remedies are largely beyond the control of the Town. Impacts of automobile pollution on local air quality, other than subjective impressions of smog and odor, are unknown and to date have not been quantified. Air pollution studies by NYS DOT are recommended when projects are proposed on the state system in the Town of East Hampton. These studies should acquire data on quantities and types of pollutants, locate problem areas and identify ways to reduce congestion at traffic choke points.

Innovative strategies for reducing traffic congestion, establishing more efficient traffic patterns, or providing for new means of local transportation are also within the purview of the Town, and may help to reduce automobile pollution. A number of such solutions have been explored and recommendations submitted in the Transportation Element for the Town Comprehensive Plan completed in 1997.

POLICY 41A THE TOWN SHALL BE INCLUDED IN RADIOLOGICAL EMERGENCY RESPONSE PLANNING AND NOTIFICATION FOR THE MILLSTONE NUCLEAR ENERGY PLANTS OPERATED BY NORTHEAST UTILITIES IN WATERFORD, CT AND THE NUCLEAR REACTORS OPERATED BY THE U.S. DEPARTMENT OF ENERGY AT BROOKHAVEN NATIONAL LABORATORY.

Explanation of policy:

Most of the Town's northerly coastal area lies within a 20-mile radius of the three units of the Millstone Nuclear Power Plant, operated by Northeast Utilities in Waterford, CT, directly across Long Island Sound. These plants have experienced a significant number of operational problems, some of which have led to releases of airborne radioactive materials, and all three units have been closed down in the past because of Nuclear Regulatory Commission safety concerns. Depending on wind and weather patterns the Town could be seriously affected by radioactive airborne emissions from the Millstone plants.

The Town also lies in the prevailing downwind shadow of the experimental nuclear reactors operated by the U.S. Department of Energy at Brookhaven National Laboratory approximately 30 miles to the west.

As ionizing radiation from byproducts of nuclear fission poses a significant health hazard, the Town should be advised immediately of any abnormal release of airborne fission byproducts, and should be included in federally mandated emergency response plans for these reactors, including notification procedures, monitoring, containment, and evacuation from affected areas.

The Town also proposes to set up an independent radiological monitoring station as a project of the LWRP (see **Projects**).

POLICY 42COASTAL MANAGEMENT POLICIES WILL BE CONSIDERED IF
THE STATE RECLASSIFIES LAND AREAS PURSUANT TO THE
PREVENTION OF SIGNIFICANT DETERIORATION
REGULATIONS OF THE FEDERAL CLEAN AIR ACT.

Explanation of policy:

The policies of this program concerning proposed land and water uses and the protection and preservation of coastal resources will be taken into account prior to any action to change Prevention of Significant Deterioration land classification under Federal Clean Air Act regulations in the Town's coastal zone or adjacent areas.

POLICY 43LAND USE OR DEVELOPMENT IN THE COASTAL AREA MUST
NOT CAUSE THE GENERATION OF SIGNIFICANT AMOUNTS OF
THE ACID RAIN PRECURSORS: NITRATES AND SULFATES.

Explanation of policy:

The New York State Coastal Management Program incorporates the State's policies on acid rain. As such, this program assists in the State's efforts to control acid rain. These efforts to control acid rain will enhance the continued viability of coastal fisheries, wildlife, scenic and water resources.

There are no significant generators of acid rain precursors in the Town. As noted above the only significant generation of air pollutants within the Town occurs from automobile traffic.

SECTION XIV

PROPOSED PROJECTS

A. INTRODUCTION

In the process of preparing the LWRP the Town has identified a wide variety of coastal zone projects to fulfill policy goals. These include initiatives to enhance and protect water-dependent uses, revitalize underutilized areas, increase public access, improve water quality, monitor and prevent damage from flooding and erosion and better understand coastal processes, and to educate citizens about coastal issues. (See Map XIV-1)

While these projects are not required for governmental administration of the LWRP, they are essential to its success as working public policy. The detailed development of the LWRP which engendered these projects has been a useful exercise in itself, but the plan must be translated into action to be truly meaningful. These projects extend the LWRP from paper policy into significant coastal zone management initiatives with tangible benefits for the Town. They are integral to the LWRP, and for the community to experience positive, concrete results from it, to provide a mandate and to maintain the political will to resolve future coastal policy issues.

Whenever possible the Town will apply to appropriate government agencies or private foundations for primary or supplemental funding for these initiatives. Availability of outside funding should not, however, prevent completing these projects on a prioritized or incremental basis within the constraints of the Town budget. They are vital to the LWRP and its successful implementation.

Proposed projects are categorized for convenience by related policy groups, although many projects overlap in purpose and serve multiple policy objectives.

B. PROJECTS LIST

POLICY GROUP/ PROJECT NAME	PAGE
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2. Gardiner's Island Preservation	XIV-6
3. Restoration of Marina Lane Dredge Spoil Site, Three Mile Harbor	XIV-6
4. Former Fishing Station, Three Mile Harbor	XIV-7
5. Revitalize Former Fish Factory Site, Napeague State Park	XIV-7
6. Reclamation and Park Design for Former Montauk Landfill	XIV-8
7. Revitalization of Montauk Harbor	XIV-8

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8. Camp Hero Revitalization and Redevelopment	XIV-9
9. Revitalize the Hamlet of Montauk	XIV-10
SIGNIFICANT HABITATS POLICY #7	
10. Town Natural Heritage Inventory and Management	XIV-11
11. Interagency Management Plans	XIV-11
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 13. Wetland Restoration 13a. Phragmites 13b. Marsh Replanting 13c. Natural Vegetation Buffers 13d. Alewife Runs 	XIV-13
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17. Fisheries Shoreside Support Infrastructure	XIV-15
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30. Ditch Plains Erosion and Remediation Study	XIV-22
31. Drainage Mitigation, Georgica Cove	XIV-23
32. East Hampton/ Southampton Cooperative Run-off Mitigation, Wainscott Pond	XIV-23
33. Reduce Impacts of Federal Groins on Wainscott Beach	XIV-23

PUBLIC ACCESS AND RECREATION POLICIES #9 & 19-22

Town of East Hampton LWRP

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35. Road-end and Beach Access Modifications	XIV-24
36. Public Access and Recreation Improvements	XIV-25
37. Canoe/Kayak Water Trail System with Low-impact Campsite Network	XIV-33
38. Lions Field/ Montauk Point State Boulevard Recreation Complex	XIV-33
39. Management Plan for Lazy Point Road-end	XIV-33

HISTORIC AND VISUAL RESOURCES POLICIES #23-25

40. Town Historic Building and District Update	XIV-34
41. Historic District and Building Preservation Local Law	XIV-34
42. Cultural Resources Inventory and Identification Matrix	XIV-34
43. Coastal Oral History Project	XIV-35
44. Scenic and Visual Resources Survey and Protection Program	XIV-35

WATER AND AIR RESOURCES POLICIES #31-44

45. Watershed Management Plans		XIV-36
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Town of East Hampton LWRP	Proposed Projects
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C. PROJECT DESCRIPTIONS	

DEVELOPMENT POLICIES #1-6

<u>1. Open Space Acquisition</u>

Preserving open space is the primary way to protect ground and surface water quality, habitat, and scenic resources, and to provide for all kinds of recreation, from active sports to passive activities like birdwatching or photography. The Town Planning Department has prepared an Open Space Plan (September, 1995) designed to protect significant areas or parcels of open space through a broad variety of planning techniques ranging from clustered or large lot development to conservation easements and management agreements to acquisition. The Open Space Plan has been approved by the Town Board, and an Open Space Advisory Committee appointed to prioritize use of funds and refine open space objectives.

A number of the parcels for which acquisition is an option lie within the coastal area. While acknowledging that priorities change with time, designated parcels are listed here with the understanding that acquisition will be pursued when and if funding becomes available, as long as the property remains undeveloped. Coastal area parcels recommended for open space preservation through techniques other than acquisition are listed in the Inventory and Analysis for Development Policies #1-6, and in the Town Open Space Plan.

	SCTM#	Location
Reach 1		
	#111-1-3.1 #111-3-1	Headwaters of Northwest Creek
	#72-1-6.1/-6.2 #90-1-2 #90-1-26.1	Adjoining open space of Grace Estate, 33.8 A Wetland parcel adjoining Northwest Creek
Reach 2		
	#119-2-2/-3/-4 #56-2-38/-39/-40/-41	/-42/-46/-48
	#37-2-1	Small tidal wetlands parcels, harbor side of Sammy's Beach Camp Blue Bay Girl Scout Camp (if/when available)
Reach 3		
	#41 #42	Gerard Drive, any vacant parcels coming in for development
	#64	
	#63-3-10 #80-2-11.1 #80-4-6 #83-2-1 #83-2-19.1 #83-2-20.1 #83-2-22.1	Accabonac Harbor shore, 15.9 A (Weitzman) " " , 26.5 A Accabonac Harbor, old field, 1.8 A Accabonac Harbor shore, 37.0 A " " , 3.2 A " " , 1.4 A " " " , 3.3 A
	#83-2-22.1 #83-6-5	, 5.5 A Freshwater wetland, Mud Hole (part of 5.3 A)

	#128-1-29.3	Napeague Bay near fish factory, 1.3 A for access
	#110-1-5.1/-5.2	12/12/16/12 6/12 7/12 0
	#110-2-10/-12.10/-12.	12/-12.16/-12.6/-12.7/-12.9 Watlands on SE side of Nanagous Harbor
		Wetlands on SE side of Napeague Harbor
Reaches 5-9 (Montauk)		
,	#7-2-9.4/-9.22	Underwater lands Lake Montauk, adjoining Town property
	#12-4-4/-5	Underwater land, Lake Montauk (Star Island)
	#12-4-6	Lake Montauk shore, 2.2 A
	#13-2-1	Adjoins Indian Field cemetery, 1.1 A
	#13-2-29	" " " , 3.5 A, unopened private road
	#15-1-14	Oyster Pond drainage shed, freshwater wetlands, adjoins
		protected open space, 339.8 A (Sanctuary)
	#19-2-16.1/-16.2/-16.3	8/-16.4/-18.1/-18.2/-18.3/-18.4/-18.5/-18.6/-18.7/-20.1/-20.2/-
	61	
		Lake Montauk drainage shed, small lots $\approx 8.2A$
	#19-5-17	Lake Montauk shore (Squaw Cove), 2.8 A
	#19-5-18	Lake Montauk, Stepping Stones Pond outlet
	#19-5-22.12	Lake Montauk, Peter's Run outlet
	#19-5-22.13/-22.5	Underwater land, Lake Montauk, adjacent to Peter's Run
	#20-6-1	Underwater land (Stepping Stones Pond), freshwater wetlands, Lake Montauk drainage, 29.4 A
	#20-6-10.1	Freshwater wetlands, Lake Montauk drainage, 29.4 77
	#27-2-4.1	Fort Pond Bay shore, Benson Reservation, 1.2 A
	#27-3-18	Massacre Valley, Fort Pond drainage shed
	#28-1-32	Massacre Valley, archaeological resources
	#29-1-18.6/-19.6	Freshwater wetlands
	#28-9-46.1/-46.2	Shadmoor (Bear & Schub) 98.8 A on bluffs W of Ditch Plains
	#30-0-0	Lake Montauk drainage, unopened road, wetlands
	#30-0-0	" " " "
	#32-1-35	" " "
	#32-1-1	Stepping Stones Pond and Lake Montauk drainage
		Freshwater wetlands, Lake Montauk drainage
	#32-4-31.1/-32/-33/-3	
		Eastern end of Hither Woods, steep slopes, 27.3 A
	#48-3-8.7	" " , 95.5 A
	#48-3-36	Fort Pond shore, adjacent to Second House
	#49-2-8	Freshwater wetlands
	#49-4-1	Little Flower School (if/when available)
	#51-1-7.2	Freshwater wetlands
Reach 10		

40.9 A east of Dolphin Drive, for water access #130-2-2

Reach 11

#197-7-15 Georgica Pond shore, 4.6 A, for public access

2. Gardiner's Island Preservation

The 3375 acres of Gardiner's Island is one of the most extraordinary troves of history and prehistory, human and natural, on the entire east coast. The island is privately owned, and although the Gardiner family heirs show every indication of being deeply dedicated to its conservation and preservation, the Town should work with them to do everything it can to ensure those goals as well. As recommended in the **Development Policies #1-6** and in the Town's *Open Space Plan* (pp. 30-32), government should work cooperatively with the heirs in facilitating a conservation plan for the island. Experts in financing, law, historic preservation, ecology and planning should work directly with the Gardiner Trust and heirs to establish such a conservation plan.

This project would enable the Town to assemble a small task force to provide research and support staff, expert consultation, and legal support. For its part the Town may wish to explore with the heirs such additional protections as tax incentives for conservation, historic district designations, habitat protections, conservation easements or other planning measures, and possible local legislation to facilitate preservation. Any tax abatement plans would also need to consider implications on revenue for the Springs School District.

3. Restoration of Marina Lane Dredge Spoil Site, Three Mile Harbor

This site, on the east side of Three Mile Harbor, has historically been used to deposit spoil from dredging of the south end of the Three Mile Harbor channel. The site is vastly underutilized and bears good potential for passive recreation as a waterfront park with public access to the water and exceptional sunset viewing across the harbor. The shoreline is disturbed and being taken over by invasive non-native species such as phragmites. The Town Natural Resources Department is interested in utilizing the site for a demonstration wetlands restoration project, with the disturbed upland area being used as a nursery area for beach grass and other seaside plants and shrubs such as beachplum for use in dune restoration and beach stabilization [in conjunction with the Town Parks Department] in other areas of the Town. The site is already being used in a limited way as a source of native species for public works.

This project would include development of a management plan to restore the site, and design and installation of a passive recreation park and native species nursery. It would involve efforts by the Town's Planning, Natural Resource, Parks and Highway Departments. An alternative dredge spoil disposal site would be needed for future dredging of the channel, or restoration could be integrated with continued use of the spoil site as a mixed use or as a temporary spoil depository for beach nourishment projects.

4. Old Fishing Station, Three Mile Harbor, Reach 2

A dilapidated fishing station near the mouth of Three Mile Harbor, purchased by the Town in 1995, offers an opportunity for reuse. Although purchased primarily to prevent commercial development in a sensitive area, the site itself is disturbed and bulkheaded, with a deteriorated building. It adjoins

the Town's Maidstone Park bathing beach with access to Gardiners Bay, and fronts on the harbor. The fishing station is surrounded by high quality saltmarsh, including shore habitat used by osprey and the federally threatened piping plover, upland dunes, and panoramic harbor views. Potential uses for the site include as a growout facility for the Town Shellfish Hatchery and wetland restoration. Some moorings for use by the Harbormaster may also work in the small boat basin, if the bulkhead is maintained. Future uses of the site envisioned by the Town will evolve further with community input.

5. Revitalize Former Fish Factory Site in Napeague State Park

The old fish factory (Smith Meal Co.) site at Promised Land acquired by New York State as part of Napeague State Park has been designated as a potential site for revitalization in the LWRP. This project would design a plan for its reuse. Limited redevelopment of the waterfront portion for passive recreation, e.g. with a public fishing pier, accompanied by public education relating to the site's history and ecology, would transform the former industrial site into a useful recreational facility for both Town and State residents. However, the site has severe development limitations due to its surrounding ecological features and lack of infrastructure. For these reasons, proposals for commercial development, a ferry terminal or active recreation (ballfields, golf courses, etc.) should be denied. The Town also opposes installation of a launch ramp because of the likelihood of increased traffic and jet-ski use. The whole of Napeague State Park is of such fragile character it should be classified as a "park preserve" in order to maintain its ecological values.

Beyond the immediate disturbed area of the former industrial plant at the fish factory, the remainder of the site is a fragile dune and wetland ecology with important habitat values, which should be maintained as undisturbed open space. The site must be carefully analyzed to determine what kind of redevelopment or revitalization is appropriate, and where it can take place.

A redevelopment plan must be consistent with preservation objectives of NYS OPRHP and the LWRP, and should provide the public with increased waterfront recreational opportunities and access to the water. It should assess potential demand and would need to address removal of debris and/or restoration of the deteriorated dock and pier area of the former fish factory, hazards from underwater remnants of former dock structures, historic preservation and documentation of the former use, environmental education, and appropriate reconstruction of the pier, with associated parking and other amenities such as toilets. Appropriate low-intensity uses include a primitive campsite for canoe/kayakers, a concession for canoes and kayaks, a picnic area, the fishing pier, and an interpretive exhibit about the old fish factory. Because of the fragility of its environment and concerns over an influx of undesirable uses [such as water scooters], numbers of users, parking and the area of the site to be used should be restricted.

In keeping with the historic use of the site, another appropriate re-use could be as a finfish hatchery, possibly for fingerling flounder, to help restore productivity to the inshore fisheries of the area. Expertise may be available from the adjoining Valenti Multi-Aquaculture facility on private land to the immediate west, or through the Town Shellfish Hatchery in Montauk. If Multi-Aquaculture finds it untenable to remain as a non-conforming use in its present location, consideration should

be given to relocating it on the fish factory site, where it could provide a living link to the local fishery that could be integrated into educational and historical programs at the site.

6. Reclamation and Park Design for Former Montauk Landfill

The former Montauk landfill is situated at one of the highest points in the Town in Hither Woods with impressive views of Block Island Sound to the north. The site would lend itself to long term reclamation, re-landscaping and park facilities for passive (picnic tables, sunset viewing) and active recreation use (ballfield, soccer field). It adjoins an extensive trail network through the preserved open space of Hither Woods, is an outstanding observation point for birdwatching and hawk migrations, especially migratory passuarines, and would also be readily accessible to residents and others making use of the present recycling and transfer facility.

7. Revitalization of Montauk Harbor

As the most active harbor and the most intensively used waterfront in the Town, as well as a primary tourist attraction, Lake Montauk deserves a coordinated planning effort to improve and enhance the land area, incorporating methods for preserving and maintaining water-dependent uses essential to the fishing industry and the maritime character of the harbor. While the needs of individual sites are addressed by private business, the Town can improve community infrastructure in conjunction with business, citizens' and commercial fishing groups, and facilitate a planning dialog on such issues as parking and lighting in the West Lake loop area, making the area more pedestrian-friendly, enhancing scenic and visual attractiveness, and improving water quality. The Town can assist with planning support and help in obtaining grants, and investigate incentives for businesses to upgrade properties.

A planning study will examine possible improvements, look at existing regulations and zoning boundaries, identify essential fish packing and fishery support facilities and analyze future needs (see *Fisheries Shoreside Support Infrastructure*), and look at ways to ensure stability of water-dependent uses and prevent their displacement, along with improving the appearance of the area and its accessability for tourists. The plan will ascertain whether current standards for WF zones adequately reflect the needs of the fishing industry and other water-dependent uses.

The project will include elements to enhance water-dependent commercial and recreational productivity in the concentrated northern section of Lake Montauk. Land uses in the Waterfront (WF) and Resort (RS) districts along north West Lake Drive and on Star Island will be analyzed with an eye toward improving or maintaining existing patterns of water-dependent uses and preserving natural wetland areas intact as buffers. Existing ACOE channel and dredging studies will be sought and incorporated. Traffic and parking patterns for the area will be analyzed and, if necessary, plans produced to increase parking capacity and improve accessibility.

The Town will organize a joint effort with waterfront business owners to connect existing walkways and/or construct additional links between docks, marinas and other waterfront facilities so pedestrians can travel unimpeded from Gosman's to the Star Island Causeway. The Town will contribute planning expertise and, possibly, financing through an improvement district. This phase

of the project will provide improved access for tourists and sightseeing, shopping, and recreational opportunities. It will add to the scenic and visual enjoyment of the harbor, increasing Montauk's desirability as a destination and enhancing the environment for tourism. It should also improve auto and pedestrian traffic by eliminating short-haul traffic between separate dock areas. The plan will also examine realignment of existing wharf lines to simplify and improve boat traffic.

In terms of water-dependent and water-enhanced uses, there is increasing pressure for traditional water-dependent uses such as commercial fishing support facilities to be displaced by higher value uses such as retail shops and other tourist oriented businesses. Maintaining existing water-dependent uses, against encroachment or displacement by water-enhanced or non-water-dependent uses is a key issue. A number of facilities in the Montauk Harbor complex encompassing Coonsfoot Cove, Star Island and northern East Lake Drive provide critical shoreside infrastructure for the Town's commercial fishing fleet, and this is the area where future commercial fishing needs will logically be met. There are also a large number of water-dependent recreational fishing and boating marinas and related businesses in the area to consider, along with the water-enhanced uses such as restaurants, lodging and fish markets which make it a focal area for tourism.

Incentives will be considered to help retain necessary shoreside infrastructure on Montauk Harbor's working waterfront. Possibilities include permitting additional combinations of special-permit water-enhanced uses in WF zones, provided they complement and supplement water-dependent uses, and tax incentives or grant assistance for improvements of water-dependent uses which provide significant public access.

Extensive consultation with civic and user groups such as the Montauk Harbor Association, Montauk Captains Association, Concerned Citizens of Montauk, Chamber of Commerce, etc. is envisioned at the outset, and public comment will be actively pursued before a plan is finalized or implemented.

8. Camp Hero Revitalization and Redevelopment

Former Camp Hero in Reach 8 in Montauk contains numerous structures and facilities left from its days as a U.S. military installation. It also encompasses an environmentally sensitive section of the Town's coastline that has little public access. Improved public access to the water through Camp Hero would address desires of surfers and recreational fishermen, and could be enjoyed by casual beachcombers and hikers. However, significant ecological resources in the undeveloped parts of Camp Hero constrain use, which should be confined to passive or low intensity recreational uses such as hiking, birdwatching, photography, etc.

Some of the structures, though deteriorated, may be amenable to restoration or conversion for recreational use, or as a museum to document Camp Hero's significant military history. Given the large radar tower and other structures on the site, leasing some structures for communication antennas could be considered in the already developed portion of the property. Likewise, using a disturbed section of the site for wind generation of electricity is another potentially compatible use, given the high wind speeds recorded in Montauk.

The site should be surveyed and inspected and a management plan developed by NYS OPRHP, with consultation and approval of the Town, with the primary goals of preserving ecological and habitat values, providing public access and enhancing passive public recreational uses. The plan should conform to the conservation goals expressed in the transfer agreement for the parcel from the U.S. Government to New York State, which specifies that no more than 15% of the site be developed. Camp Hero's unusual plant communities, including an oak/holly forest, threatened or endangered species present in the perched ponds or wetlands, and Montauk moorlands ecological systems, must be protected in the management plan. The plan should also address preservation of the site's historic resources, including artifacts and structures relevant to World War II, and to the post-Spanish-American War return of the Rough Riders to Montauk. Cleanup or removal of deteriorated structures or toxic remnants from military activities may be required before redevelopment can occur.

NYS OPRHP is currently preparing a feasibility study to determine the future use of Camp Hero. A recent proposal for a golf course on the property conflicts with the ecological and habitat values, and may violate the original conservation agreement under which the parcel was acquired by the State from the Federal government. From a planning standpoint the golf course proposal is inconsistent with the goals of the LWRP, and should be rejected by the Town, New York State and by the Federal government.

Passive and low intensity park and recreational uses that limit impacts on the site's wetlands, plant communities and historic resources are appropriate for Camp Hero; more intensive uses with associated impacts are not. A "park preserve" designation would be consistent with its high habitat and ecological values.

9. Revitalize the Hamlet of Montauk

The Montauk hamlet is the second largest commercial center in the Town with the highest concentration of motels, restaurants and other facilities for transient guests. The numerous motels along the oceanfront are greatly enhanced by their coastal location, indeed, many are built directly on the dunes, and their reason for being is proximity to the beach. These water-enhanced uses contribute significantly to the resort economy of the Town. The hamlet includes a business area radiating from the traffic circle presided over by East Hampton's sole [six-story] skyscraper, both artifacts of Carl Fisher's day when Montauk was slated to become the "Miami Beach of the north". Much of the present motel and other resort construction dates from the post-war boom of the 1950's, pre-dating zoning and site plan review. Much of it is aging and will progressively require refurbishing in the foreseeable future.

With the cooperation of Montauk's pro-active business community, the Town has an opportunity to help revitalize the downtown business area. As aging structures begin to require renovation the Town will form an active partnership with the community to shape the future Montauk hamlet into an attractive and prosperous area, and address potential problems from parking and traffic flow to flooding and erosion. The Town can contribute to this partnership overall planning, site plan and design expertise, and facilitate an exchange among business owners and citizens groups to devise community goals and draft a planning framework for future development and redevelopment.

Implementation of the resulting plan will seek to improve common infrastructure such as parking, sidewalks, parks and active recreation sites, enhance visual appeal and formulate community standards that will augment the entire area.

SIGNIFICANT HABITATS POLICY #7

10. Townwide Habitat Inventory, Management, and Restoration Plan

This project will identify and map the major Town habitats, including their flora and fauna, in publicly owned open space areas (especially in designated Nature Preserves). The inventory will identify habitats at risk, and those that are already disturbed or degraded and prioritize them according to their significance, size and degree of disturbance or degradation. Open space areas will be inspected and checked annually to assess habitat conditions and environmental degradation.

Management plans consistent with habitat conservation for Town owned open space areas will then be developed. Maintenance of habitat for threatened and endangered species will be a priority, with other LWRP goals to be included, such as maintaining public access. Management plans will also work to resolve conflicts with other uses. Restoration plans will be developed for those habitats that receive high priority.

Examples of habitats to be inventoried are:

grasslands, maritime red cedar groves, tidal wetlands, freshwater wetlands, deciduous forests, mixed hardwood forests, pine barrens, heathlands, dunes, strands, shores, beaches, streams, coastal ponds, and tidal embayments.

Examples of habitats to be restored are:

eelgrass beds, degraded wetlands, phragmites-invaded marshes, exotic-invaded woodlands, overgrown grasslands, destabilized dunes, dredge spoil sites, silted up embayment bottoms and coastal lagoons.

<u>11. Interagency Management Plans</u>

Interagency management plans should be prepared on a cooperative basis for a number of areas in the Town that have overlapping interests. Some of these areas, affected agencies, and management concerns include the following:

Napeague State Park, old fish factory: NYS OPRHP and Town of East Hampton; public access to water, fishing pier, low-impact canoe/kayak camping area, dune habitat

Napeague Harbor: Town of East Hampton and NYS OPRHP; windsurfing area on west side, ORV traffic on east side to Goff Point and around to Napeague Bay side, wetland, dune and beach habitat

Hither Hills/Hither Woods/Montauk County Preserve: NYS OPRHP, Suffolk County Parks Department, Town of East Hampton; trails, fire management, ATV's, upland habitat, avoid large scale uses

Camp Hero/Sanctuary: NYS OPRHP and Town of East Hampton; habitat, public access to the water, trails, historic resources, military theme park/museum, eliminate golf course or other large scale use

<u>12. Interpretive Signs</u>

This project serves multiple purposes of public education and environmental and habitat protection. By posting interpretive signs at overlooks and in sensitive locations such as dunes, marshes, trailheads, etc. users acquire respect and knowledge about the place they are seeing. For instance, dune signs would emphasize the critical role of beachgrass in anchoring the dune system, the role of the dune itself as first line of erosion defense, etc. They would also indicate foot trails or board walks to control pedestrian impacts. Where habitat restoration is underway, signs can explain the project. The sign at the Hither Hills overlook designed by Judy Cooper some years ago is a good example of interpretive signage that is informative and visually interesting.

Sign designs should blend in and complement the site without obstructing views or being obtrusive. It should be relatively easy to develop a standard set of sign texts and graphic formats for various site-types and habitats, dunes, beaches, saltmarsh, etc. The sign can be customized for individual sites on computer, printed out on a color ink-jet printer, and laminated or adhered to plexiglas for outdoor use. If the designs are sufficiently handsome, they can be printed and sold as limited edition posters by the Town -- which may also provide an incentive for collectors not to steal them ! Design criteria would also require weatherproof long-lasting mounting and installation, probably through a professional sign contractor.

The project will seek joint sponsorship from local business or a business group, such as the Business Alliance, Chamber of Commerce, etc.

13. Wetland Restoration

This project will have several components, described below, each designed to address a significant aspect of wetland loss or degradation. It also integrates with a number of other proposed projects, including *Restoration of the Marina Lane Dredge Spoil Site, Interpretive Signs, Eelgrass Restoration, Drainage and Runoff Mitigation for Georgica Cove and Wainscott Pond, Road-end and Beach Access Modifications, Stormwater Abatement, Open Marsh Water Management (OMWM), Harbor Management Plans, Harbor Protection Overlay District Homeowner Education, etc.*

13a. Phragmites

Phragmites is an invasive species that has been taking over wetland areas and crowding out longstanding native marsh communities. NRD has mapped phragmites incursion, which ranges from 10-50% of marsh surface surrounding local harbors. Every harbor and most of the larger coastal ponds have phragmites populations at present. Several methodologies have been proposed for

inhibiting phragmites, some of which involve the use of herbicides (Rodeo, Roundup), others of which are purely mechanical in nature. In order to maintain the integrity of existing marsh communities, the Town proposes to use non-chemical, non-intensive mechanical methods. An experimental phragmites removal effort at Pussy's Pond adjacent to Accabonac Harbor was undertaken in 1993, and appears to be successful.

The phragmites component of wetland restoration will employ periodic cutting down phragmites followed by flooding [using tidal cycles or impoundments such as *OMWM*, or pumping]. Cutting weakens the plant, then salt causes osmotic shock, further weakening the phragmites plant and allowing other in situ native species to gain a competitive foothold and repopulate the phragmites areas. The project will begin with a single harbor, and progressively add one harbor per year. Project requirements will include permitting, staffing, equipment and monitoring, including photo documentation.

13b. Marsh Replanting

Nearly every harbor and pond in the Town's coastal area has some section of degraded or otherwise compromised fringing marsh or wetland. All these disturbed areas will be inventoried and prioritized for restoration. Degraded areas will be regraded and replanted with native species gleaned from borrow sites at other Town marshes. Two sites have been replanted successfully to date, therefore the Town has confidence that these methods will work at other sites. Harvest and planting techniques are low impact, using simple hand tools which disturb marsh soils minimally. Project needs include permitting, plant materials, staffing, equipment and monitoring, including photo documentation.

Replanting efforts will be posted with signs (see *Interpretive Signs*) to explain the restoration effort, educate on the value of wetlands, and prevent further damage. The Town intends to establish a native plant nursery, which would potentially supply much of the plant material for these projects (see *Marina Lane Dredge Spoil Site*). Any marsh replanting projects adjacent to a Trustee harbor will require Town Trustee approval.

13c. Native Vegetation Buffers

Buffers adjacent to marshes and surface waters serve many important ecological and habitat needs. This project would have both public and private components. On the one hand the Town will undertake to reestablish native vegetative buffers on municipal property adjoining marsh areas, and also at road ends to filter stormwater runoff (see *Road-end and Beach Access Modifications*).

A second public education component with demonstration plots will encourage homeowners with lawns or grounds adjoining wetlands or marshes to install native vegetation as a means of preventing pollutants from entering marshes or surface waters. The proposed Town native plant nursery at the Marina Lane site would be a potential source for plant material (see *Restoration of Marina Lane Dredge Spoil Site*, and *HPOD Homeowner Education*).

13d. Alewife Runs

Alewives and other anadromous fish seek fresh or brackish ponds and streams to spawn or reach reproductive maturity, but traditionally prolific sites in the town have been compromised by

development, diversions, obstructions or chronic water quality problems. This project will seek to restore previously productive streams and ponds by reopening streams and stream beds, improving access for fish through modifying and cleaning culverts, and improving local water quality as outlined above and through some of the methods noted in other projects. Annual monitoring of fish runs will record effectiveness.

14. Eelgrass Restoration

Subaquatic vegetation, primarily eelgrass (*Zostera marina*), is a vital element of the bay, harbor and creek habitats of the Peconic/Gardiners Bay system. Meadows of eelgrass support a myriad of marine organisms and provide shelter for finfish fry and shellfish, especially the bay scallop. Since the onset of the Brown Tide algae blooms in the mid-1980's, and possibly due to other factors of degraded water quality or excess nutrients, eelgrass beds have declined precipitously.

As part of a Peconic Estuary Program Grants for Action Plan Demonstration Projects, Cornell Cooperative Extension, Suffolk County, East Hampton Town Natural Resources Department and East Hampton Town Trustees, are conducting an experimental pilot project to restore eelgrass in three different East Hampton harbors, Three Mile Harbor, Accabonac Harbor and Northwest Creek. In the past these harbors had large healthy eelgrass meadows, but in recent years, since the visitations of Brown Tide algae, there has been very little growth.

Stock for transplanting is gleaned from different local areas, a variety of planting methods are employed, and surrogate beds are chosen on different sediment types and in different hydrographic conditions. Sites selected include: one each in Accabonac Harbor and Three Mile Harbor, and two in Northwest Creek (north and south). Healthy eelgrass plants(shoots) are collected from thick meadows at natural sites located in Hog Creek and in Northwest Harbor.

Once successful transplanting and culture techniques are sufficiently developed the program will be expanded to restore eelgrass beds in harbor and creek areas where they have declined. This is a crucial step for restoring the inshore bay scallop fishery, formerly one of the most important to the local baymen. Eelgrass is a barometer of the health and productivity of inshore waters. Any eelgrass restoration projects iwhtin Trustee harbors will require Town Trustee approval.

15. Beach Habitat and Coastal Processes Test Area

This project will provide a control area to observe and compare natural vegetation and habitat isolated from human uses. Isolated areas of beach with typical geological and topographic characteristics will be selected to establish references for several bay and ocean beach habitat types within the community.

These areas will serve as baseline control areas for information on coastal habitat and ecology restoration in other parts of the Town. They will also provide comparative data for flooding and erosion policy, conservation of natural protective features, and determining how shorebird nesting habitats and beach vegetation develop naturally without human interference.

If possible, sufficiently isolated beach sites should be found where it is unnecessary to restrict public access. Designated sections of bay and ocean beaches should receive appropriate signage to limit intensive human activity in the test area. Town Trustee approval may be required, depending on the location.

16. Roadside Wildflower Habitat, Scenic Byways

Road shoulders of many of the Town's back roads in the coastal area support indigenous populations of wildflowers, some of which are threatened or endangered. Populations of birdsfoot violet, lupine, and several species of orchids have probably subsisted since wagon road days, but are now threatened by road widening, mechanized highway equipment, mowing, and other practices more typical of suburban than rural roads.

This project would identify roadsides with significant or threatened indigenous populations, produce management plans, and work with local, County and State Highway Departments to promote habitat management for indigenous wildflowers and use of native, non-invasive species for road shoulder revegetation. In general roadsides covered with healthy native vegetation experience less surface runoff, soil erosion and siltation than those covered with non-native grasses. In addition, the native vegetation is hardier, has historic value, and provides scenic and esthetic amenities.

In coordination with LWRP Historic and Visual Resources Policies #23-25, some routes may also be designated as scenic byways (see also *Scenic and Visual Resources Survey and Protection Program*).

COMMERCIAL FISHING POLICY #10

<u>17. Fisheries Shoreside Support Infrastructure</u>

This project addresses the future infrastructure needs of the local commercial fishing industry to assure continued access to shoreside facilities and explore possibilities for future development, consonant with the goals of the LWRP. Though existing commercial fishing facilities appear adequate for the present, future needs of the inshore and offshore commercial fishing fleets may change and land use alterations may affect shoreside infrastructure that provides essential support for the fishing industry. Existing facilities will be analyzed in detail, shortcomings determined, and future needs identified in active consultation with local commercial fishermen. A local Right-to-Fish Law will be drawn up and implemented to insure fishing activities are not curtailed or harassed by nuisance complaints, although such water-dependent uses are protected under §915 of Article 42 of NYS Environmental Law.

The Town will identify potential sites at Montauk and Three Mile Harbors where land may be acquired or designated for future fish packing, dockage, or other commercial fishing uses (see *Revitalization of Montauk Harbor*). Consideration will be given as to whether future needs can be best met by private enterprise, or whether the Town should help to finance, build or operate additional fish packing, processing or distribution facilities.

The existing Waterfront (WF) District designation will be reexamined in individual Harbor Management Plans, with a view toward creating a sub-category Commercial Fishing zone for packing or dock facilities with fewer requirements as to the land-related uses, e.g. parking, but more specific use restrictions. Current zoning will also be further analyzed to determine whether adequate protection is offered to water-dependent fishing support activities, in addition to the protections afforded under §915 of Article 42 of NYS Environmental Law. For instance, the Multi-Aquaculture facility on Napeague Bay is important to the local fishing industry as the base of the live-fish market. As it is a non-conforming use in a residential zone, consideration should be given to its continued existence in its present location, and to its relocation if necessary, possibly to the adjoining former fish factory site on NYS OPRHP land.

Present distribution networks and past attempts at alternative distribution schemes, such as cooperatives and an ill-fated state project in lower Manhattan, will be reviewed and future alternatives explored in consultation with local commercial fishermen and distributors.

18. Local Fishery Assistance

Fisheries management and coastal zone permitting agencies need to weigh the costs and assess the impact on fisheries of environmental degradation due to marina construction, boating pollution, navigational congestion, and pressure on stocks from recreational anglers (e.g. where recreational landings are greater than commercial harvests). However, in many of these areas concrete data is lacking as a basis for regulation or improving fisheries management, and other levels of government lack manpower and resources to adequately monitor local conditions.

This project will allow the Town to retain a fish and wildlife specialist in the Natural Resources Department to monitor water quality, shellfish and finfish stocks, and to act as an advocate and liaison for management of traditional local fisheries with appropriate state and federal agencies. The Town's Natural Resource Department will upgrade its water-testing capabilities to monitor water-quality and maintain health standards for shellfish beds. See *Water Quality Monitoring*.

FLOODING & EROSION POLICIES #11-17

19. Hazard Mitigation Plan

This project will synthesize recommendations from the Flooding and Erosion section of the LWRP with a Town hazard assessment program being carried out under a grant from FEMA through the NYS Emergency Management Office (SEMO). The Hazard Mitigation Program will identify critical infrastructure for restoration or risk reduction, identify mitigation measures for flooding and erosion prone areas, and recommend appropriate areas for floodproofing, redevelopment, relocation, buyouts, or other mitigation in the event of 1) flooding and erosion events within the parameters of the 30 year storm, using NFIP Hazard Mitigation or other funds, and/or 2) catastrophic storm damage, using Stafford Act funds in conjunction with a Federal disaster declaration.

20. Hurricane Damage Mitigation Plan

The Hurricane Damage Mitigation Plan (HDMP) is a detailed plan to include measures for pre-storm mitigation, evacuation and recovery plans, and post-storm reconstruction and redevelopment. It will be designed to reduce pre-storm risks, assist in damage assessment, and supply a reconstruction and redevelopment blueprint for the Town in the event of a catastrophic storm, helping Town and other governmental agencies to prioritize recovery resources in a well thought-out manner.

It will pay particular attention to public infrastructure, including reconstruction and/or relocation of damaged roads, water and sewer lines, restoration of public facilities and public trust lands, because these are areas where government can exert direct control. The HDMP will augment existing civil defense and emergency response with land use and mitigation plans and will work to minimize loss of life and property and more effectively plan for the aftermath of various category storms.

Elements of the plan will do the following:

Pre-storm mitigation

Mapping and Geographic Information Systems (GIS): Produce a unified map integrating flood zones from FIRM's, CEHA zones, SLOSH areas of inundation from various categories of storms and hurricanes, historical shorelines and contemporary erosion rates with Suffolk County Tax Maps (SCTM's). Integrate satellite and aerial photos showing underwater shoals, etc. to indicate littoral patterns and sediment trends. Consolidate previous studies by other agencies, and integrate current Town initiatives such as proposed erosion mitigation at Ditch Plains. Analyze natural protective features such as dunes and bluffs, note and map areas of vulnerability. This phase of the HDMP would be best performed on a GIS system. The maps and other data will then be used to:

a) designate local erosion hazard areas;

b) generate preliminary parcel recommendations for post-storm reconstruction and redevelopment, and identify areas requiring intensive review for post-storm redevelopment, such as Beachampton and the Montauk business area;

c) identify potential post-storm open space acquisitions;

d) identify areas of potential overwash or breach of the coastal barrier and formulate priorities for closing or stabilizing breaches;

e) produce remedial strategies to restore deteriorated features to full protective capacity, e.g. dunes at Kirk Park, Montauk damaged by excessive pedestrian summer traffic;

f) identify arterial roads (e.g. Montauk Highway at Napeague and Georgica) where storm flooding and erosion may necessitate emergency repairs or future protection, and work with Town Highway Department and NYS DOT to stockpile necessary equipment and materials;

g) identify critical public infrastructure and facilities in hazard zones, such as water, power and sewer lines, fuel supplies, etc.

h) identify areas where flooding and salt intrusion may impact wells, and develop contingency plans for drinking water in these areas;

i) identify areas that may be subject to increased storm flooding or erosion from long term sea level rise, and phase in reconstruction restrictions for these areas.

Inventory public infrastructure in hazard zones, propose mitigation measures, and coordinate emergency restoration of services with local Civil Defense plans.

Develop a public awareness program on coastal hazards, coastal processes, how land forms respond to coastal dynamics, local ordinances, and the implications of living in impacted areas. Scientifically based knowledge of human impacts on flooding and erosion, and an understanding of the hazards of living adjacent to the coastline are important to improving coastal zone management. Public and private property owners should be made aware that their properties are potentially subject to severe coastal flooding and coastal storms.

To increase public awareness, property in coastal hazard areas will have that designation recorded on tax maps and official records in municipal clerks', assessors', and building inspector's offices. In addition, properties in coastal hazard areas should be required to be so designated by real estate agents, lending institutions, and in contracts of sale for pending property transfers.

Publish a homeowner's guide to environmentally benign, non-structural and soft solutions to flooding and erosion problems, including native plantings, techniques for dune reconstruction, protecting beach grass, etc.

Develop local initiatives to limit new development or expansion of existing development in flood and erosion hazard areas. For instance, the Town may wish to limit additions or accessory buildings in areas such as Sammy's Beach and Gerard Drive, and require flood-proofing whenever construction is permitted. (However, flood-proofing should not be construed to permit multi-story construction.)

Develop better guidelines, local laws, and public education to limit damage to beaches, beach vegetation and habitat caused by ORV's.

Seek to expand undeveloped coastal barrier designations under the Coastal Barrier Resources Act on storm-damaged portions of the island. (LIRPB 1984 Hurricane Damage Mitigation Plan for South Shore)

Insurance: Survey homeowners in areas of potential flooding and erosion to determine participation in NFIP. Encourage participation in NFIP to the maximum extent legally possible (e.g. houses on bluffs are eligible as well as those in V- and A- zones). Confer with local insurance agents to set up coordinated post-storm damage assessment and claims adjustment. Survey carriers' risk exposure and insurance availability within Town's coastal zone to make sure continuing coverage remains available [and affordable ?] after a catastrophic storm.

Check commercial sites located in flood hazard zones for potential flood-borne dispersion of hazardous or toxic materials and potentially hazardous water-borne debris, e.g. lumber, fuel, pesticide or chemical tanks, etc., and require mitigation measures where necessary. New facilities with potential hazards should not be sited in flood hazard zones.

Update Town building code to include latest hurricane and flood proofing standards in cooperation with NYS agencies, Town Building Department, and representatives of insurance industry.

Enact Town local law for CEHA administration to provide permitting consistency in erosion hazard areas, both NYS and locally designated.

Formulate a long-term program to adapt zoning and planning procedures to the changing coastline, shoreline recession, storm activity, rising sea level, etc. For example, the Town will put in place mechanisms to periodically reevaluate and adapt coastal setbacks to erosion rates and flooding conditions.

Evacuation and recovery planning

Set up a contingency plan to survey the Town's coastline with aerial photography and video following major storms, and coordinate with the Erosion Monitoring Project and NYS DOS to conduct ground-based pre- and post-storm beach profile surveys.

Use the mapping techniques above to identify flood and erosion-prone parcels, analyze lot size in relation to existing and potential setbacks, with options for reconstruction, relocation or acquisition for each lot. Integrate with existing Town Open Space and Public Access plans to target areas for acquiring open space or improving public access in the wake of a storm.

Devise a post-storm damage assessment and inspection procedure based on the mapping procedures above, to rapidly determine which residential and commercial structures should or should not be rebuilt, where floodproofing to NFIP standards is required, where structures should be required to relocate landward, where land should be acquired or condemned by the Town [or State] if the structures are destroyed, where leases of public trust land should be terminated or phased out, etc. As above, identify public infrastructure at risk and develop damage assessment and emergency plans for restoration of services and facilities.

Develop mechanisms for rapid claim processing and condemnation proceedings in coordination with FEMA and SEMO.

In coordination with Civil Defense evacuation procedures, use mapping above to evaluate critical evacuation areas and potentially untenable shelter sites (e.g. Springs School, which according to the SLOSH model, could be flooded in a Category 3 or greater hurricane). Analyze sites of emergency generating facilities (e.g. LIPA's Montauk substation in Fort Pond). Check plans for stockpiling of medical and other supplies, communications and generating equipment, availability of heavy equipment, etc. with mapping as above. Assist with planning aspects of local Civil Defense plan, and help to coordinate with appropriate State and Federal agencies, such as SEMO and FEMA.

Post-storm reconstruction and redevelopment

Prepare contingency response plans for closing breaches in coastal barriers and reconstructing vital highway arteries damaged by flooding or storm overwash. Prepare an emergency dredging plan for reopening harbors and inlets closed by storms.

Using the studies above identify areas and parcels where post-storm emergency reconstruction should be permitted, where reconstruction should not be permitted, and which parcels should be acquired using federal disaster funds. Prepare information and forms for applicable buy-out provisions of NFIP and, in cooperation with FEMA, prepare ready off-the-shelf applications for [Stafford Act] Federal Disaster Relief for properties identified for acquisition.

Institute a moratorium on post-storm reconstruction in areas questionable for reconstruction pending completion of the HDMP. Examine practices and standards for temporary

emergency reconstruction in permitted areas to make certain new temporary structures will not be made permanent.

Establish emergency municipal bonding authority for reconstruction and for acquisition of designated areas, and identify other sources of funding and bridge financing, both governmental and private [e.g. Nature Conservancy, local banks].

Explore establishing special local property taxing districts to pay for erosion control and beach nourishment projects that benefit groups of individual homeowners. To support local erosion control activities, the Town could impose a surcharge on property taxes for all properties located within V-zones or Coastal Erosion Hazard Areas and a lesser surcharge on all other shoreline property located within A-zones. Rather than being used for pay-as-you-go funding, the local surcharges and/or district taxes could be used to pay off revenue bonds sold to finance local erosion control projects which warrant prompt action (Source: Governor's Erosion Task Force Report, Volume II, pg. 178).

Analyze erosion control structures on the shoreline and designate by tax map number those eligible for in-place in-kind reconstruction, those which require full permit review or may not be reconstructed, and those which should be removed if damaged more than 50%, or if shoreline recession renders them non-functional.

In cooperation with the Association of Marine Industries, prepare a post-storm reconstruction plan for marinas and commercial docks in the primary harbor areas of the Town, viz. Coonsfoot Cove in Lake Montauk and the east side of Three Mile Harbor. This plan could include future hazard mitigation and remediation including floodproofing, relocating structures, upgrading of aging septic systems (see Policies 31-40+44), restoration of vegetative buffers and natural shorelines, etc. It could also provide opportunity for other improvements, such as an integrated harbor walkway at Coonsfoot Cove proposed to facilitate public access (see *Revitalization of Montauk Harbor*).

21. Visual Inventory of Existing Waterfront

Establish a visual database for future planning of the Town's coastline, especially as relates to land use and erosion policies. Shoot high quality video from helicopter of existing LWRP covered waterfront (shoreline + 1500 ft. inland). Video should be time-coded and frame numbered so images can be later accessed and scanned for image analysis. Also, acquire multi-spectrum SPOT satellite photos with digital data for analysis of resources. Video should be shot at a season when there is no foliage and atmosphere is of maximum clarity (late fall, early spring). Make sure data formats will translate to Town GIS system so images can later be transferred to optical disk or similar system for comparative use.

[Dr. Stephen Leatherman at U. of Md. suggests that video mapping of the coastline [for comparative erosion mapping] be conducted on an annual basis. His formula is to shoot from a helicopter at 150-200 ft, traveling about 40 mph and with an audio track identifying location, then log the information

with time code into a computer database. He also suggests additional inventory after major storms or hurricanes.] See *Erosion Monitoring* and *Scenic and Visual Resources Survey and Protection*.

Pre-arrange post-storm helicopter inventories of the Town coastline (for 2-3 days after a major coastal storm) with Air National Guard through DOS and local Congressional delegation.

22. Coastal Erosion Monitoring Project

With 110 miles of coastline, East Hampton's shores encompass some of the world's finest ocean beaches along its Atlantic shore and protected bay beaches along the Peconic-Gardiner's Bay system to the north. These beaches, dunes, and bluffs and the property adjoining them are frequently exposed to damaging flooding and erosion from nor'easters, tropical storms and hurricanes, as well as the constant force of wind, waves, tides and the encroachment of rising sea level. Erosion hazards and sea-level rise are probably the two most critical coastal policy issues for the decades to come. If global warming accelerates the rate of sea level rise and leads to increased frequency and severity of storms and hurricanes, problems of coastal flooding and retreating shorelines will increase dramatically. It is important to plan for and work to minimize these environmental impacts rather than simply react to successive storm emergencies.

The need for good data on erosion is pressing to ensure the efficacy of public policy and planning responses. Present information on coastal erosion for East Hampton Town is primarily anecdotal or outdated, or from broader studies of the south shore of Long Island. Proper methodology and scientifically acceptable local data are important to identify specific erosion hazard zones for planning purposes.

Many past responses to erosion, whether by individual homeowners or various levels of government, have caused more harm than good. Engineered solutions of the past such as groins, seawalls and other structures have accelerated the loss of beaches and in some cases deprived citizens of public access.

This project will help establish a long term shoreline monitoring system and database for the Town, effectively involve people in erosion related environmental issues, and provide an information based forum for changing perceptions and developing local erosion policy. The project is designed with two components, one for development of information and one for development of policy alternatives.

The information and coastal planning component of the project has three parts: 1) acquiring an aerial visual record of the Town's existing coastline using video and still photography; 2) ground-based quantitative surveys of selected beach erosion test sites; and 3) an historical shoreline analysis of the Town's coastline using aerial photographs and photogrammetric techniques. Some of the work can be performed by Town personnel while other parts, particularly technical photogrammetry, will, at least initially, be contracted to consultants with required expertise.

The public policy component will consist of researching and developing policy alternatives and solutions for erosion problems, and educating the public on the issues in white paper reports and

through public access video. This part of the project will address how people can live along the coast without disrupting coastal processes such as storm erosion, historical shoreline changes and sea level rise. It will examine coastal environmental, development and legal aspects, and offer legislative alternatives to local government.

As a community whose resort economy is literally built on sand, it is important that erosion policy solutions for East Hampton be produced through an unthreatening process of education and community consensus. In a regional context and because of the National Estuary Program designation of the Peconic Bay Estuary, this small Town program may also serve as a model for other communities on Long Island.

23. Storminess History and Statistical Model

This project will establish a detailed storm history for the Town, through research of local documents, anecdotal recollections and non-local (NOAA, NWS, etc.) storm records of tropical and extra-tropical (nor'easter) storms that have affected East Hampton.

This record will be correlated with such cycles as the El Niño occurrences, with available tidal records, and with the aerial photo record (see historical shoreline change analysis in Erosion Monitoring Project above). An attempt will be made to develop a predictive model for probable periods of storminess and consequent flooding, erosion and property damage using statistical techniques. This data will be correlated to other factors having an impact on the Town's coastline such as sea level rise, effects of human development and alterations to the coast such as dredging.

24. Sea Level Rise Model

This project will develop a GIS computer model for the Town shoreline under different sea level rise scenarios for the next 50-100 years. It will identify areas of greatest concern, with prospective erosion and inundation rates, with computer graphic simulations of predicted shoreline positions correlating sea level and local coastal topography. It will include analysis of possible increased hurricane activity due to global warming, using SLOSH model and FIRM's to identify vulnerable areas.

The project will also develop policy alternatives for protection and/or orderly retreat of natural features such as beaches and wetlands, critical community infrastructure [such as Montauk Highway], and for private property. It will present the various alternatives in a series of white papers to local government and to the public through conferences and video presentations (see *Public Education*).

25. Erosion Control Districts

The Town will research models and mechanisms for Erosion Control Districts for neighborhoods surrounding sections of the Town's coastal zone where beaches and other natural protective features are being degraded or are particularly susceptible to erosion. As part of the project the Town will set up a model district for beach restoration in a sector where beaches have been damaged by human

activity, e.g. erosion control hard structures. In conjunction with local citizen groups it will explore innovative solutions for beach nourishment and/or restoration, as well as possible funding mechanisms. The Barnes Landing/Accabonac Cliff area in Reach 3 and Sound View Drive in Reach 6 are possible sites (see also *Hurricane Damage Mitigation Plan*).

26. Northwest Creek Channel Relocation, Feasibility Study

This study would consider relocating the Northwest Creek inlet channel to it's original position at the eastern end of the baymouth spit, in order to improve navigation, circulation and water quality in the Creek. Since moving the channel to its present location it has required frequent dredging, and water quality has deteriorated, due in part to decreased flushing. As part of this study any resulting dredge spoil should be considered for deposition on Barcelona Neck or the toe of the bluff south of Cedar Point, for beach nourishment and/or bluff stabilization.

27. Accabonac Harbor North End Sluice, Feasibility Study

Proposals for re-opening the former sluice at the north end of Accabonac Harbor, or opening a second inlet along the Gerard Drive causeway, have circulated for years. The purpose would be to improve flushing and circulation and reduce siltation within the harbor. Such a solution could be combined with redesign of the causeway to ameliorate the nearly annual washouts of the roadbed there. The study would evaluate effects on the tidal range and circulation, on the shellfishery and shorebird habitat, as well as flooding and sedimentation within the harbor.

28. Fresh Pond Channel Erosion Stabilization and Widening

The inlet to Fresh Pond shoals up continually and has eroded part of the Town park and picnic area. This project will shorten or remove the jetty at the north side of the inlet and widen the inlet to allow for increased flushing and to stabilize the north side of the park against further erosion. Saltmarsh vegetation will be reestablished along the inlet following any excavation.

29. Montauk Harbor Channel Sand Bypass System

The jetties stabilizing the inlet to the Federal channel at Montauk Harbor have interfered with littoral transport of sediment, contributing to the significant erosion problems along Sound View Drive and Captain Kidd's Path to the west. This project will analyze the various causes of erosion in the vicinity, with emphasis on the impacts of the jetties, and propose possible solutions to the erosion problems. One objective will be to design, fund and implement a sand bypass system to equalize any sediment deficit in the area immediately downdrift of the jetties. Since the inlet is a Federal channel dredged and periodically maintained by the Army Corps of Engineers, and the jetties were built and are maintained by the ACOE, Federal funding should be utilized to conduct a feasibility study and determine funding for this project.

30. Ditch Plains Erosion and Remediation Study

A consultant working with the Town will determine causes and possible solutions to erosion problems at the Town bathing beach and neighboring municipal land at Ditch Plains in Montauk. The study is designed to establish baseline and historical information for the shoreline at Ditch Plains, assess causes of erosion and potential extent of risk from future flooding and erosion, and propose remedial "soft" strategies for approval by the Town Board. An EPF matching grant has been awarded to the Town by NYS DOS to assist with this project. The study phase is expected to be completed during 1998.

31. Drainage Mitigation, Georgica Cove

A drainage system that emanates from Route 114 and empties into Georgica Pond through an outfall at Cove Hollow in East Hampton Village constitutes a substantial input of stormwater runoff which acts to increase flooding [and pollution] in the pond. Partly as a result of the drain, the pond is prone to substantial fluctuations in water level, resulting in periodic flooding of basements and septic systems on bordering properties even under relatively normal conditions. This project will analyze and propose design and engineering solutions for the run-off entering the Cove Hollow drain with the goal of eliminating or limiting input to Georgica Pond by natural filtration or other diversion of waters emanating from this watershed. It will require a cooperative arrangement with the Village of East Hampton.

32. East Hampton/Southampton Cooperative Run-off Mitigation, Wainscott Pond

Flooding in Wainscott Pond is exacerbated by runoff from fields and roads to the northwest, a drainage corridor that culminates in the pond through the culvert near the Wainscott School. Much of these floodwaters originate in Southampton Town, therefore mitigation should be an intermunicipal effort.

This project would develop a cooperative inter-jurisdictional agreement culminating in joint actions by both Town's Highway and Public Works Departments to reduce and otherwise mitigate road and agricultural run-off entering Wainscott Pond. It will analyze watershed characteristics and run-off patterns and recommend strategies for capital improvements to divert, impound and filter upland floodwaters.

In addition to alleviating flooding this project will improve water quality by reducing non-point pollutants entering the pond from road run-off, agricultural chemicals, nutrients and sediments. Improved water quality will also enhance habitat for the many native and migratory species that utilize the pond.

33. Reduce Impacts of the Federal Groins on Wainscott Beach

A 1989 study by coastal geomorphologist Stephen Leatherman discusses the adverse impact of the Federal groins on the Wainscott beach and indicates the desirability of mitigating their downdrift effects. Leatherman states "There is an obvious and unacceptable adverse impact of these groins on the Wainscott shoreline... resulting in the wave-eroded and storm-susceptible downdrift beaches...." Similarly, a 1991 study by the Marine Science Resources Center at SUNY Stony Brook

notes "the shoreline change is approximately 15% to 20% greater for the existing, long Federal groins condition."

Potential remediation includes removal or shortening of the Federal groins to improve sand bypass and restore littoral drift. Leatherman suggests the two Federal groins be shortened by 205 feet to bring them in line with the updrift State groins, which "would go a long way to correct the present shoreline problem." This action would require approvals from County, State and Federal agencies, particularly the Army Corps of Engineers. An August 1984 report (appended in Leatherman) commissioned by the Army Corps on removal of the groins states "the short-term effects of removing the groins at the Easthampton (Georgica Pond) groin field and the Ocean Beach groin field should not be dramatic, since both of these fields are nearly filled and effectively by-passing."

This project will assemble available research and anecdotal information on the groins and their effect on neighboring beaches, work to develop a cooperative political approach with East Hampton Village, conduct engineering and feasibility studies on possible remedial solutions, assess support of affected property owners, research possible sources of funding for remedial actions, and seek necessary permits from State, Federal or other involved agencies.

PUBLIC ACCESS AND RECREATION POLICIES #9 & 19-22

<u>34. Improve Public Access to Ocean Beaches</u>

The Town's south shore ocean beaches are some of the finest in the world and are a primary recreational resource for residents, tourists, renters and second-home owners. Parking at the Town's ocean bathing beaches is inadequate for peak summer crowds, and available space for expansion is limited onsite. The bathing beaches themselves can accommodate more people without overcrowding and the Town needs to develop ways to expand public access to these beaches.

A system of additional offsite parking with shuttle transport is one way to meet existing and future demand for getting people to designated bathing areas. The Town also needs to plan for possible future development of additional public bathing beaches, and has previously purchased land in the Napeague section of Town for one such facility.

As part of this project the Town Planning, Parks, Natural Resources and Highway Departments will:

1) Study existing and projected future demand for Town beach facilities and parking by residents and non-residents, and analyze potential sites for new or expanded facilities. A list of options to meet future demand will be prepared, including at least the following two actions.

2) Conduct a feasibility study for offsite parking areas in Amagansett and Montauk with shuttle transportation ("Bus to the Beach") to the Town's primary bathing beaches at Atlantic Avenue and Indian Wells Highway in Amagansett, and Kirk Park and Ditch Plains in Montauk.

3) Prepare a plan for the Assembly of God property purchased by the Town in Napeague to develop it as a municipal bathing beach, with attendant facilities, parking, etc., addressing relevant environmental concerns for the fragile dune ecology, potential flooding and erosion, and colonial shorebird nesting habitat.

35. Road-End and Beach Access Modifications

Many of the Town's road ends leading to beaches are simply exposed pavement used for parking, pedestrian and ORV access to the beach. In heavy rains there is direct run-off from the road system onto the beach and into surface waters, and in times of severe coastal storms the road ends may act as open flood corridors, exacerbating inland flooding. The heavy summer traffic from pedestrians and ORV's inhibits growth of natural beach vegetation that could act to filter pollutants and preclude erosion.

This project proposes to reduce flooding and erosion by eliminating or changing the topography of flood corridors, and improve surface water quality by filtering or recharging non-point pollutants from road run-off. Habitat restoration will also be an objective as part of revegetation efforts. To accomplish these objectives the Town will:

Survey and prioritize exposed road ends and accesses according to severity of problems. In consultation with coastal experts, design a variety of appropriate landscaping and paving solutions that are appropriate to bayshore and ocean conditions. The project will result in a design matrix adaptable to a variety of road end conditions.

Create and vegetate low dunes at exposed road ends where flooding is a potential problem, with pedestrian walkways and designated vehicular access corridors where appropriate.

Erect snow fence and revegetate dunes or access points damaged by excessive pedestrian and/or vehicular use to prevent erosion (examples: Kirk Park in Montauk, vehicle access at east end of Marine Boulevard in Amagansett).

Maintain visual access to water views by creating viewing platforms with seating or elevating road ends to provide views over the dune.

Reduce impacts of ORV use on beaches where vegetation or dunes have been damaged or inhibited through some or all of the following measures: a) additional regulation, b) fencing of vegetated areas, c) improved public education, d) increased enforcement of beach vehicle regulations.

[N.B. An EPF grant from NYS DOS was received by the Town Natural Resources Department in 1996 for the study and design phase of this project.]

36. Public Access & Recreation Improvements

Town of East Hampton LWRP

I ocation/Description

Public Access and Recreation Policies #9 & 19-22 recommend a variety of measures to improve access to the water and recreational use of the coast and to resolve use conflicts. While in aggregate these recommendations would be costly, a modest program of annual capital improvements will result in substantial incremental progress at a reasonable cost to the Town.

Proposed capital improvements, acquisition of access points, and projects to redesign accesses to reduce impacts (e.g. dune walkovers) or use conflicts are listed here and proposed for implementation as funding becomes available either from the Town budget or from outside grants. A number of the proposals would be included within or integrated with *Road-end and Beach Access Modifications, Wetland Restorations* or other projects. This is a working list which will be periodically updated. See *Map VII-1A and 1B* for locations.

Location/ Description	Improvement Opportunity
Reach 1	
CEDAR POINT PARK	Parking, wetland restoration (phragmites has invaded Alewife Pond), close access seasonally to Cedar Point to protect nesting shorebirds
NORTHWEST CREEK/NORTHWEST HARBOR	Water quality improvement, wetland restoration, phragmites has invaded wetlands
NORTHWEST HBR CTY PARK (NW CREEK)	Benches, bike racks, repair launch ramp, canoe/kayak potential campsite, interpretive signs, parking, picnic tables, parking lot could be improved, fence point seasonally for nesting shorebirds, erect educational sign
BARCELONA NECK	Bike racks, wetland restoration, phragmites along golf course driveway
MILE HILL ROAD END & TOWN PROPERTY	Bike racks, pedestrian access, relandscape to reduce flooding
GRACE ESTATE	Interpretive signs, wetland restoration, phragmites has invaded south of Alewive Brook Road
ALEWIFE POND	Wetland restoration

Improvement Opportunity

Town of East Hampton LWRP

ALEWIVE BROOK ROAD END	Launch ramp should be improved, presently in disrepair
Reach 2	
HEDGES BANKS DR W END, TOWN	Remove private property sign, pedestrian access, parking could be accommodated by widening road R.O.W.
HEDGES BANKS DR MID, HOMEOWNER	Bike racks
HEDGES BANKS DR MIDDLE, SUF. CO.	Bike racks, parking could be accommodated by widening road R.O.W.
HEDGES BANKS DR OLD WOOD LNDG	Bench, bike racks, remove berm, parking could be accommodated by widening the road R.O.W.
OLD HOUSE LANDING ROAD END	Bike racks, restore road-end
SAMMY'S BEACH	Bike racks, interpretive signs, restrict vehicle access seasonally to protect nesting shorebirds, educational signs
THREE MILE HARBOR	Acquire public access, access to west side of Harbor needed
HANDS CREEK	Acquire public access, water quality improvement, wetland restoration, phragmites has invaded wetlands
HANDS CREEK ROAD END & TOWN PARK	Bike racks, interpretive signs, trail
DUKE DRIVE ROAD END	Acquire public access, pedestrian access, possible launch area to replace loss of historic launch area at Dominy's Point.
SPRINGY BANKS ROAD ACCESS PATH	ORV access, pedestrian access, dirt road until fence of private property.
HAMPTON WATERS (CEDAR POND)	Wetland restoration

HAMPTON WATERS BEACH ASS'N	Wetland restoration, phragmites has invaded wetlands.
GARDINER COVE ROAD-END	Garbage cans, wetland restoration, phragmites has invaded the wetlands.
BOAT YARD ROAD END	Wetland restoration, phragmites has invaded wetlands.
TOWN DOCK - BOAT BASIN	Bike racks, picnic tables
MARINA LANE (EH TOWN)	Interpretive signs, picnic tables, scenic viewpoints, trail, wetland restoration, phragmites has invaded wetlands
TOWN DOCK - GANN ROAD	Benches, bike racks, garbage cans, minimize potential conflicts between recreation and commercial fishing uses.
HARBOR VIEW LANE ROAD END	Pedestrian access
FOLKSTONE ROAD END	Benches for sunset viewing
OLD FISHING STATION	Benches, fishing pier, garbage cans, launch ramp, parking, scenic viewpoints, should be used in conjunction with Maidstone Park, possible moorings in Three Mile Harbor (subject to approval of the Town Trustees), water quality lab and shellfish hatchery uses (see Development Policies)
MAIDSTONE PARK	Bike racks, garbage cans, parking, rollerblading, scenic viewpoints, tennis, trail, sign, "Dangerous Currents" on channel side
HOG CREEK	Acquire public access, water quality improvement, wetland restoration, protected navigable access needed near mouth of Creek, fence nesting areas seasonally to protect shorebirds

HOG CREEK HIGHWAY ROAD END	Wetland restoration, wetlands at head of Creek have been disturbed, possible launch for hand carried boats, canoes, etc but no space to park and dangerous curve in road
Reach 3	C
FIREPLACE ROAD END	Bike racks, interpretive signs
ACCABONAC HARBOR	Acquire public access, water quality improvement, PA recommends Town purchase land or obtain easement to west side of Harbor for vehicular access to edge of meadow, pedestrian access to water for clamming
LANDING LANE ROAD END	Benches, interpretive signs, scenic viewpoints, wetland restoration, launch ramp is in disrepair and should be removed, should be used as a launch area without ramp
COMBER PARK - OLD STONE HWY &	
LOUSE POINT RD	Scenic viewpoints, trail, wetland restoration, phragmites has invaded wetlands
GERARD PARK	Benches, bike racks, garbage, interpretive signs, fence shorebird colony and close entire bayside of Gerard Drive beach to vehicles Apr 1- Aug 15
GERARD POINT	Benches, bike racks, garbage cans, interpretive signs, scenic viewpoints
LOUSE POINT BEACH	Benches, parking, picnic tables, scenic viewpoints, wetland restoration, phragmites has invaded wetlands
SPRINGS SCHOOL	Trail
PUSSY'S POND	Water quality improvement, wetland restoration, ongoing wetland

	restoration projects to remove phragmites
PUSSY'S POND PARK	Benches, bike racks, garbage cans, interpretive signs, parking, picnic tables, trail, wetland restoration, ongoing wetland restoration projects by Town and Cornell Cooperative Extension
BARNES LANDING	Benches, bike racks, garbage cans, apply daytime vehicle restrictions (10 a.m. to 6 p.m.)
ALBERTS LANDING ROAD END	Bike racks, apply daytime vehicle restrictions (10 a.m. to 6 p.m.)
LITTLE ALBERT'S LANDING	Bike racks, apply daytime vehicle restrictions (10 a.m. to 6 p.m.)
FRESH POND	Water quality improvement, wetland restoration, phragmites has invaded the wetlands
FRESH POND PARK & ROAD END	Bike racks, interpretive signs, trail, wetland restoration
ABRAHAMS LANDING ROAD END	Bike racks

Reach 4	
NAPEAGUE BAY	Acquire public access from Cranberry Hole Road by acquiring SCTM #128- 1-29.3
FISH FACTORY PIER	Provide public access for fishing pier, pedestrian access through park, develop primitive canoe/kayak campsite
BAY VIEW AVENUE ROAD END	Remove "Private Road" sign, parking, pedestrian access, wetland restoration, swimming
TRUSTEE LANDS AT LAZY POINT	Benches, [dry] toilets, garbage cans, parking for windsurfers
CRASSEN BLVD./ NAPEAGUE POND	Scenic viewpoints, wetland restoration
NAPEAGUE ST. PK.(North)	Benches, bike racks, canoe/kayak potential campsite, fishing pier, garbage cans, interpretive signs, parking, scenic viewpoints, toilet facilities
NAPEAGUE HARBOR RD.	Launch ramp, sign "Fragile Habitat", close road behind dune and revegetate
TOWN PARCEL, NAPEAGUE HARBOR RD.	Interpretive signs, trail
HITHER HILLS/WALKING DUNES (St Park)	Benches, bike racks, canoe/kayak potential campsite, garbage cans, interpretive signs, picnic tables, scenic viewpoints, restrict vehicles from Walking Dunes
GOFF POINT	Fence seasonally to protect nesting shorebirds, signs
ART BARGE (MUSEUM OF MODERN ART)	Pedestrian access to beach

Reach 5	
FORT POND	Wetland restoration
SECOND HOUSE	Benches, bike racks, garbage cans, interpretive signs, picnic tables, trail, wetland restoration
LIONS FIELD/ MONTAUK POINT STATE BLVD. RECREATION COMPLEX (see also p.XIV-34)	Ballfields, soccer, basketball, rollerblading, tennis, benches, garbage cans, parking, pedestrian access, picnic tables, scenic viewpoints, toilet facilities
HITHER WOODS	Benches, bike racks, canoe/kayak potential campsite, garbage cans, interpretive signs, scenic viewpoints, trail
FORT POND BAY	Acquire additional public access from Navy Road for swimming, access on SE shore for commercial fishermen
BENSON POINT DOCK	Boat dock, fishing pier, launch ramp, pedestrian access to beach
MONTAUK MOUNTAIN	Trail, important maritime grass and heathlands, maintained by TNC
ROUGHRIDER DOCK	Boat dock, fishing pier
TOWN BEACH AT NAVY ROAD	Benches, bike racks, garbage cans, parking, scenic viewpoints, toilet facilities
TOWN SHELLFISH HATCHERY	Interpretive signs, scenic viewpoints
CULLODEN POINT	Bike racks, canoe/kayak potential campsite, garbage cans, interpretive signs, parking, pedestrian access, swimming, scenic viewpoints, trail (Town management plan)

MONTAUK RECYCLING CENTER	Ballfield, basketball, benches, bike racks, garbage cans, ORV access, parking, picnic tables, rollerblading, scenic viewpoints, swimming pool, toilet facilities, trail
RESERVED AREA W. OF FLAMINGO RD.	Trail w/ potential for scenic appreciation only
<u>Reach 6</u>	
LAKE MONTAUK	Acquire public access, additional access needed to western shore, new launch ramp on east shore, proposed coordinated walkway through Coonsfoot Cove (see pedestrian access below), remediation/restoration of wetlands and ditches along West Lake Dr. and Ditch Plains area could reduce pollutants and minimize flood potential
GOSMAN'S DOCK	Pedestrian access
TOWN DOCK AND ROAD END	Pedestrian access
MONTAUK FISH DOCK/DURYEA'S	Pedestrian access
TUMA'S DOCK (JOHNNY MARLIN'S)	Pedestrian access
SALIVAR'S DOCK	Pedestrian access
VIKING DOCK	Pedestrian access
UIHLEIN'S	Pedestrian access
PIER ONE	Pedestrian access
MONTAUK MARINE BASIN	Pedestrian access
MONTAUK SPORTSMAN'S DOCK	Pedestrian access
OFFSHORE SPORTS	Pedestrian access
THE LANDINGS	Pedestrian access

LAND'S END	Pedestrian access
CAPTAIN'S COVE	Pedestrian access
WEST LAKE FISHING LODGE	Pedestrian access
SNUG HARBOR	Pedestrian access
STAR ISLAND YACHT CLUB	Pedestrian access
STAR ISLAND CAUSEWAY	Acquire public access
TOWN R.O.W. OFF WEST LAKE DRIVE	Pedestrian access
STEPPING STONES POND	Acquire public access, wetland restoration may improve water quality in southern Lake Montauk
BIG REED POND	Wetland restoration
SOUTH LAKE DRIVE ROAD END	Benches, bike racks, upgrade comfort station with model composting toilet to help improve water quality.
UNNAMED ROAD OFF EAST LAKE DRIVE	Launch ramp, acquire adjacent underwater lands SCTM #7-2-9.4, 7- 2-9.22 (see Open Space Acquisition)
WEST JETTY BEACH	Bike racks, separate parking from spoil area with pilings, revegetate upland spoil, snowfence to reduce wind-borne sand movement
EAST JETTY BEACH	Benches, picnic tables, close access to vehicles, redirect through County Park
MONTAUK COUNTY PARK	Reduce heavy summer vehicle load on beach, seal holding tanks at entrance
MONTAUK DOWNS STATE PARK	Trail

Reach 7 **OYSTER POND** Wetland restoration to prevent phragmites from invading but area contains too many protected plant species to disturb otherwise, close road around Oyster Pond to vehicle traffic, improve pedestrian trail Fence off $\frac{1}{2}$ mi area around seal FALSE POINT (North side) haulout, from mid-Nov to Apr 30, allow pedestrian access along bluff top MONTAUK STATE PARK (North) Bike racks, garbage cans, interpretive signs, scenic viewpoints Reach 8 MONTAUK STATE PARK (CAMP HERO) Develop low impact water access open to hiking, surfcasting, etc., interpretive signs, trail, wetland restoration; upland parking area closer to Turtle Cove CAMP HERO BALLFIELD Parking, picnic tables MONTAUK SANCTUARY Acquire public access, garbage cans, interpretive signs, parking, pedestrian access, trail[s] Reach 9 RHEINSTEIN PARK Interpretive signs, trail, wetland restoration **SHADMOOR** Acquire public access, pedestrian access, scenic viewpoints, swimming, trail[s] **DITCH PLAINS** Pedestrian access only, close beach to vehicular traffic RHEINSTEIN PARK Restrict ORV traffic from park Restrict vehicle access to S. Edison MONTAUK HAMLET and S. Eton road ends

KIRK PARK (South)	Bike racks, revegetate dune at walkway
BENSON RESERVE AREA	Acquire public access, garbage cans, interpretive signs, parking, scenic viewpoints
TOWN OVERLOOK	Benches
GURNEY'S INN	Pedestrian access to beach
<u>Reach 10</u>	
HITHER HILLS STATE PARK (South)	Interpretive signs
BEACH PLUM COURT (Town Rsv Area)	Interpretive signs
EH TOWN (FORMER ASSEMBLY OF GOD)	Develop as bathing beach, benches, bike racks, garbage cans, parking, toilet facilities
NAVAHOE ROAD END	Bike racks, close beach seasonally 4/1-8/15 to protect nesting shorebirds [except for commercial fishermen], fence colony and erect signs
DOLPHIN DRIVE/ATLANTIC DRIVE	Close beach seasonally from 4/1-8/15 to protect nesting shorebirds [except for commercial fishermen], fence colony and erect signs
SEA BREEZE ESTATES	Acquire public access, interpretive signs, ORV access, swimming, prime shorebird nesting area
DOLPHIN DRIVE ROAD END	Benches, bike racks
ATLANTIC DRIVE ROAD END	Benches, bike racks
NAPEAGUE STATE PARK (South)	Interpretive signs
SHIP WRECK DRIVE R.O.W.	Acquire public access, bike racks, garbage cans, improvements after dedication of the road to the Town.

WHALER'S LANE R.O.W.	Bike racks, garbage cans
MARINE BLVD. E END	Establish narrower right-of-way for vehicles, restore blow-out in dune, revegetate, snowfencing, parking at road-end, signs
NAPEAGUE LANE ROAD END	Benches, bike racks
BEACH AVENUE R.O.W.	Bike racks, garbage cans
BLUFF ROAD DOUBLE DUNES	Interpretive signs, scenic viewpoints, trail, wetland restoration, acquire additional land or obtain easements to create a contiguous ecosystem, phragmites in man made pond, possible scenic view from Bluff Road, TNC maintains boundary markers and identification signs
INDIAN WELLS BEACH	Benches, bike racks, picnic tables
<u>Reach 11</u>	
BEACH LANE ROAD END	Bike racks, increase parking, improve drainage
TOWN LINE ROAD END	Bike racks, garbage cans
GEORGICA POND STATE ACCESS, RTE 27	Bike racks, garbage cans, interpretive signs, launch ramp [for shallow draft boats], picnic tables
GEORGICA POND	Acquire public access (see PA report and below), water quality, close beach to ORV's 4/1-8/15, except emergency vehicles & commercial fishermen, fence shorebird colony
HOPPING PARCEL, GEORGICA POND	Acquire public access
MATHEWS ROAD, GEORGICA POND	Acquire public access
	1 1

Note: The Town Trustees do not support the beach vehicle restrictions proposed for Sammy's Beach (p. XIV-26); Gerard Park, Barnes Landing and Little Albert's Landing (p. XIV-28); Walking Dunes (p. XIV-29); Navahoe Road End and Dolphin Drive (p. XIV-32); and Georgica Pond (p. XIV-33).

37. Canoe/Kayak Water Trail System with Low-impact Campsite Network

This project will establish a water trail system extending through the Town from Northwest Harbor to Montauk. Associated with it will be a linked series of low-impact rustic campsite areas for canoers and kayakers at roughly one-day paddle intervals. Possible locations include Northwest or Cedar Point County parks; the old fish factory site in Napeague State Park at Promised Land; and the reserve area of Culloden Point in Montauk. The project will involve planning and coordination between Town, County and State agencies, and consultation with user groups to develop an action plan, and to seek necessary permits and funding for development of the water trail system.

38. Lions Field/ Montauk Point State Boulevard Recreational Complex

Utilizing state land originally designated for the right of way for Montauk Point State Boulevard, the Town will expand its Lions Field ballfield to accommodate demand for recreational facilities. Plans include two ballfields, a soccer field, basketball courts, a rollerblading rink, and tennis courts, with associated amenities including parking, benches and scenic viewpoints, pedestrian access to Fort Pond, garbage cans, toilet facilities, etc. Facilities will be spread out so as to minimize impacts to the natural resources surrounding Fort Pond, and will include areas to the east of Flamingo Road and adjoining the Montauk Library.

39. Management Plan for Lazy Point Road End

This popular windsurfing access to Napeague Harbor receives an overload of traffic in an area with fragile dune and wetlands which are being affected by vehicle and pedestrian traffic. A management plan is needed to address problems caused by the existing use, conflicts with the natural resources and other users (e.g. clammers), and to coordinate the several jurisdictions of East Hampton Town, the Town Trustees, and Napeague State Park which have management responsibilities for the area.

The plan would need to assess present and future use of the site, including its use for competitions and rental activities, adequacy of parking and sanitary facilities, and appropriate changes in regulations, and resolution of use conflicts consonant with resource protection.

HISTORIC & VISUAL RESOURCES POLICIES #23-25

40. Town Historic Building and District Update

In 1989 - 1990, Robert J. Hefner was commissioned to conduct an intensive level survey and study of the historic and architectural resources of the town. This Historic Preservation Report provided recommendations for properties and districts eligible for listing on the National Register of Historic Places. A public hearing was conducted on the findings and recommendations of this report, changes were made and the report was adopted into the Town Comprehensive Plan. However, none

of the recommendations have been implemented: no districts were designated and no legislation was adopted. This project will review and update this report to incorporate structures that previously were not within the 50-year historic designation but are now more than 50 years old. This may bring in many of the World War II structures, primarily in Montauk and some in Amagansett, that were not yet eligible under the previous survey. Surveys from the report will also be updated to review integrity of previous sites and account for recent development.

The project will also coordinate this work with the preparation and implementation of a *Historic District and Building Preservation Local Law*.

41. Historic District and Building Preservation Local Law

As recommended in the Town's Historic Preservation Report, the Town has prepared (October 1999) a townwide local law to provide regulations to preserve and enhance buildings nominated or eligible for listing on the national register of historic places. The law provides for architectural review to maintain harmony with the historical characteristics of a landmark or historic district. The jurisdiction of the Architectural Review Board has been expanded to evaluate applications for construction, alteration, removal, or demolition affecting designated landmarks, historic sites or structures within historic districts. Historic districts have not yet been designated townwide, but are being considered and evaluated for several areas.

Separate legislation based on an inventory and/or sensitivity model of significant cultural, historic and prehistoric sites is identified as a separate project.

42. Cultural Resources Inventory and Identification Matrix

Tasks of this project will be to:

- 1) Inventory and map all known areas of historic and pre-historic significance. Archaeological and culturally significant sites documented in the literature as well as sites discovered through the phased investigations required at the time of development should be included. Research should also include a survey of local lore, historic maps and documents to identify economic and cultural features of historical importance, such as former wharfs, fish processing sites, whaling facilities, communications networks, old trails and roads, etc.
- 2) Develop a probability model to assess the likelihood of an area having historic or prehistoric significance. This model would evaluate all identified areas of known significance (refer to task 1 described above) mapping and correlating them with natural and cultural features such as navigable water bodies, drinking water sources, shellfish beds, topography, old trails, local lore, etc.
- 3) Develop local legislation to protect areas of known historic and prehistoric significance. The law would require incorporation of the probability model into planning procedures and building permit inspections, and in areas identified by the model as potentially significant

would require phased archaeological research and preservation to be conducted in accordance with state and federal standards before development occurs.

43. Coastal Oral History Project

A series of video-recorded interviews will be conducted with Town elders to record the history of the Town's waterfront. Baymen, fishermen and other residents will be interviewed about traditional fishing techniques, how the coastline has changed, old access points, and general reminiscences on East Hampton's rich waterfront history. This could be a sub-project of the *Cultural Resources Inventory*.

44. Scenic and Visual Resources Survey and Protection Program

East Hampton has an extraordinary endowment of unique and irreplaceable coastal scenic resources. These scenic resources are the backbone of the Town's resort economy. This project will identify and categorize the scenic and visual resources within the coastal zone. The Town will conduct an inventory and analysis of scenic resources consistent with standards and criteria developed by the NYS DOS Scenic Areas of Statewide Significance (SASS) program. The Scenic Inventory and Analysis will build on the Town's proposed *GIS for Coastal Zone Management*. A narrative will be prepared discussing the role of scenic resources in the cultural history and economic life of the Town, as experienced by residents, visitors and the many distinguished visual artists who have depicted East Hampton coastal scenes and activities over the years. Emphasis will be placed not only on natural landscapes, but also on traditional marine landscapes that relate to commercial fishing and other water-dependent uses. Implementation procedures will be developed to better protect scenic resources, including siting and design guidelines, land use regulations, policies and procedures for preserving scenic resources, and for initiation of the State SASS.

Aesthetic values are necessarily relative. An observer's position in relation to a scene, or movement through the landscape in a car or boat, affects their impression. An observer in a house in the dunes may be delighted by the water view, but someone viewing from behind the house or from the water may consider it an eyesore. Distance shifts the emphasis from details to overall patterns. Ephemeral effects of seasonal change, foliage altering visibility, weather related clarity of the atmosphere, fog, moisture, and the vagaries of sun and cloud cover, all further affect our visual perception. Views can also be scenic or unattractive depending on viewer interpretation of values. For example, the radio tower at Napeague is a large structure interrupting a natural wetland vista, which might put it in the unattractive category. However, the tower is also a longtime landmark which evokes nostalgic feelings, which could classify it as scenic.

Some controversy is unavoidable when aesthetics are involved. However, a broad consensus is often shared by people on what they consider either scenic, visually attractive or unattractive and this consensus can be quantifiable. Using a variety of planning techniques to inventory and evaluate scenic resources, for example visibility and viewshed analyses, and social research methods like preference surveys to quantify public appreciation of views and open space, aesthetic considerations can be systematized and codified to provide better visual resource protection. In an inventory, scenic values can be categorized and values assigned to aesthetic elements and views, with critical

input from the public to characterize favorite viewpoints, vistas and scenic routes. Visual eyesores should be identified that need attention. Planning procedures and zoning regulations can be developed to minimize visual impacts and safeguard scenic resources through setbacks, site planning, landscaping, height restrictions, architectural review and other common sense measures to minimize the impact of development.

Products to be generated by the project include:

- A resource library of postcards and art reproductions depicting historical Town scenes
- A slide library of the coastal region incorporating aerial, ground and water-based perspectives keyed to a base map (see also *Visual Inventory of Existing Waterfront*)
- Classification of the Town's coast into visual districts
- Identification and mapping of coastal viewsheds
- Identification and mapping of key viewpoints
- Identification and mapping of visual subunits
- Completion of visual inventory forms
- Visual inventory of the Town's coastal area
- Survey to rate public interest and reaction to the identified sites and to identify any additional sites that may have been overlooked in the inventory
- Visual evaluation of the Town's coastal area
- Identification and narrative description of areas suitable for SASS designation
- Visual analysis maps
- Design guidelines for managing future development within scenic areas
- Implementation recommendations for policy guidelines, local laws and regulations, and planning procedures
- A manual for government combined with a citizens' handbook, accompanied by slide or video presentations, to educate property owners and planning and zoning personnel on the benefits, methods and regulations for protecting scenic and visual resources

WATER & AIR RESOURCES POLICIES #31-44

45. Watershed Management Plans

Using GIS, the Town will map primary and secondary watersheds within the coastal area, to assist in controlling non-point source pollution, stormwater and road run-off abatement, and septic waste remediation. Maps will inventory and identify all road drains and catchments, ditches and other drainage inputs into the harbors and creeks, and will be used to develop a pollution mitigation plan for each harbor. Hydrological data from test wells will be introduced to determine groundwater underflow, and determine areas vulnerable to saltwater intrusion or entrainment of pollutants into surface waters.

46. Stormwater Abatement

Stormwater runoff is a significant source of pollutants in surface waters of the Town. Runoff carries chemical contaminants, sediments, nutrients and organic wastes that adversely affect the purity of harbors, creeks and bays, compromising marine habitat and reducing biological productivity and recreational enjoyment of these critical resources.

The Town has undertaken a program of capital improvements to reduce the impacts of stormwater runoff, including road drainage catchments, marsh pond impoundments, and an *Open Marsh Water Management (OMWM)* program to restore the filtering mechanism of saltmarshes. The Town has maintained a consistent commitment to carrying out such projects. However, the program has been administered on an ad hoc basis and is subject to annual budget constraints.

This project would seek to place the road drainage and catchment program on a well-planned footing, consistently funded in the Town's capital budget over a multi-year time span. Individual stormwater abatement projects will be surveyed and prioritized, and engineering, permitting and capital funding needs will be identified, grants sought out and/or funds raised and committed through Town bond issues. Staff time will be dedicated for engineering, permitting and follow-up and coordination between Town agencies and with State permitting agencies. A feasible number of site improvements will be scheduled annually, and a concerted effort made to address all significant stormwater runoff problems in the Town within a set time. A stormwater database of inputs and abatement work will be established to monitor progress.

Innovative methods for capturing and filtering runoff will be researched and tested, and the program will be integrated with other water quality and habitat initiatives of the LWRP (*Eelgrass Restoration, Georgica Cove Drainage Mitigation, Wainscott Pond Cooperative Runoff Mitigation, OMWM, Water Quality Monitoring, Septic Leaching Into Harbors Experiment, Alternative Septic Systems Pilot Project, Beneficial Dredging to Improve Water Quality, and No-Discharge Zone*).

47. Open Marsh Water Management (OMWM)

Wetlands and saltmarsh are extremely productive lands, not only for marine plants and animals, but for warm-blooded terrestrial and avian animals as well. As development has consumed, altered or otherwise compromised the natural saltmarsh environments resulting pollutants have decreased fishery productivity and precipitated closures of shellfish beds in inner harbors and creeks.

Studies have shown that much of the pollutant loading is channeled through ditches and culverts in the wetlands installed over the last 70 years for mosquito control purposes. Vector control ditches by their design are intended to drain the surrounding wetland area. In addition to providing habitat, vector control ditches appear to act as direct conduits for fecal material from warm-blooded animals into receiving surface waters.

Open Marsh Water Management (OMWM) is a technique that seeks to restore the natural water flow and filtration function of the wetlands, and has been used elsewhere for habitat restoration and natural control of mosquitos. In cooperation with the Marine Program of Cornell Cooperative Extension Service the Town Natural Resources Department has conducted two pilot studies of OMWM in Accabonac Harbor and Northwest Creek. The results have been encouraging, and the project has been expanded to 50 acres of tidal wetland in Accabonac Harbor and 25 acres in Northwest Creek.

Small dams constructed of wood or sand bags are installed near where the ditch enters the creek or embayment. The top of the dam is set at a level to allow flood tides to enter the ditches near the end of the flooding cycle. On the ebb, tidal water is trapped and/or diverted to larger channels that enter the embayment closer to the bay's inlet, where pollutants are more rapidly dispersed by increased tidal flushing.

This simple low cost approach appears to be an effective method for mosquito control and for lowering fecal coliform levels in receiving waters. In addition to providing enhanced habitat for mosquito predators such as killifish, OMWM prolongs residence time for fecal bacteria in the marsh, accelerating decomposition by allowing additional UV exposure and grazing by other organisms, lowering the numbers of coliform bacteria used by NYS DEC to certify water quality in shellfish harvest areas.

This project will expand OMWM to additional tidal wetlands in the Town's enclosed harbors, creeks and embayments, provide personnel for installation and monitoring, as well as equipment and materiel. Projected benefits include habitat restoration and enhancement, surface water quality improvement, natural mosquito control, enhanced fishery productivity, and possible reopening of waters now uncertified for shellfishing.

48. Water Quality Monitoring Project

This project will continue and amplify an ongoing program by the Town Natural Resources Department for sampling and testing of selected surface water sites to monitor water quality. As part of it the Town will develop in-house capability for analyzing these samples for relevant pollutants, in coordination with NYS DEC and the National Shellfish Sanitation Program (NSSP) shellfish quality assurance programs to insure better compliance and regular data collection for health standards for local shellfish beds. This will assist the Town's goals for improved water quality and minimizing shellfish closures in Town waters.

The project proposes that the Natural Resources Department equip and staff a water testing laboratory, with the aim of eventually attaining certification by NYS DEC, to perform coliform and other testing such as salinity, dissolved oxygen, etc. As NYS DEC and the NSSP have stringent standards and requirements for testing procedures, a feasibility study should be conducted beforehand of requirements for compliance with NYS DEC standards, including an analysis of costs of construction, certified equipment, staff training and operating costs to determine whether such an installation would be cost effective.

The test program will be used to monitor sources, types and quantities of pollutants, and to aid and monitor the Town's various efforts to improve water quality. Testing will be coordinated with NYS

and NSSP shellfish quality assurance programs to help resolve the Town's ongoing difficulties over shellfish closures.

A second component of this project will be a comparative analysis of water quality as related to eelgrass production, subaquatic vegetation and plankton that provides important habitat and food sources for juvenile bay scallops and other organisms (see *Eelgrass Restoration*). This phase of the project will be coordinated with research and management objectives of the Peconic Estuary Program and other local and regional water quality initiatives, and is not dependent on NYS DEC certification.

49. Septic Waste Remediation

Infiltration of septic waste into the Town's surface waters and groundwater is an unseen and insidious source of pollution of largely unknown dimensions. Many residences in proximity to the water have inadequate septic systems that predate current health department standards, and in areas with high groundwater tables or high hydrologic head [i.e. significant groundwater underflow toward a water body] even systems that are up to code may not adequately filter nutrients and bacterial or viral pathogens.

This project involves several measures to survey and monitor existing systems, repair or upgrade failing or substandard facilities, and to test and recommend alternative septic disposal systems in areas where standard soil leaching systems are unlikely to function acceptably.

A first phase of this project would be to explore creation of a revolving low interest loan fund for residential septic system upgrades. Setting up this fund will involve legal and financial research and, in addition to local laws, may require enabling legislation at the state level, which would require lobbying to draft and introduce the law, and then to educate legislators for passage. As recommended in **Water Resources Policies #30-40 & 44**, property tax reductions or other incentives should also be considered, which may also require enabling legislation.

As more stringent septic waste standards have already been introduced for certain areas in the Town within the Harbor Protection Overlay District (HPOD), this would be a logical area to begin this effort. The septic waste remediation effort would be undertaken in conjunction with other HPOD initiatives (see *HPOD Homeowner Education*). For example, to solicit homeowner input a letter could be sent to affected property owners within the HPOD, notifying them of the availability of funding and requesting cooperation in identifying candidate systems for upgrading, with a self-survey including information about the age, location and construction of their septic system. If homeowners elect to participate in the program, systems would be upgraded to the standard of the HPOD.

Depending on the initial rate of success, methods may need to be reappraised following a pilot phase. Obviously a voluntary system is preferable. However, if voluntary subscription is ineffective, after a grace period the Town may wish to set up a procedure to require septic system testing and remediation, either triggered as described in the HPOD, i.e. when homeowners apply for building permits or variances for new construction, or alternatively, through a program of

inspections and mandatory upgrading. Once working well the program would be expanded to other parts of the coastal area, and perhaps eventually to all groundwater recharge areas of the Town.

As part of the effort to raise public awareness of the clean-up effort, a community experiment on septic leaching into the harbor may be a useful educational tool. This is similar to a "Great Flush-Out" conducted in the Chesapeake Bay estuary. Some research would be required to assess whether the procedure would be effective here, given the composition of local soils. Dye tablets are distributed to all residents around a harbor where septic leaching is a suspected cause of coliform contamination, and everyone flushes the dye down their toilet at once. If the dye becomes visible in the harbor it will emphasize the need to reconstruct faulty systems and help to identify the location of inadequately functioning systems.

A second segment of this project is to identify coastal residential areas where high hydrological "head" and proximity to the water (e.g. along Springy Banks Road on Three Mile Harbor) combine to produce pollution. See *Watershed Management*. The same revolving fund and incentives such as tax rebates would be provided to residents to retrofit existing systems with waterless composting toilets or other alternative septic disposal systems. The Town would work with NYS and County Health Departments to approve alternative systems and secure permits, and would monitor coliform counts in areas of the harbor in proximity both before and after the installation to determine its effectiveness. Again, this initiative would begin as a pilot project with a few volunteer homeowners, adjust methods as necessary, and eventually expand to other coastal areas as needed.

Along with *Stormwater Abatement, No-Discharge Zones, Harbor Management Plans* and *Water Quality Monitoring*, these *Septic Waste Remediation* projects are an important component of a comprehensive effort to improve surface water quality, to insure biological productivity and recreational enjoyment.

50. Harbor Management Plans

In preparing the LWRP, the Town identified numerous harbor management issues and recognizes the need to manage shore and nearshore areas through harbor management planning. A harbor management plan addresses conflict, congestion and competition for space in the use of a community's surface waters and underwater land. It provides guidance and regulation for management of boat traffic and general harbor use; optimum locations and numbers of boating support structures such as docks, piers, moorings, pumpout facilities, and transient anchorage areas; and identifies local and federal navigation channels and maintenance needs. It also provides the opportunity to identify various alternatives for optimum use of the waterfront and adjacent water surface, while at the same time analyzing the probable environmental effects of these alternatives.

Although the LWRP integrates many harbor management issues, the Town should undertake comprehensive harbor-specific management plans for Northwest Harbor/Northwest Creek, Three Mile Harbor, Hog Creek, Accabonac Harbor, Napeague Harbor, Fort Pond Bay and Lake Montauk. The most urgent of these are Lake Montauk and Three Mile Harbor, the most intensively used and extensively developed waterbodies in the Town. Harbor management should be integrated with other LWRP harbor initiatives, including *Restoration of Marina Lane Dredge Spoil Site; Former*

Fishing Station, Three Mile Harbor; Montauk Harbor Revitalization; Wetland Restoration; Eelgrass Restoration; Fisheries Shoreside Support Infrastructure; Montauk Harbor Channel Sand Bypass; Road-end and Beach Access Modifications; Public Access and Recreation Improvements; Coastal Oral History; Scenic Resources Survey and Protection Program; Stormwater Abatement; Water Quality Monitoring; Septic Waste Remediation; No-Discharge Zone; Boater Education; Harbor Protection Overlay District; Dredging; and the Geographic Information System (GIS). The Town Trustees have the authority to adopt those aspects of any harbor management plan which relate directly to their harbors, bays, bottomlands and beaches.

Harbor Management Plans also involve collecting data and establishing standards for, among other parameters:

Water quality, including flushing and tidal patterns, circulation studies, effects of boat wastes, No-Discharge Zones, pump-out facilities and boat waste disposal, pump-out monitoring, run-off containment, impact of surrounding septic systems, provisions for upgrading substandard systems

Habitat protection, including wetlands and shorebird nesting areas, terrestrial, marine and benthic flora and fauna of interest, saltmarshes, intertidal zones, beaches and tidal flats

Boat traffic, including analysis of existing marina resources, boat slip demand, mooring locations, launching ramps, dock space and developing overall carrying capacity models of the harbor, with designated locations for future expansion

Shellfish management, including impacts of above as well as inventory of prime beds and breeding areas, target areas for seeding programs or public aquaculture, and problems of access to shellfish beds on private underwater lands

Commercial fishing, available dockage and shoreside support facilities, including fishpacking marketing, and gear repair, existing and future demand

Private dock regulations, incorporating navigation and shellfish management concerns, ecological factors, and visual impact

Flooding and erosion, existing control structures and impacts, non-structural solutions, impacts of inlet management and need for sand bypassing

Upland uses, relative to existing and future harbor needs and priorities, Waterfront (WF) and Resort (RS) District requirements, visual and scenic context, and *HPOD*

Harbor management plans should have input from all Town agencies, including the Town Trustees, Harbormaster, Planning and Natural Resource Departments, and representatives of local marine industries and other harbor users.

51. No-Discharge Zone

Along with *Stormwater Abatement, Septic Waste Remediation*, and the land-based *Harbor Protection Overlay District*, No-Discharge Zones are an important tool for improving surface water quality in inshore waters of the Town and in its enclosed harbors, creeks and embayments. The designation serves as both a public education opportunity and facilitates enforcement against discharges of boat waste. Rules on discharges within the NDZ are simplified, the standard for enforcement is simplified, and visitors and local boaters alike are aware that violations are not permitted.

It is important that No-Discharge Zones not be seen in isolation, but as one component of a comprehensive effort by the Town to improve water quality. Also, if presented as part of a coordinated effort, the NDZ is likely to meet wider acceptance among boaters and marine industry people, who otherwise may feel they are being blamed or unfairly required to bear the brunt of clean-up efforts.

In coordination with NYS DOS and NYS DEC, in July 1997 the Town applied for State and Federal No-Discharge Zone designations, which were approved in January 1999 for the following water bodies:

Reach 1: Northwest Creek Reach 2: Three Mile Harbor, Hog Creek Reach 3: Accabonac Harbor Reach 4: Napeague Harbor Reach 6: Lake Montauk

The NDZ requires planning, public education and careful implementation for success. The Town will implement the NDZ in coordination with a public education program (see *Boater Education*), a phase-in period for boaters and marinas, and will develop new local laws and enforcement procedures. Public support and widespread participation are critical, and public awareness and boater willingness to comply have to be built with public education. Enforcement is a last resort, but will be better received if it comes hand in hand with education.

A broad coalition of local business, environmental groups and the marine industry are supporting the Town's NDZ effort, which complements the goals of the regional Peconic Estuary Program. 1998 has been agreed to by all participants as a year of public education. A campaign to raise public awareness about the impending NDZ and water quality issues began in 1998, and will continue into the 1999 boating season. Elements of the campaign include a Town brochure, meetings with marina owners, print ads in local newspapers and regional boating publications, harbor signage, a public launch of a new pumpout boat, and radio and TV PSA's.

NDZ public education was expanded during the 1998 boating season and will continue into 1999. The new Peconic Baykeeper will be in touch with boaters and the marine industry, and will become an ambassador for the NDZ. In the fall, emphasis will shift to retrofitting boats during the off season to comply with the NDZ. By spring another round of announcements, ads, new signage and a new brochure will announce the NDZ going into effect.

In conjunction with establishing the NDZ, the Town will seek to modify its Scavenger Waste Treatment Plant facility to accept marine vessel waste. A 1990-91 Marine Vessel Waste/Pump-out Waste Pilot Project conducted by Cameron Engineering for the Town established that pump-out waste can be successfully trickle-fed into the Scavenger Waste Treatment Plant and treated to State standards. As pump-out waste otherwise has to be trucked out of town at considerable expense to a facility at Bergen Point, treating it locally represents a significant cost saving for the Town and for marina owners who operate pump-out facilities. Plans for the plant modification and an estimated budget are included in the Pilot Project. The SPDES permit for the plant will also require amendment to permit treatment of vessel waste. SPDES permitting should be coordinated with the NDZ designation process to facilitate overall implementation.

52. Boater Education Project

In addition to instituting a *No-Discharge Zone*, this project will further educate boaters on the advantages of having clean attractive harbors, both for the enjoyment of local users and to lure visitors. Information offered will emphasize BMP (Best Management Practices) to protect and improve water quality, including locations and procedures for using pump-out equipment, and maintaining MSD's (heads) and bilge systems. It will encourage the use of onshore facilities for laundry, dishwashing, showers and hygiene. It will also address other aspects of ecology for boaters, including disposal of waste oil, solid waste, and wash water, use of biodegradable detergents and cleaners, fueling procedures to avoid spills, and educate boaters about other Town programs to improve water quality.

Brochures and signage will be used to inform boaters throughout the Town, and will be distributed through marinas and docks, the Town Clerk, Town Trustees, and marine personnel. Print material should be sufficiently attractive so the brochure can be used by marinas to promote their facilities to out-of-town boating customers. Education efforts should be coordinated with the Peconic Estuary Program to assure regional consistency and avoid duplication.

Ongoing "market surveys" of boaters and marine industry participants will be used to monitor effectiveness of the education effort. Special presentations will be developed to train people who will be interfacing with the public, such as marina personnel, harbormasters and bay constables, and boater user groups such as the Power Squadron, Coast Guard Auxiliary, and yacht clubs.

Boater Education will seek joint sponsorship from other stakeholders such as the Association of Marine Industries, Montauk Harbor Association, Montauk Captains Association, Concerned Citizens Of Montauk, Group for the South Fork, etc. It will also promote local waters for cruising.

53. Harbor Protection Overlay District (HPOD), Homeowner Education

The recently adopted Harbor Protection Overlay District (HPOD) encompasses regulations and suggested best management practices (BMP) for residential property surrounding the Town's inner harbors, embayments, creeks and coastal ponds. The HPOD law is intended to help control stormwater runoff, constrain swimming pool chemicals and effluent, upgrade septic systems, encourage use of native vegetative buffers, and discourage use of fertilizers and pesticides, and of

treated wood products in contact with surface waters. The effectiveness of the HPOD in improving water quality will be measured not by regulations and permits, but by cooperation and participation of residents in conservation of their harbors. A number of the provisions of the HPOD are directly dependent on public awareness and education, since they are homeowner initiatives rather than regulatory requirements.

The HPOD public education program will design and prepare a variety of materials including a homeowners' guide, watershed maps, a presentation and slide show for public meetings, and a direct mail package for property owners within the district. Besides direct mail, outreach to residents will be accomplished through public meetings and topical discussions on subjects like landscaping with native vegetation, alternatives to treated wood products, and how upland uses affect surface water quality. Meetings will also be videotaped for distribution via public access TV and local libraries. The focus of the meetings and materials will be on fostering a sense of ownership and participation, that what individual homeowners do on their property can help to improve water quality for the whole community.

Minimizing use of fertilizers and pesticides, cultivating native plant buffers and filter strips, promoting onsite drainage, operating swimming pools with minimal or non-chemical means, using pool dry wells to drain them, and maintaining septic systems properly are all initiatives of the HPOD which rely on easily understood information getting directly into the hands of homeowners who will willingly follow the practices.

This project will fund an informational brochure, personal contacts and informal neighborhood meetings to communicate HPOD recommendations and the reasons behind them. An environmental educator will contact affected homeowners and encourage them to fill out a self-assessment form for their property, and will maintain a resource database of sources of environmentally friendly techniques and materials. Effectiveness of the public education campaign will be evaluated through periodic surveys.

54. Tanker-Free Zone for Block Island Sound

In accordance with **Water Resources Policy #36, Shipment and Storage of Petroleum and Other Hazardous Materials**, and in recognition of the fragility of the coastal environment its importance to the Town's economy, and of navigational hazards existing in Block Island Sound, the Town of East Hampton shall encourage the U.S. Department of Transportation to establish a Tanker-Free Zone in Block Island Sound waters between Block Island and Montauk.

55. Oceanside Drainage Mitigation

A series of artificial marsh ponds will be used to impound and filter polluted run-off from the Oceanside subdivision in Ditch Plains, which has affected water quality in the south end of Lake Montauk. The project was designed by the Town Natural Resources Department, Town Engineer, Cornell Cooperative Extension Service, and the USDA Natural Resource Division, and is in the permitting stage. Funding commitments include federal ISTEA moneys and a contribution from the Concerned Citizens of Montauk.

56. Dredging Projects

56a. Dredging to Benefit Water Quality and Habitat

Several areas of the Town's harbors and enclosed water bodies could likely benefit from dredging to improve flushing and circulation, which could help to improve water quality and marine habitat, enhance shellfishing, and prevent siltation. Potential sites, several of which include channels which have since been closed, moved or otherwise altered, include:

Northwest Creek, investigate reestablishing original channel on east side Goose channel in the northwestern section of Three Mile Harbor Former north-end sluice of Accabonac Harbor, now closed off by Gerard Drive Fresh Pond, Amagansett, jetty has constricted natural pond opening Georgica Pond, extensive bar built up near gut impedes flushing when pond is opened

This project will analyze circulation and flushing for the proposed water bodies and evaluate prospective impacts and changes which would result from dredging, and design least cost/ lowest impact solutions where appropriate. The project will carry proposals though the design and permitting phases. Actual dredging will be arranged through Suffolk County or private contractors as available. Project will be integrated with *Harbor Management Plans*, above.

56b. Maintenance Dredging for Navigation Channels

Channels to Three Mile and Montauk Harbors and to protected anchorages in the Town's creeks and embayments require periodic dredging to maintain adequate depths for safe navigation. In the past this work was performed with some regularity by Suffolk County Public Works Department, which had its own dredge, or in the case of the Federal channel at Lake Montauk, by the Army Corps of Engineers.

In recent years the County sold its dredge to economize, and dredging efforts have fallen behind, causing problems with boats running aground in the channels of both Lake Montauk and Three Mile Harbor. The Town will seek to prioritize channel maintenance dredging and to identify stable funding sources for a long term maintenance dredging program. It will also provide for emergency dredging when storms or other short term phenomena cause channels to fill in or shift. Private maintenance and emergency dredging needs will also be identified and monitored.

In the past dredging projects have lacked monitoring and quality control to make sure work is carried out to specification. The Town will develop in-house capability for monitoring, which will also assist in identifying areas prone to rapid infill, sand bars, etc.

56c. Use of Dredge Spoil for Beach Nourishment and Sand Bypass

In the past dredge spoil has been required by law to be disposed of in the least cost manner possible, which in practice has meant creating spoil sites immediately adjacent to channels or other areas being dredged. Many of these spoil sites have now been filled, and serve no useful purpose.

This project will bring dredge spoil disposal practices into line with the policy objectives of the LWRP (Flooding and Erosion Policy #15 and Water Resources Policy #35), designate appropriate

permanent or temporary spoil storage sites, and prioritize further use of spoil for beach nourishment, sand bypass projects, etc.

As stated in **Policy #15**, priorities for use of dredge spoil are: "1) to nourish public bathing beaches, 2) to restore habitat, primarily for nesting shorebirds, 3) to nourish other public trust lands and beaches, and 4) for erosion control, possibly through future erosion control districts, though none presently exist in the Town."

56d. Dredging Workshop

The Town will organize an inter-agency workshop to discuss dredging issues and their environmental impacts. The conference will include regulators, public works administrators, contractors, harbor interests and environmental groups. Potential subjects include dredging specifications for different locations, windows to minimize environmental impacts, channel maintenance, use of spoil, permitting and financial needs.

57. Air Quality Monitoring Station

The Town should monitor rainfall for acid-rain and other pollutants, which might provide additional insight into phenomena such as the brown tide, and other alterations in marine and onshore habitats. In view of prevailing wind patterns and the Town's proximity to both the Millstone nuclear power generating plants, the nuclear submarine yards near New London, and the reactor at Brookhaven National Laboratory, and since the Town is not included in emergency notification or evacuation zones for these installations, the Town should set up an automated radiation monitoring station with alarms in case of unauthorized releases from these sources (the Millstone plants are notoriously "dirty").

58. Storm and Flood Monitoring Cooperative with National Weather Service

Weather conditions in the shore/inland/bay/ocean environments of the Town can vary widely, and adequate data is often not available at a sufficient density of recording points to allow thorough analysis. Conditions in East Hampton are often at variance with other parts of Long Island, and offshore forecasts essential for fishermen are sometimes not reliable. These problems can be particularly acute in times of severe storms or other inclement weather.

With advice and technical assistance from the National Weather Service (NWS) office at Brookhaven National Laboratory, the Town and a group of interested local citizens will set up a network of recording stations to monitor weather conditions and storm flooding. These will be connected to a local computer in the Town Natural Resources Department and relayed to NWS Brookhaven via radio transmitter. Funding is needed for additional monitoring stations, computer and communications equipment.

PUBLIC EDUCATION & FUTURE PLANNING NEEDS

59. LWRP Implementation

This project will provide staff to identify future LWRP projects, explore grants and other outside funding, and supervise implementation of existing projects. Project personnel will also coordinate information sharing between Town departments and with appropriate state and federal agencies, and assist with consistency review procedures.

60. LWRP Public Education

Many of the measures contemplated in the LWRP require understanding, acceptance and support by the citizens of the Town to be effective. The Town will undertake a series of coordinated public education efforts using various media to educate townspeople about the LWRP and what they can do to help implement it.

Some efforts will be targeted at specific user groups, for instance brochures given to boaters on using pumpouts and how to maintain clean waters (*Boater Education Project*), to waterfront property owners within the *Harbor Protection Overlay District* (see page XIV-44), to owners in the Flood Hazard Overlay District, and to shellfishermen and ORV beach driving permitees on how to protect beach species and bottomland resources.

The Town is proposing several elements of LWRP-related public education for funding in 1998-99. These programs will cover two areas related to water quality, the *Harbor Protection Overlay District* to prevent non-point pollutants from entering surface waters, and a vessel waste *No-Discharge Zone* (see page XIV-42) expected to be in place for the 1999 boating season. In addition, a *Symposium on Flooding and Erosion Issues*, including future sea level rise, will be held in the fall at the local public access television studios.

The televised symposium will focus attention on flooding and erosion issues during the fall hurricane season, as part of a mid-October media festival at the local public access television station. The TV studio has capacity for a substantial live audience, as well as the possibility for broadcasting via a link to the entire East End. The symposium will present an opportunity to bring public attention to flooding and erosion problems, solutions proposed in the LWRP, and new local laws. Public safety issues such as storm evacuation, breach closures, and restoration of infrastructure will be one topic. Local flooding and erosion hot spots will be highlighted, and ongoing erosion-related Town projects described. Long term issues such as scenarios for rising sea level and increased hurricane activity due to global warming will be framed and discussed. State and nationally known coastal geomorphologists, policy makers, and public officials will be invited to join local participants to bring as broad a perspective as possible to the discussion. If successful, other avenues for distribution of the program will be sought in addition to public access TV.

Future LWRP public education efforts will focus on other issues, and will include slide shows and videos on coastal issues for school classes, civic groups, and property owner associations, programs for local public access cable TV, and PSA radio spots for local radio stations. Programs will be integrated with existing public education efforts by various Town departments by the Town Trustees, Harbormasters, Natural Resource and Planning Departments. The Town Waterfront Advisory Committee will sponsor a series of issue-oriented public forums including experts, local

officials, and members of the public, and resulting in white papers and video tapes, on coastal policy issues addressed in the LWRP, such as:

- Hurricane damage mitigation
- Erosion hazards/control
- Dune preservation and restoration
- Pollution and water quality
- Beach ecology, wildlife habitat vs human use
- Global warming and sea level rise

Each hamlet of the Town has a Citizens Advisory Committee, and these groups will be encouraged to organize public meetings in their communities. Property owner associations and other civic organizations will also be approached to have education programs at their meetings or to include material with mailings. Members of the Waterfront Advisory Committee will be encouraged to form a speakers bureau, and using the audiovisual materials prepared by the project, make presentations to civic and school groups to personalize the communication about the LWRP.

Project scope will be expanded once the Town's LWRP is approved and being implemented. Additional grant applications, and budgets including salary, costs for contractors, production and distribution will be prepared at that time. Funding will be required for a coordinator/producer; for producing materials in several different media, including print (with related direct mail or other distribution), slides, video, and radio; and for arranging the public forums.

61. Environmental Education Center

A proposed environmental education center will focus on raising the level of public awareness about water quality and other LWRP-related issues. This will be a low-key facility located near the water that will bring together marine science and coastal planning, and where coastal issues can be demonstrated with hands-on immediacy. Both students and townspeople will have an opportunity to learn about and experience the estuarine environment, to spur community problem-solving for clean-up of local waters.

Programming will integrate the regional goals of the US EPA sponsored Peconic Estuary Program and the LWRP, by emphasizing real world connections of planning efforts with grassroots community action. A two-pronged educational strategy will provide for the needs of students, the future users of the resource, and homeowners and boaters, existing users whose habits have created the legacy of water quality problems the area faces today.

Programs for students will complement school environmental curricula. Staff from the Town Natural Resources Department will assist with student activities to demonstrate field and lab equipment, for instance, water testing gear, a video microscope to introduce marine micro-organisms, or grow-out racks from the Town Shellfish Hatchery.

Programs for adults will be aimed at specific water quality issues, through exhibits and workshops dealing with, for example, runoff, use of treated wood products, native landscaping buffers, wetland restoration, septic remediation, nutrient loading from lawn fertilizers, pumpout use and vessel

discharges. Adult programs at the center will also focus on community consensus building. Land use and boating management practices developed within the surrounding neighborhoods of each of the Town's enclosed water bodies will ultimately result in formulation and adoption of harbor management plans. The center will provide a forum for community input into Town policy making, to promote creative thinking and inquiry on water quality issues, and exchange data, ideas and promote voluntary action. Emphasis will be on citizens understanding what they as individuals can do to improve water quality.

LWRP related programs for which the center will provide public education support include the *Harbor Protection Overlay District (HPOD), No-Discharge Zones, Harbor Management Plans,* water quality initiatives such as *Open Marsh Water Management (OMWM) and Stormwater Abatement,* wetland and aquatic habitat protection and restoration, and traditional fishing and public aquacualture. LWRP policies implemented by the center will include:

Development Policies #1-6 Significant Habitats Policy #7 Commercial Fisheries and Aquaculture Policies #10/10A Public Access and Recreation Policies #9 & #19-22 Water and Air Resources Policies #30-44

The Center as envisioned will accommodate approximately 50 students, and will consist of a multiuse building with classroom and combination wet room and laboratory, and preparation, greenhouse, storage, and small kitchen and office facilities. The building is intended to be an integral statement of the center's educational objectives. For example, sanitary facilities will include a waterless toilet. The building will be handicapped accessible and constructed according to regulations for the appropriate flood zone. Building and site design will incorporate appropriate technology such as passive solar devices for energy needs, etc. Details will be further specified as the program is developed and a site is identified.

62. G I S for Coastal Zone Management

A large number of the projects listed above will be greatly facilitated by a computerized Geographic Information System, which will make coastal zone information more readily available and accessible for all levels of Town government and to the public. Some of the projects and other aspects of the LWRP that will benefit from a GIS system include: Land Use and Development Inventory, Recreation and Public Access Database, Habitats Inventory, Historic and Scenic Resource Inventory, Erosion Monitoring, Hurricane Damage Mitigation Plan, Sea Level Rise Model, the Coonsfoot Cove Management Plan, Fisheries Shoreside Support Plan, Cultural Resources Sensitivity Model, Harbor Management Plans, etc.

It is important that whatever system is chosen be as flexible and easy to learn as possible. It should be selected with future upgradeability in mind, and should be compatible with systems in use by other levels of government, such as Suffolk County and NYS DOS.

SECTION XV

LOCAL IMPLEMENTATION

A. Summary of Town Code Provisions Implementing the LWRP

A summary of existing Town Code provisions that implement the policies of the LWRP follows. Please consult a current text of the Code for verbatim language. Where not otherwise denoted, the term "Town" in this summary may refer to any of a number of Town agencies, including the Town Board, Town Trustees, Town Planning Board, Zoning Board of Appeals, Architectural Review Board, etc.

§22 Conservation Easements

Sets forth conditions for acceptance and management of conservation easements. Except for agricultural easements, conservation easements may not be "developed, built upon, cleared or otherwise disturbed or changed ... except that bona fide conservation management measures may be permitted pursuant to a conservation plan approved by the Director of Environmental Protection of the town." The Town Board may not change or terminate a conservation easement without approval of a proposition by the voters. The law also provides for penalties and fines for violations.

Conservation easements are used to preserve coastal wildlife habitat and vegetative communities, implementing Policies #7-10. They complement setbacks by providing buffers for flooding and erosion, implementing Development Policies #1-6 and Flooding and Erosion Policies #11-17, and filtering runoff (Water Quality Policies #30-44). Conservation easements on occasion protect public access points to the water (Policies #19-20), and enhance visual quality by providing unobstructed natural views of the coastline (Policies #24-25). Conservation easements have been a useful tool for preservation and in the future the Town may look to strengthen the protections they afford.

§43 Beaches and Parks

Sets up a power sharing arrangement between Town Board and Town Trustees over the town's beaches and defines the jurisdictional boundaries. Provides specific use limitations for some tracts of parkland, viz. the Grace Estate and Hither Woods.

§43-4 Prohibited Conduct

Prohibits camping, riding (seasonal), disturbance of endangered birds, obstructing access, noise, etc. Prohibits placing fill or any other material, or installation of any structure including erosion control devices on the beach without authorization and proper permits from the Town Board or Town Trustees.

§43-5 Vehicles on the beach

Requires Town permit for beach driving; requires towrope or chain, jack and spare tire; restricts operation on some [specified] beaches between 10 a.m. - 6 p.m. from Thursday before Memorial Day to September 15; exempts commercial fishermen, handicapped drivers and crabbers in Georgica Pond; provides exclusions and fines for designated bird nesting areas; gives driving regulations including speed limits, avoiding driving over beach vegetation, dunes or bluffs, and gives right of way to pedestrians.

§43-12 Temporary Closure

Allows the Town Trustees or Town Board to temporarily close or restrict any beach at any time if deemed appropriate and necessary. Either Board shall advise the other of its decision to order any closure.

Note that a cooperative agreement between the Town Board and Town Trustees creates a joint arrangement for beach management, requiring mutual consent to alter regulations. Coastal structures on Town Trustee owned beaches or bottomlands require Town Trustee permits as well as permits required under provisions of the Town Code.

§43-40 to -51 Hunting on Town Parklands

Provides for town licenses for hunting access to town parklands in addition to NYS hunting license, requirements and eligibility for town license, where hunting is permitted.

The Town's Beaches and Parks ordinances provide protection for natural coastal features and for recreational use of the Town's coast. As such they implement many of the LWRP policy groups, including Fish and Wildlife Policies #7-10, Flooding and Erosion Policies #11-17, General Policy #18, Public Access #19-20, Recreation Policies #21-22. Provisions of the Beaches and Parks law may in the future be affected by additions to Town Code proposed to implement recommendations of the Flooding and Erosion Policies. **§43-12, Temporary Closure** to beach vehicles, is effected differently each year depending on habitat needs and location of nesting shorebirds, storm or hurricane activity, etc.

§53 Building Construction

Establishes the Building Inspector's Office and the requirement for obtaining a town building permit for all building construction and improvements in East Hampton.

§53-4 (A) 1. For all construction in the Flood Hazard Overlay District (§153-3-40) requires actual elevation above MSL of lowest floor, and to which structure has been floodproofed §53-6 (C) 2. Requires flood elevations and certification of floodproofing per §153-3-45A(2)b be incorporated into building plans and specifications §53-8 (D), Requires elevation certificate for Flood Hazard Overlay District

The Town's Building Construction codes implement LWRP **Development Policies #1-6, Fish and Wildlife Habitat Policy #7, Flooding and Erosion Policies #11-17, and Water Resources Policies #30-40 and 44**, by insuring conformity with the Town's goals for open space, habitat preservation, water quality, setbacks from wetlands and natural erosion protection features, and implementation of NFIP standards.

§75 SEQR

Implements on a local level the provisions of the State Environmental Quality Review Act and related regulations, thereby incorporating environmental factors into planning and decision making. The SEQR process provides an avenue for introducing environmental factors and overall planning goals into the development process, and in so doing affects all aspects of LWRP policy.

§79 Farmland Preservation

Authorizes the Town Board to purchase the development rights to farmland designated in the Town Comprehensive Plan, on the initiative of either the Town Board, Planning Board, or the landowner. General procedures guiding the purchase of development rights are set forth.

These tools help to implement the Town's open space goals as articulated in **Development Policies #1-6**, as well as maintaining indigenous agriculture, per **Agricultural Lands Policy #23**.

§103 Nature Preserves

Establishes a procedure whereby Town owned properties are afforded additional protection through the dedication to the Town Nature Preserve. Parcels are nominated to the Nature Preserve by the Town Board and administered by a committee consisting of a Town Board member, Town Trustee, the Directors of Planning and Natural Resources, and three at-large members. Once dedicated, these Nature Preserve Properties cannot be sold, leased, exchanged or otherwise disposed of without adherence to the following: a Town Board Public hearing; a majority plus one vote of the Town Board; a public referendum; and adherence to all other laws regarding the divestiture of parkland including the common law rule which requires an act of the State legislature to sell or divest parkland for other uses.

This section of the code insures that future Town governments will adhere to commitments of open space preservation of sensitive tracts, further implementing the Town's open space and habitat preservation goals expressed in **Development Policies #1-6** and **Significant Habitats Policy #7**.

§104 Natural Resources

Creates the Town's Department of Natural Resources, listing among its duties protection of natural resources, and investigation and enforcement of pollution discharges into the environment. The Natural Resources Department provides the professional expertise to implement Town programs and laws related to protection of resources in LWRP **Development Policies #1-6**, **Fish and Wildlife Habitat Policies #7-10**, **Flooding and Erosion Policies #11-17**, **Public Access and Recreational Resources Policies #9 & 19-22**, **and Water Resources Policies #30-40 & 44**.

§105 Department of Planning

Creates the Town's Planning Department, listing among its duties the protection, preservation and conservation of the town's natural resources and to provide technical and professional advice to the various town agencies. The Planning Department provides the professional expertise to implement Town programs and laws related to protection of resources in **Development Policies #1-6**, **Fish and Wildlife Habitat Polices #7-10**, **Flooding and Erosion Policies #11-17**, **Public Access Policies #19-20**, **Recreational Resource Policies #21-22**, **and Water Resources Policies #30-41 & 44**.

§110 Open Space Preservation

Empowers the Planning Board to vary the dimensional requirements of the Zoning Ordinance in order to foster the protection of open lands. East Hampton was the first municipality in the State to <u>require</u> the preparation of open space subdivisions in certain areas. This type of "cluster" subdivision enables the Planning Board to reduce the minimum size of lots in a development in exchange for a greater set-aside of natural or recreational land for common ownership and preservation.

Open space subdivisions have proven successful at protecting the Town's character while returning a profit to landowners and developers. They have become the standard method of development for almost all major land divisions. Open space plans are mandated for the subdivision of farmland and groundwater recharge areas and for all practical purposes, for the subdivision of all tracts of land greater than 25 acres. The law specifies minimum open space requirements for various types of land: 70% preservation of large tracts or contiguous tracts of farmland; 40% preservation of isolated, smaller tracts of farmland; 50% preservation of groundwater recharge areas or areas containing important natural features, scenic or historic resources or recreational resources greater than 25 acres. Chapter 110 specifies how these lands will be preserved and restricts future uses in perpetuity. These provisions help to implement the open space goals in Development Policies #1-6, which also affect objectives for **Significant Habitats Policy #7**, **Public Access and Recreational Resources Policies #9**, and 19-22, and Water Resource Policies #30-40 & 44.

§118 Right to Farm

Provides that agricultural uses shall not be considered nuisances in relation to surrounding land uses, provided the agricultural activities have been in operation for more than one year or pre-existed the surrounding conflicting land use. This legislation recognizes that agricultural preservation involves more than just the preservation of land. The extension of residential development into an area with agricultural activities has resulted in legal actions forcing agricultural actives to cease. Right to Farm Legislation is a means of protecting and encouraging agricultural activities. Besides helping to preserve open space for agriculture (**Development Polices #1-6**), **§118** specifically implements **Agricultural Lands Policy #23**.

§123 Scavenger waste

Stipulates licensing and record keeping for carters of scavenger waste, and provides for disposal at Town scavenger waste treatment plant, and conformity with Suffolk County Health Department regulations for residential wastewater treatment. Implements **Water Resources Policies #30-40 & 44**.

§125 Shellfish

Regulates and permits taking of a variety of shellfish from Town waters and bottomlands owned by the Town and Town Trustees. Among the species regulated are blue claw crabs, scallops, hard clams, soft clams, lobsters and oysters. Implements **Policy #9**, **Recreational Use of Fish and Wildlife**, and **Policy #10**, **Commercial Fishing**, and ties into efforts in **Significant Habitats Policy #7** and **Water Resources Policies #30-40 & 44** to maintain or improve marine habitats.

§131 Subdivision

Provides regulations and procedures for division of land into two or more lots and is intended to facilitate development compatible with existing features and natural features and ecosystems. The subdivision regulations include standards for the preservation and protection of open space and natural resources, street layouts, lot configuration and drainage improvements. The law promotes the use of cluster subdivisions, referred to as Open Space Plans, also governed by Chapter 110 of the Town Code.

§131-1.04 Definitions

Includes definitions and references to Coastal Features and Wetland Areas, and for Lot Area (see also **§153-1-20**), which excludes from computation of the buildable area "that portion of any lot which is underwater land or ... which is seaward of the bluff line or primary dune crest or which is beach, wetland or watercourse."

§131-1.05 General policies

Enunciates priorities for protection of coastal features and wetlands, and other natural and cultural features including trails, which are to be identified and shall be protected by preservation in their natural state by conservation or by such other means as the Planning Board shall deem necessary. Gives effect to the Flood Hazard Overlay District requirements, and review requirements for any coastal structures.

§131-1.06 Subdivision requirements

Provides standards for subdivision design, including reserve areas to protect recreational, environmental, cultural, historical, archaeological and agricultural features; property owner associations; water conservation. It excludes natural features such as beaches and wetlands from computation of buildable area (see also **§153-1-20**), and provides for preservation of trails, etc. Standard details for road and drainage improvements assure that all new development will have suitable and safe access, all drainage will be contained on site and adequate landscaping in the form of existing or planted street trees is provided.

As it relates to the LWRP, subdivision law primarily implements **Development Policies #1-6**, but it also affects policy goals of habitat protection (**Policy #7**), flooding and erosion (**Policies #11-17**), public access and recreational uses (**Policies #9 and 19-22**), cultural and visual resources (**Policies #23-25**), agricultural Land (**#26**), and water resources (**#30-40 &44**).

§146-34, -35 Parking Permit

Standards and regulations for parking permits for Town beaches. Implements **Public Access and Recreation Policies #9 & 19-22**.

§147 All terrain vehicles

Prohibits ATV's, including snowmobiles, from operation on Town property, and from private property without written permission of the owner, and by children under the age of 16. Implements **Public Access and Recreational Resources Policies #9, & 19-22**.

§149 Waterways and Boats

Regulates use of Town waters and boats operating therein, Town docks, of moorings, floats, and anchorages, speed limits for boats, distance from bathers, waterskiing, surfboarding and water scooters (jet-skis, etc.), diving, waste disposal, fish trap placement, etc.

§149-2 Prohibited discharges

Prohibits dumping of oil, refuse, garbage or waste and discharge of toilets in Town waters. **§149-3 Placement of boats**

Makes moorings and anchorage of boats in Trustee waters subject to their control and supervision; defines Trustee waters and beaches.

§149-8.1 Speed of boats

Limits speed of vessels with more than 2000 installed h.p. to 15 m.p.h. within Town waters. **§149-12.B. Waterskiing; surfboarding; water-scooters**

Waterskiers, surfboarders, water-scooters must stay at least 200' from shore and 50' from any bather or swimmer, except when commencing or ending a ride; and further, water-scooters may not operate in any harbor or designated bathing beach, and must stay 500' from shore except for beginning/ending ride, at 10 mph or less.

§149-30.1 Placement of fish traps

No one may install a fish trap on Town bottomlands unless a resident and without obtaining a permit from the Town and/or the Town Trustees.

§149-34 Prohibition on floating homes

Prohibits floating homes, defined as boats or other floating craft without independent means of propulsion, or designed primarily for residential use as opposed to transportation over water.

§149-60 to -67 et al, Vessel Waste No-Discharge Zone

Local law implementing State and Federal No-Discharge Zone designation for the Town's inner harbors.

These sections implement Significant Habitats Policy #7, Public Access and Recreational Resources Policies #9, & 19-22, Commercial Fishing Policy #10 and Water Resources Policies #30-40 & 44.

§151 Wind Energy Conversion Systems

Requires a permit from the Town to operate a power generating windmill, guided by considerations of safety, effects on the natural environment and character of the community, and whether the proposed system causes excessive noise or radio or TV interference to adjoining properties. This implements aspects of **Energy Facilities and Siting Policy #27**.

§153 Zoning

The zoning code promotes orderly growth; protects neighborhoods; ensures the proper utilization of land, especially access to and use of public lands; provides for affordable housing; preserves productive agricultural lands and other natural landscapes along with important manmade features to ensure water recharge, clean drinking water and surface waters; maintains safety and health; prevents overcrowding; maintains property values; provides for review of subdivisions and site plans; and perpetuates and enhances the natural beauty of the community.

§153-1-20 Definitions

Provides the meaning of certain terms used in the Code. Definitions have regulatory implications. For example, the definition of lot area excludes natural features, easements and underwater lands for computation of lot size, also land which is seaward of the bluff line or primary dune crest, or which is beach, wetland or watercourse.

§153-3-40 to -45 Flood Hazard Overlay District

Conforms to the National Flood Insurance Program regulations, which include standards for construction and elevation of structures and placement of utilities, and also prohibits alteration or grading of sand dunes. The sand dunes provision states: "There shall be no alteration of any sand dune in any special flood hazard area which cuts down the height of the dune at any point, undermines the dune or which would increase the potential for flood

damage. A natural resource special permit, pursuant to **§153-4-20B and C** ... shall be obtained when required." See also introduction to **Flooding and Erosion Policies #11-17**. **§153-3-65 Water Recharge Overlay District**

Establishes additional regulations for land delineated on the Use District Map (Zoning Map) which overlie the Town's groundwater supply and sole source drinking water recharge areas, including: requires mandatory clustering for all subdivisions of land creating five or more lots; designates these lands as critical environmental areas pursuant to SEQR; establishes restrictive vegetation clearing limits according to lot size and zoning district; prohibits the establishment of new landfills or waste disposal areas; restricts the use and storage of hazardous chemicals and substances as defined by the Natural Resources Director.

§153-3-70 Harbor Protection Overlay District

Establishes additional regulations for land delineated on the Use District Map (Zoning Map) within the primary watersheds of the major creeks, harbors and ponds in the Town. The regulations provide enhanced standards for: control of stormwater runoff; siting of new septic systems and the upgrading of existing systems; preservation of natural vegetation through clearing restrictions; swimming pool construction, sanitization and maintenance; and installation of residential fuel storage tanks. HPOD regulations are included in Appendix C.

§153-4 Protection of Natural Resources

Designates wetlands, watercourses, tidal waters, beaches, beach vegetation, dunes and bluffs as protected natural features and establishes regulations designed to preserve and maintain these features in their undisturbed, natural condition.

§153-4-20 Natural Resource Special Permit

Requires a Natural Resource Special Permit for any alteration of the land or water within specified distances, or jurisdictional limits from the protected natural features above. The jurisdictional limits vary depending on the feature and activity proposed. For wetlands, jurisdictional limits are: 200 feet for the installation of a septic system and 150 feet for any clearing, grading, dredging or any non-septic construction. For bluffs, the jurisdictional limits are 100 or 150 feet from any bluff line, depending on geographical location of the construction. Additionally, beach grass may not be damaged or removed, nor any sand dune removed, cleared, graded, or otherwise altered without a Natural Resources Special Permit.

§153-4-25 Emergency and minor maintenance exceptions

No Natural Resources Special Permit is required for in place and in kind replacement of existing coastal erosion structures, docks or pilings which have been damaged or destroyed, provided that a building permit is first obtained, and materials are approved by the Natural Resources Department. Also allows minor maintenance work not exceeding 25% of a structure by area or extent. A 1992 amendment permits in place and in kind restoration of bluffs, dunes, beaches or other natural erosion protection features which have been damaged or destroyed.

§153-4-32 & 37 Bluff setbacks

Requires a minimum 100 foot setback from the dune crest or bluff line along the Atlantic Ocean except east of the hamlet of Montauk where a 150 foot setback is required, and along certain sections of the Old Montauk Highway where the 100 foot setback is measured from the base of the bluff. Establishes a minimum setback from the bluff along the bays and harbors ranging from 50 feet for lots of 40,000 sq. ft. or smaller, to 100 feet for lots greater than 40,000 sq. ft., and 150 feet for lots 84,000 sq. ft. or greater.

§153-4-34 Wetland setbacks

Requires 150 foot minimum setback for the installation of septic systems; 100 feet for the erection or construction of all other structures; and 50 feet for clearing or grading of natural vegetation.

§ 153-4-39

Contains an exception to the setbacks for coastal structures for which a natural resources special permit has been issued and for which all other necessary federal, state, county and local approvals have been obtained.

§153-4-85 Town Trustee prerogatives

References Town Trustee prerogatives over lands and waters under their ownership.

§153-4.95(A) Use exemption for fishing, shellfishing, hunting and trapping

Exempts fishing, shellfishing, hunting and trapping from the regulations in this section. **§153-5-10 & 40 Special Permit Uses and Standards**

Establishes special standards and safeguards for certain land uses which are anticipated to

Establishes special standards and safeguards for certain land uses which are anticipated to have significant impacts on the surrounding area even though they are allowed under zoning. Thirteen general standards are set forth including: compatibility with the location proposed; provisions for adequate collection of runoff and waste; and protection of natural features including ground and surface waters.

§153-5-45(D) Special Permit Standards in Waterfront District

Uses permitted by zoning in the Waterfront (WF) District are required to be waterdependent. All special permit uses, other than ferries, are deemed not to be water-dependent and therefore must meet the following additional standards: must not adversely affect any existing or potential water-related use; must economically support the water-related use and enhance public access to the waterfront; must not usurp any land area needed by the waterdependent use and must demonstrate an integrated and adequate circulation and parking plan; must have a maritime character or theme; must meet a minimum lot area specified per use.

§153-5-50 Specific standards and safeguards

Sets standards, in addition to the general standards for particular uses. For coastal structures, for example, they must be demonstrated to not interfere with tidal flow, marine life or habitat, or destroy other than minimal areas of existing wetland vegetation or beach grass. Structures are only eligible for a permit if refusal to permit the structure would make likely a rapid or sudden loss of the property to erosion, and there is an explicit determination that similar results are impossible using nonstructural controls. There is an exception for water-dependent facilities in Waterfront (WF) Districts or that are part of a lawful marina or recreational marina, which are held to lesser standards. Using a public utility as another example, the special permit standards require the facility to have, as a primary purpose the

distribution or delivery of a utility or service to the residents of East Hampton and that it be located in a commercial industrial zoning district unless it is shown to be impractical.

§153-6 Site plan review

Requires Planning Board approval for the design and layout of all commercial uses, and land uses requiring a special permit, all agricultural structures greater than 200 sq. ft., all multiple residences and certain clearing activities in a residential zone. Planning Board review of site plans are intended to: help protect the rural, open space environment of the town; protect residential areas; provide safe access and parking areas; prevent drainage and flooding problems; provide for adequate fire protection, water supply, waste and garbage disposal. **§153-6-30**

Requires site plan approval for erection, construction or enlargement of any single-family residence on a parcel of 10 acres or more within an Agricultural District.

§153-6-60 G. Protection of agricultural lands. Development of agricultural lands, particularly with prime agricultural soils, shall be avoided or minimized. The Planning Board shall seek to protect public views across farmland, ensure that development is compatible with its surroundings, and strive to protect large contiguous areas of agricultural soils for present or future farm use.

§153-6-72

Provides for referral to the Architectural Review Board of sites designated as landmarks or historic structures or within an historic district.

§153-7 Architectural and design review

Requires all lots subject to site plan review also be reviewed by the Architectural Review Board to maintain the character of the Town and preserve its architectural heritage and harmony. In addition architectural review is required for signs requiring a building permit, structures in Agricultural Overlay Districts [excepting docks and a variety of accessory structures], and other structures for which the code requires it.

§153-7-10, §153-7-20, §153-7-25, §153-7-30, et al, **Historic Preservation Law[s]**, 10/99 Provides for review and approval of the architecture, design, scale, and style of certain classes of buildings and structures, and for the design, scale, and architectural compatibility of historic landmarks and structures and improvements within designated historic districts, gives mechanism for establishing historic districts, describes activities requiring review and establishes standards for review.

§153-11-10 Use and Dimensional Tables

These list uses Permitted, Specially Permitted or prohibited in each of the zoning districts and the dimensional requirements for principal and accessory structure in each zone.

§153-11-72 Height

References limits on height contained in the Dimensional Table for each zone, and includes a Pyramid Law governing relation of building height to property lines.

§153-11-88 Ferry Terminal

Requires special permit and limits types of vessels for ferries.

§153-12 Use District Zoning Maps

Graphically depict the zoning boundaries townwide.

In the aggregate the provisions of the zoning code implement aspects of nearly all LWRP policies, while specific sections implement **Development Policies #1-6, Significant Habitats Policy #7,**

Commercial Fishing Policy #10, Flooding and Erosion Policies #11-17, Public Access Policies #19-20, Recreation Policies #9, and 21-22, Historic Resource and Visual Quality Policies #23-25, Agricultural Lands Policy #26, Energy Facilities Siting and Construction Policy #27, and Water and Air Resources Policies #31-44.

Town Trustee Regulations

As the original fee titleholders of the Town's common lands, now primarily beaches, bottomlands, and trails, the Town Trustees serve an important function by establishing regulations for activities occurring on these properties held in trust for the citizens of the Town. These include permit requirements, fees and restrictions on coastal erosion protection structures, including docks, bulkheads and other structures on Trustee beaches and bottomlands; regulations on taking of shellfish from Trustee-owned bottomlands; and mooring of boats on beaches and bottomlands in Trustee ownership. Nothing in this LWRP should be construed to abrogate, dilute, limit or abridge any rights the Town Trustees may possess, either now or in the future, to regulate and manage properties within their control.

As compiled and revised by the Trustees, these regulations are generally distinct from the Town Code, except where cooperative arrangements exist with the Town Board, as for the management of shellfish and regulation of beach vehicles. The Trustees also work cooperatively with other Town agencies, including the Harbormasters, Natural Resources Department, and Town Shellfish Hatchery to manage coastal resources on the public trust lands within their purview, and carry out independent management actions such as the traditional semi-annual opening of Georgica Pond to the sea. Trustee regulations implement various LWRP policies including related sections of **Significant Habitats#7, Commercial Fishing #10, Flooding and Erosion #11-17, Public Access #19-20, and Recreation #9 and 21-22**.

Solid Waste Management Plan

The Town's state approved Solid Waste Management Plan, including the Stop Throwing Out Pollutants (STOP) program, implements LWRP policies related to pollutants and solid waste including **Pollutants #8, General Policy #18, and Water Resources Policies #30-40 & 44**.

Future Legislation

Approximately 40 acres of the easterly portion of the Benson Reservation is now protected by Town ownership following a recent donation, and a zone change to Parks and Conservation (PC) will be proposed.

A local Right To Fish law will be considered, although most local concerns appear to be addressed by existing Suffolk County Right To Fish legislation, and §915 of Article 42 of State law. Better defined protection for water-dependent fisheries uses and shoreside support facilities within the Waterfront (WF) zone will be examined in the **Projects** for *Fisheries Shoreside Support Infrastructure, Local Fishery Assistance*, and in *Harbor Management Plans*.

Implementation of **Policies 11-17** with regard to erosion control structures will be included in proposed local legislation to adopt CEHA and implement LWRP recommendations (**Appendix G**). Development in sensitive flood and/or erosion prone areas will be regulated (V-26, \P 3) through a

1999 update of FEMA flood district regulations, local adoption of CEHA, and Town NRSP requirements. Other erosion protection measures such as erosion control districts (V-39) will be studied and legislation developed as part of Flooding and Erosion-related **Projects**, including the *Hurricane Damage Mitigation Plan*, *Hazard Mitigation Plan*, *Erosion Control Districts*, etc.

The Town needs legislation requiring mandatory farmland preservation for site plans within Agricultural Overlay District and for consideration of preservation of farmland in all site plans. However, this is a townwide problem that would affect few parcels in the coastal zone.

In recognition of the need for additional protection of its scenic resources through local laws and planning procedures, and to initiate the state designation process referred to in Policy #24, the Town is undertaking a Scenic and Visual Resources Survey and Protection Program as proposed in **Projects**. The program is funded by NYS DOS under EPF, as and will serve to identify and catalog visual resources and develop community standards and protections with public input. The Town also expects to pursue designations of Scenic Areas of Statewide Significance (SASS) using the results of the program.

Although most best management practices (BMP's) for stormwater and non-point pollutant control detailed in **Policy 37** are covered by the Town's Harbor Protection Overlay District (HPOD, §153-3-70 et al), additional legislation may be needed in the future to include more comprehensive BMP's and to extend them to broader watershed management areas. These will be assessed as part of detailed watershed management plans for individual harbors.

A local consistency law will be enacted to implement coastal consistency review and to integrate it with Town Code and planning processes.

ZONING USE AND DIMENSIONAL TABLES XV A-1

TABLE XV.A-2: LOCAL LAWS IMPLEMENTING COASTAL POLICIES

#	CATEGORY	IMPLEMENTING LEGISLATION
1 2 3 4 5 6	Development Policies	 §22 Conservation Easements; §53 Building Construction; §75 SEQR; §79 Farmland Preservation; §103 Nature Preserve; §104 Natural Resources; §105 Planning; §110 Open Space Preservation; §118 Right to Farm; §131 Subdivision; §153 Zoning code, including §153-3-70 et al, Harbor Protection Overlay District, §153-4 Protection of Natural Features, §153-3- 40 et al, Flood Hazard Overlay District, §153-5 Special Permit Uses, §153-6 Site Plan Review, §153-12 Use District Zoning Maps, §153-11-10 Use Tables, §153-11-88, Ferry Terminal, §149 Waterways & Boats
7 8 9 10	Fish & Wildlife Policies	 §22 Conservation Easements; §43 Beaches and Parks, §43-40 Hunting on Town Parklands; §75 SEQR; §77-8 Dredging; §53 Building Construction; §103 Nature Preserve; §104 Natural Resources; §105 Planning; §110 Open Space Preservation; §125 Shellfish; §131 Subdivision; §149 Waterways & Boats, especially §149-30.1 Placement of fish traps; §153 Zoning, particularly §153-4, Protection of Natural Features, and §153-4.95(A) Use exemption for fishing, shellfishing, hunting and trapping; Town Trustee regulations; Solid Waste Management Plan
11 12 13 14 15 16 17	Flooding & Erosion Policies	 §22 Conservation Easements; §43 Beaches and Parks, particularly §43-4 Prohibited Conduct, §43-5 Vehicles on the beach, §43-12 Temporary Closure; §53 Building Construction; §75 SEQR; §77- 8 Dredging; §104 Natural Resources; §105 Planning; §131 Subdivision, especially §131-1.04 (cf.§153-1-20) Lot Area definitions, §131-1.05 General Policies; §153 Zoning, particularly §153-4 Protection of Natural Resources, §153-4-20 Natural Resource Special Permit, §153-4-20 (E) Bluff setbacks, §153-4-25 Emergency and minor maintenance, §153-4-30 Setbacks, §153-3-40 Flood Hazard Overlay District, §153-5-50 Coastal structure standards, §153-4-85 ref Town Trustee regulations for coastal structures
18	General Policy	§43 Beaches and Parks; §75 SEQR; §153 Zoning, especially §153-4 Protection of Natural Features; Solid Waste Management Plan

#	CATEGORY	IMPLEMENTING LEGISLATION
19 20	Public Access Policies	 §22 Conservation Easements; §43 Beaches and Parks; §75 SEQR; §104 Natural Resources; §105 Planning; §110 Open Space Preservation; §131 Subdivision; §146-6 Parking Permit; §153 Zoning, particularly §153-4 Protection of Natural Features; Town Trustee regulations
21 22	Recreation Policies	 §43 Beaches and Parks, §43-5 Vehicles on the beach; §75 SEQR; §77-8 Dredging; §103 Nature Preserves; §104 Natural Resources; §105 Planning; §110 Open Space Preservation; §125 Shellfish; §131 Subdivision; §146-6 Parking Permit; §147 All terrain vehicles; §149 Waterways and Boats; §153 Zoning, particularly §153-4 Protection of Natural Features; Town Trustee regulations
23 24 25	Historic Resource and Visual Quality Policies	Townwide regulations needed to protect scenic, cultural and historic features and buildings. Current laws include: §22 Conservation Easements; §75 SEQR; §110 Open Space; §131 Subdivision; §153 Zoning, particularly §153-7 Architectural and design review
26	Agricultural Lands Policy	§75 SEQR; §79 Farmland Preservation; §118 Right to Farm; §131 Subdivision; §153 Zoning; legislation needed to require mandatory farmland preservation in site plans within Agricultural Overlay District, and to consider farmland preservation in all site plans
27 28 29	Energy & Ice Management Policies	§75 SEQR; §151 Wind Energy Conversion Systems; §153-5-50 Public Utility; §153-6 Site Plan Review; §153-12 Uses and Dimensions; §153-11-72 Height
30 31 32 33 34 35 36 37 38 39 40 41 42 43 44	Water & Air Resources Policies	 §22 Conservation Easements; §53 Building Construction; §75 SEQR; §77-8 Dredging; §104 Natural Resources; §105 Planning; §110 Open Space Preservation; §123 Scavenger waste; §125 Shellfish; §131 Subdivision; §149 Waterways and boats, particularly §149-2 Prohibited discharges and §149-34 Prohibition on floating homes; §153 Zoning, particularly §153-3- 40 Flood Hazard Overlay District, §153-3-65 Water Recharge Overlay District, §153-3-70 Harbor Protection Overlay District, §153-4-20 Natural Resource Special Permits, §153-4-20(A) Wetland setbacks, and §153-6 Site plan review; Town Trustee regulations for structures, docks and mooring of boats on beaches and bottomlands in their ownership; Solid Waste Management Plan, including Stop Throwing Out Pollutants (STOP) program

B. Other Actions for Implementation

1. **Proposed Projects**

In the process of preparing the LWRP, the Town has identified some sixty projects to address and implement the LWRP policies. These projects are discussed in detail in **Section XIV**, **Proposed Projects**. Project objectives include expansion of existing coastal management programs, restoration and revitalization of underutilized sites, research to acquire necessary data, improvements to recreation and public access facilities, acquisition of open space and new public access, and a number of environmental remediation initiatives to improve water quality, habitat, etc.

Some projects require development of public/private partnerships, while others will be accomplished through cooperative agreements with other levels of government. In many cases, the Town expects to carry out these projects with financial assistance from grants. A number of projects are directly dependent on securing sources of outside funding, although a substantial number of improvements and research activities are also being funded directly by Town taxpayers via annual budget appropriations and the Town's capital budget. Note that nothing in the LWRP will compel the Town to undertake a project if financial resources are unavailable.

Proposed Projects in **Section XIV** are listed according to policy group as presented within the LWRP. Map XIV-1 gives the locations of projects, notes projects with multiple locations, and identifies those that are townwide. The Town expects to prioritize and allocate funding for projects on an annual basis as part of the ongoing implementation of the LWRP. A number of initiatives have already commenced that will contribute to the knowledge base for the LWRP and provide the basis for other projects. The **Projects** are a crucial component of the LWRP in that they actualize many facets of the plan, and in effect provide the most visible and convincing rationale for its existence.

2. Public Education

A second critical facet of implementing the LWRP is educating the public about the purpose and substance of the local program, and how it may improve everyday living with the shore environment. The Town will create presentations to inform both the general public and particular user groups on coastal issues and how they are addressed by the LWRP. Specific initiatives such as the *Harbor Protection Overlay District* and *No-Discharge Zones* will require additional education programs, brochures, and media campaigns to inform residents and users of new requirements and how they can help to improve water quality, habitat, etc. Several of these expanded public education programs are listed in **Proposed Projects, Section XIV**.

C. MANAGEMENT STRUCTURE TO IMPLEMENT THE LWRP

The Town intends that the LWRP be carried out in a coordinated and comprehensive manner that ensures a proper balance between human uses of the land and waters and protection of natural resources. Since the Town already has an extensive apparatus governing actions in the coastal area, implementation of the approved LWRP will, for the most part, be incorporated within existing Town planning and zoning procedures, and will be executed by Town departments with responsibility for these procedures, augmented as necessary to handle LWRP evaluations, policy directives, tasks, and projects.

The Town Waterfront Advisory Committee will continue to meet annually to monitor implementation of the LWRP and consider future amendments to the plan. Community and user involvement is vital to the success of the LWRP, and the Town may also appoint advisory groups on an ad hoc basis for specific issues, projects or in other needed capacities. One of the benefits of the Waterfront Advisory Committee has been to provide a working forum on coastal issues for community interests and the various departments of the Town government. This function will be continued through quarterly coordination meetings convened by the Town Supervisor.

The management framework for the LWRP will be institutionalized in a Local Consistency Review Law (see **Appendix H**). The effectiveness of this management structure will be evaluated in an annual review, in addition to the quarterly coordination meetings. A summary of anticipated LWRP tasks and functions, and which official or department of Town government will be expected to carry them out, follows.

Function Organization

Consistency Review: Initial evaluation of actions in the coastal area will be conducted by the Planning Department as part of the initial project review process. A Coastal Assessment Form (CAF) will be filled out as an attachment to the Environmental Assessment Form (EAF) or as an attachment to other permit applications. A sample CAF is included in **Appendix H**. The Planning Department will coordinate their review with permitting or other review by the Planning and Architectural Review Boards, the Zoning Board of Appeals, or the Town Board. The Planning Department will be available for consultation with the Town Trustees if requested. The appropriate board will make the final determination of consistency. If an action requires approval of more than one board, decision making will be coordinated between boards to determine which board will conduct the final consistency review, and only one Consistency Assessment Form per action will be prepared. The Planning Department will also coordinate with NYS DOS regarding consistency review for actions by State or Federal agencies.

Coordination: The Town Supervisor will convene a quarterly LWRP coordinating meeting, including relevant Town department heads and the Town Trustees, to discuss LWRP issues, monitor progress and efficacy of LWRP management, and determine project and grant priorities. The Supervisor's office will conduct an annual evaluation of the LWRP, and issue an annual LWRP report which will be reviewed by the WAC, and conveyed to the Town Board, Town Trustees, NYS DOS and the public. The report will focus on LWRP progress and problems, and will prioritize LWRP projects prior to preparation of the Town's annual budget.

- Oversight: The Town Supervisor will coordinate implementation of the LWRP, with annual review by the WAC, Town Board and NYS DOS. The Town Trustees have oversight of those aspects of this LWRP which relate directly to their harbors, bays, lands and bottomlands.
- Projects: LWRP projects, as listed in **Section XIV**, **Proposed Projects** or subsequent addenda, will be carried out by appropriate Town agencies under the direction of the Town Supervisor.

Grant Wwriting/

- Administration: As at present, LWRP project grant applications will be prepared by the various Town departments, at the direction of the Supervisor, or by a consultant[s]. Approved projects and any associated grants will be administered by the implementing Town agency, with regular progress reports to the Supervisor and under the fiscal supervision of the Town Comptroller.
- LWRP Amendments: Future amendments to the LWRP will be prepared by the Planning Department, or consultant[s] hired for the task, on the advice of the WAC, or at the direction of the Supervisor and Town Board, in cooperation with NYS DOS.

Public education and

education of Town

Boards/Departments

responsible for LWRP

implementation: Initial briefings on the LWRP for Town boards and departments and the Town Trustees will be carried out by the Planning Director, with the assistance of a consultant. Public education on the overall content of the LWRP will also originate in the Planning Department, and may include publications or dissemination through other media. Additional public education for specific coastal issues such as *HPOD or NDZ*, will be undertaken as LWRP projects or through ad hoc committees.

Community

Commitment: The Town Board and the Town Supervisor will maintain the community's interface with the LWRP by continuing the WAC, in its present or in a reconstituted form, and by appointing ad hoc advisory groups to work on specific projects or issues, which will include appropriate community, user, government and water-related business interests.

D. FINANCIAL RESOURCES NECESSARY TO IMPLEMENT THE LWRP

There are two main funding implications to the Town of East Hampton in implementation of the LWRP, the administrative costs involved in the continuing local management of the LWRP, and the capital and revenue costs involved in project implementation. Management costs associated with the administration of the LWRP can be absorbed within the regular budget of the Town of East Hampton and financed out of general revenues. However, the Town may require additional staff to perform some of the tasks outlined in the management framework, and may seek outside funding for this purpose.

The second funding implication involves capital and revenue costs for the 61 **Projects** outlined in **Section XIV** and for future projects. The projects are grouped according to policy associations, though many overlap several policy categories. Cost estimates have not as yet been formulated for most of the projects in **Section XIV**. These will be developed as funding is identified or becomes available, whether from Town revenues and capital budgets, or from external sources. The Town may also seek to develop public/private partnerships where appropriate for projects involving, for instance, revitalization of harbor or business districts, or erosion protection districts. The Town of East Hampton will work closely with the NYS DOS Division of Coastal Resources to identify potential sources of outside funding for the **Projects**. It should be noted that nothing within the LWRP will compel the Town to undertake a project if financial resources are unavailable.

Possible sources of funding include, but are not limited to, the New York State Environmental Protection Fund, the New York Clean Water/Clean Air Bond Act, Federal ISTEA and its successor Transportation Enhancement Program, US Department of Interior USFWS appropriations for habitat acquisition, Hazard Mitigation Program Section 404 funds under the Stafford Disaster Relief Act via FEMA/SEMO, US EPA Peconic Estuary Program funds, and private foundations.

A key element in building successful fiscal partnerships with other levels of government or the private sector is the availability of a local match from the Town of East Hampton. This match is essential in leveraging public or private sector grant funding. The local match can usually be supplied in a variety of ways, including direct appropriations, provision of materials or public works labor by the Town, and the use of volunteers and staff time as a monetary equivalent. It can also be advantageous to link LWRP project implementation to other capital improvement work occurring in the Town, such as highway drainage work, dredging or land acquisition, thus stretching the benefits of limited public funds and achieving multiple objectives. In terms of providing a monetary match, the Town should consider setting up a regular budget line that will dedicate funds to LWRP projects. These funds could fund small scale capital improvements such as public access improvements, or design studies, or to fulfill match requirements and leverage larger amounts of money for project implementation.

SECTION XVI

STATE AND FEDERAL ACTIONS AND PROGRAMS LIKELY TO AFFECT IMPLEMENTATION

XVI. STATE AND FEDERAL ACTIONS AND PROGRAMS LIKELY TO AFFECT IMPLEMENTATION

State and Federal actions will affect and be affected by implementation of the LWRP. Under State law and the U.S. Coastal Zone Management Act, certain State and Federal actions within or affecting the local waterfront area must be "consistent" or "consistent to the maximum extent practicable" with the enforceable policies and purposes of the LWRP. This consistency requirement makes the LWRP a unique, intergovernmental mechanism for setting policy and making decisions and helps to prevent detrimental actions from occurring and future options from being needlessly foreclosed. At the same time, the active participation of State and Federal agencies is also likely to be necessary to implement specific provisions of the LWRP.

The first part of this section identifies the actions and programs of State and Federal agencies which should be undertaken in a manner consistent with the LWRP. This is a generic list of actions and programs, as identified by the NYS Department of State; therefore, some of the actions and programs listed may not be relevant to this LWRP. Pursuant to the State Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), the Secretary of State individually and separately notifies affected State agencies of those agency actions and programs which are to be undertaken in a manner consistent with approved LWRPs. Similarly, Federal agency actions and programs subject to consistency requirements are identified in the manner prescribed by the U.S. Coastal Zone Management Act and its implementing regulations. The lists of State and Federal actions and programs included herein are informational only and do not represent or substitute for the required identification and notification procedures. The current official lists of actions subject to State and Federal consistency requirements may be obtained from the NYS Department of State.

The second part of this section is a more focused and descriptive list of State and Federal agency actions which are necessary to further implementation of the LWRP. It is recognized that a State or Federal agency's ability to undertake such actions is subject to a variety of factors and considerations; that the consistency provisions referred to above, may not apply; and that the consistency requirements can not be used to require a State or Federal agency to undertake an action it could not undertake pursuant to other provisions of law.

A. STATE AND FEDERAL ACTIONS AND PROGRAMS WHICH SHOULD BE UNDERTAKEN IN A MANNER CONSISTENT WITH THE LWRP

1. STATE AGENCIES

OFFICE FOR THE AGING

1.00 Funding and/or approval programs for the establishment of new or expanded facilities providing various services for the elderly.

DEPARTMENT OF AGRICULTURE AND MARKETS

- 1.00 Agricultural Districts Program
- 2.00 Rural Development Program
- 3.00 Farm Worker Services Programs.
- 4.00 Permit and approval programs:
 - 4.01 Custom Slaughters/Processor Permit
 - 4.02 Processing Plant License
 - 4.03 Refrigerated Warehouse and/or Locker Plant License

DIVISION OF ALCOHOLIC BEVERAGE CONTROL/STATE LIQUOR AUTHORITY

- 1.00 Permit and Approval Programs:
 - 1.01 Ball Park Stadium License
 - 1.02 Bottle Club License
 - 1.03 Bottling Permits
 - 1.04 Brewer's Licenses and Permits
 - 1.05 Brewer's Retail Beer License
 - 1.06 Catering Establishment Liquor License
 - 1.07 Cider Producer's and Wholesaler's Licenses
 - 1.08 Club Beer, Liquor, and Wine Licenses
 - 1.09 Distiller's Licenses
 - 1.10 Drug Store, Eating Place, and Grocery Store Beer Licenses
 - 1.11 Farm Winery and Winery Licenses
 - 1.12 Hotel Beer, Wine, and Liquor Licenses
 - 1.13 Industrial Alcohol Manufacturer's Permits
 - 1.14 Liquor Store License
 - 1.15 On-Premises Liquor Licenses
 - 1.16 Plenary Permit (Miscellaneous-Annual)
 - 1.17 Summer Beer and Liquor Licenses
 - 1.18 Tavern/Restaurant and Restaurant Wine Licenses
 - 1.19 Vessel Beer and Liquor Licenses
 - 1.20 Warehouse Permit
 - 1.21 Wine Store License
 - 1.22 Winter Beer and Liquor Licenses
 - 1.23 Wholesale Beer, Wine, and Liquor Licenses

DIVISION OF ALCOHOLISM AND SUBSTANCE ABUSE SERVICES

- 1.00 Facilities, construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Certificate of approval (Substance Abuse Services Program)
- 3.00 Permit and approval:
 - 3.01 Letter Approval for Certificate of Need
 - 3.02 Operating Certificate (Alcoholism Facility)
 - 3.03 Operating Certificate (Community Residence)
 - 3.04 Operating Certificate (Outpatient Facility)
 - 3.05 Operating Certificate (Sobering-Up Station)

COUNCIL ON THE ARTS

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Architecture and environmental arts program.

DEPARTMENT OF BANKING

- 1.00 Permit and approval programs:
 - 1.01 Authorization Certificate (Bank Branch)
 - 1.02 Authorization Certificate (Bank Change of Location)
 - 1.03 Authorization Certificate (Bank Charter)
 - 1.04 Authorization Certificate (Credit Union Change of Location)
 - 1.05 Authorization Certificate (Credit Union Charter)
 - 1.06 Authorization Certificate (Credit Union Station)
 - 1.07 Authorization Certificate (Foreign Banking Corporation Change of Location)
 - 1.08 Authorization Certificate (Foreign Banking Corporation Public Accommodations Office
 - 1.09 Authorization Certificate (Investment Company Branch)
 - 1.10 Authorization Certificate (Investment Company Change of Location)
 - 1.11 Authorization Certificate (Investment Company Charter)
 - 1.12 Authorization Certificate (Licensed Lender Change of Location)
 - 1.13 Authorization Certificate (Mutual Trust Company Charter)
 - 1.14 Authorization Certificate (Private Banker Charter)
 - 1.15 Authorization Certificate (Public Accommodation Office Banks)
 - 1.16 Authorization Certificate (Safe Deposit Company Branch)
 - 1.17 Authorization Certificate (Safe Deposit Company Change of Location)
 - 1.18 Authorization Certificate (Safe Deposit Company Charter)
 - 1.19 Authorization Certificate (Savings Bank Charter)
 - 1.20 Authorization Certificate (Savings Bank De Novo Branch Office)
 - 1.21 Authorization Certificate (Savings Bank Public Accommodations Office)
 - 1.22 Authorization Certificate (Savings and Loan Association Branch)

- 1.23 Authorization Certificate (Savings and Loan Association Change of Location)
- 1.24 Authorization Certificate (Savings and Loan Association Charter)
- 1.25 Authorization Certificate (Subsidiary Trust Company Charter)
- 1.26 Authorization Certificate (Trust Company Branch)
- 1.27 Authorization Certificate (Trust Company-Change of Location)
- 1.28 Authorization Certificate (Trust Company Charter)
- 1.29 Authorization Certificate (Trust Company Public Accommodations Office)
- 1.30 Authorization to Establish a Life Insurance Agency
- 1.31 License as a Licensed Lender
- 1.32 License for a Foreign Banking Corporation Branch

OFFICE OF CHILDREN AND FAMILY SERVICES

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding or approval of such activities.

DEPARTMENT OF CORRECTIONAL SERVICES

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

DORMITORY AUTHORITY OF THE STATE OF NEW YORK

- 1.00 Financing of higher education and health care facilities.
- 2.00 Planning and design services assistance program.

EDUCATION DEPARTMENT

- 1.00 Facilities construction, rehabilitation, expansion, demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Certification of Incorporation (Regents Charter)
 - 2.02 Private Business School Registration
 - 2.03 Private School License
 - 2.04 Registered Manufacturer of Drugs and/or Devices
 - 2.05 Registered Pharmacy Certificate
 - 2.06 Registered Wholesale of Drugs and/or Devices
 - 2.07 Registered Wholesaler-Repacker of Drugs and/or Devices
 - 2.08 Storekeeper's Certificate
- 3.00 Administration of Article 5, Section 233, Sub 5 of the Education Law on removal of archaeological and paleontological objects under the waters of State water bodies.
- 4.00 Administration of Article 3, Section 32 of the Navigation Law regarding location of structures in or on navigable waters.

EMPIRE STATE DEVELOPMENT/EMPIRE STATE DEVELOPMENT CORPORATION

- 1.00 Preparation/revision of statewide or specific plans to address State economic development needs.
- 2.00 Allocation of the state tax-free bonding reserve.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- 1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of lands under the jurisdiction of the Department.
- 2.00 Classification of Waters Program; classification of land areas under the Clean Air Act.
- 3.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 4.00 Financial assistance/grant programs:
 - 4.01 Capital projects for limiting air pollution
 - 4.02 Cleanup of toxic waste dumps
 - 4.03 Flood control, beach erosion and other water resource projects
 - 4.04 Operating aid to municipal wastewater treatment facilities
 - 4.05 Resource recovery and solid waste management capital projects
 - 4.06 Wastewater treatment facilities
- 5.00 Funding assistance for issuance of permits and other regulatory activities (New York City only).
- 6.00 Implementation of the Environmental Quality Bond Act of 1972, including:
 - (a) Water Quality Improvement Projects
 - (b) Land Preservation and Improvement Projects including Wetland Preservation and Restoration Projects, Unique Area Preservation Projects, Metropolitan Parks Projects, Open Space Preservation Projects and Waterways Projects.
- 7.00 Marine Finfish and Shellfish Programs.
- 8.00 New York Harbor Drift Removal Project.
- 9.00 Permit and approval programs:

Air Resources

- 9.01 Certificate of Approval for Air Pollution Episode Action Plan
- 9.02 Certificate of Compliance for Tax Relief Air Pollution Control Facility
- 9.03 Certificate to Operate: Stationary Combustion Installation; Incinerator; Process, Exhaust or Ventilation System
- 9.04 Permit for Burial of Radioactive Material
- 9.05 Permit for Discharge of Radioactive Material to Sanitary Sewer
- 9.06 Permit for Restricted Burning
- 9.07 Permit to Construct: a Stationary Combustion Installation; Incinerator; Indirect Source of Air Contamination; Process, Exhaust or Ventilation System

Construction Management

9.08 Approval of Plans and Specifications for Wastewater Treatment Facilities

Fish and Wildlife

- 9.09 Certificate to Possess and Sell Hatchery Trout in New York State
- 9.10 Commercial Inland Fisheries Licenses
- 9.11 Fishing Preserve License
- 9.12 Fur Breeder's License
- 9.13 Game Dealer's License
- 9.14 Licenses to Breed Domestic Game Animals
- 9.15 License to Possess and Sell Live Game
- 9.16 Permit to Import, Transport and/or Export under Section 184.1 (11-0511)
- 9.17 Permit to Raise and Sell Trout
- 9.18 Private Bass Hatchery Permit
- 9.19 Shooting Preserve Licenses
- 9.20 Taxidermy License

Lands and Forest

- 9.21 Certificate of Environmental Safety (Liquid Natural Gas and Liquid Petroleum Gas)
- 9.22 Floating Object Permit
- 9.23 Marine Regatta Permit
- 9.24 Mining Permit
- 9.25 Navigation Aid Permit
- 9.26 Permit to Plug and Abandon (a non-commercial, oil, gas or solution mining well)
- 9.27 Permit to Use Chemicals for the Control or Elimination of Aquatic Insects
- 9.28 Permit to Use Chemicals for the Control or Elimination of Aquatic Vegetation
- 9.29 Permit to Use Chemicals for the Control or Extermination of Undesirable Fish
- 9.30 Underground Storage Permit (Gas)
- 9.31 Well Drilling Permit (Oil, Gas, and Solution Salt Mining)

Marine Resources

- 9.32 Digger's Permit (Shellfish)
- 9.33 License of Menhaden Fishing Vessel
- 9.34 License for Non-Resident Food Fishing Vessel
- 9.35 Non-Resident Lobster Permit
- 9.36 Marine Hatchery and/or Off-Bottom Culture Shellfish Permits
- 9.37 Permits to Take Blue-Claw Crabs
- 9.38 Permit to Use Pond or Trap Net
- 9.39 Resident Commercial Lobster Permit
- 9.40 Shellfish Bed Permit
- 9.41 Shellfish Shipper's Permits
- 9.42 Special Permit to Take Surf Clams from Waters other than the Atlantic Ocean

Regulatory Affairs

9.43 Approval - Drainage Improvement District

- 9.44 Approval Water (Diversions for) Power
- 9.45 Approval of Well System and Permit to Operate
- 9.46 Permit Article 15, (Protection of Water) Dam
- 9.47 Permit Article 15, (Protection of Water) Dock, Pier or Wharf
- 9.48 Permit Article 15, (Protection of Water) Dredge or Deposit Material in a Waterway
- 9.49 Permit Article 15, (Protection of Water) Stream Bed or Bank Disturbances
- 9.50 Permit Article 15, Title 15 (Water Supply)
- 9.51 Permit Article 24, (Freshwater Wetlands)
- 9.52 Permit Article 25, (Tidal Wetlands)
- 9.53 River Improvement District Approvals
- 9.54 River Regulatory District Approvals
- 9.55 Well Drilling Certificate of Registration
- Solid Wastes
- 9.56 Permit to Construct and/or Operate a Solid Waste Management Facility
- 9.57 Septic Tank Cleaner and Industrial Waste Collector Permit *Water Resources*
- 9.58 Approval of Plans for Wastewater Disposal Systems
- 9.59 Certificate of Approval of Realty Subdivision Plans
- 9.60 Certificate of Compliance (Industrial Wastewater Treatment Facility)
- 9.61 Letters of Certification for Major Onshore Petroleum Facility Oil Spill Prevention and Control Plan
- 9.62 Permit Article 36, (Construction in Flood Hazard Areas)
- 9.63 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas
- 9.64 Permit for State Agency Activities for Development in Coastal Erosion Hazards Areas
- 9.65 State Pollutant Discharge Elimination System (SPDES) Permit
- 9.66 401 Water Quality Certification
- 10.00 Preparation and revision of Air Pollution State Implementation Plan.
- 11.00 Preparation and revision of Continuous Executive Program Plan.
- 12.00 Preparation and revision of Statewide Environmental Plan.
- 13.00 Protection of Natural and Man-made Beauty Program.
- 14.00 Urban Fisheries Program.
- 15.00 Urban Forestry Program.
- 16.00 Urban Wildlife Program.

ENVIRONMENTAL FACILITIES CORPORATION

1.00 Financing program for pollution control facilities for industrial firms and small businesses.

FACILITIES DEVELOPMENT CORPORATION

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

OFFICE OF GENERAL SERVICES

- 1.00 Administration of the Public Lands Law for acquisition and disposition of lands, grants of land and grants of easement of land under water, issuance of licenses for removal of materials from lands under water, and oil and gas leases for exploration and development.
- 2.00 Administration of Article 4-B, Public Buildings Law, in regard to the protection and management of State historic and cultural properties and State uses of buildings of historic, architectural or cultural significance.
- 3.00 Facilities construction, rehabilitation, expansion, or demolition.

DEPARTMENT OF HEALTH

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Approval of Completed Works for Public Water Supply Improvements
 - 2.02 Approval of Plans for Public Water Supply Improvements.
 - 2.03 Certificate of Need (Health Related Facility except Hospitals)
 - 2.04 Certificate of Need (Hospitals)
 - 2.05 Operating Certificate (Diagnostic and Treatment Center)
 - 2.06 Operating Certificate (Health Related Facility)
 - 2.07 Operating Certificate (Hospice)
 - 2.08 Operating Certificate (Hospital)
 - 2.09 Operating Certificate (Nursing Home)
 - 2.10 Permit to Operate a Children's Overnight or Day Camp
 - 2.11 Permit to Operate a Migrant Labor Camp
 - 2.12 Permit to Operate as a Retail Frozen Dessert Manufacturer
 - 2.13 Permit to Operate a Service Food Establishment
 - 2.14 Permit to Operate a Temporary Residence/Mass Gathering
 - 2.15 Permit to Operate or Maintain a Swimming Pool or Public Bathing Beach
 - 2.16 Permit to Operate Sanitary Facilities for Realty Subdivisions
 - 2.17 Shared Health Facility Registration Certificate

DIVISION OF HOUSING AND COMMUNITY RENEWAL/SUBSIDIARIES AND AFFILIATES

- 1.00 Facilities construction, rehabilitation, expansion, or demolition.
- 2.00 Financial assistance/grant programs:
 - 2.01 Federal Housing Assistance Payments Programs (Section 8 Programs)
 - 2.02 Housing Development Fund Programs
 - 2.03 Neighborhood Preservation Companies Program

- 2.04 Public Housing Programs
- 2.05 Rural Initiatives Grant Program
- 2.06 Rural Preservation Companies Program
- 2.07 Rural Rental Assistance Program
- 2.08 Special Needs Demonstration Projects
- 2.09 Urban Initiatives Grant Program
- 2.10 Urban Renewal Programs
- 3.00 Preparation and implementation of plans to address housing and community renewal needs.

HOUSING FINANCE AGENCY

- 1.00 Funding programs for the construction, rehabilitation, or expansion of facilities.
- 2.00 Affordable Housing Corporation

JOB DEVELOPMENT AUTHORITY

1.00 Financing assistance programs for commercial and industrial facilities.

MEDICAL CARE FACILITIES FINANCING AGENCY

1.00 Financing of medical care facilities.

OFFICE OF MENTAL HEALTH

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Operating Certificate (Community Residence)
 - 2.02 Operating Certificate (Family Care Homes)
 - 2.03 Operating Certificate (Inpatient Facility)
 - 2.04 Operating Certificate (Outpatient Facility)

OFFICE OF MENTAL RETARDATION AND DEVELOPMENT DISABILITIES

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Permit and approval programs:
 - 2.01 Establishment and Construction Prior Approval
 - 2.02 Operating Certificate Community Residence
 - 2.03 Outpatient Facility Operating Certificate

METROPOLITAN TRANSPORTATION AUTHORITY

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Increases in special fares for transportation services to public water-related recreation resources.

DIVISION OF MILITARY AND NAVAL AFFAIRS

1.00 Preparation and implementation of the State Disaster Preparedness Plan.

NATURAL HERITAGE TRUST

1.00 Funding program for natural heritage institutions.

OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

- 1.00 Acquisition, disposition, lease, grant of easement or other activities related to the management of land under the jurisdiction of the Office.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 3.00 Funding program for recreational boating, safety and enforcement.
- 4.00 Funding program for State and local historic preservation projects.
- 5.00 Land and Water Conservation Fund programs.
- 6.00 Nomination of properties to the Federal and/or State Register of Historic Places.
- 7.00 Permit and approval programs:
 - 7.01 Floating Objects Permit
 - 7.02 Marine Regatta Permit
 - 7.03 Navigation Aide Permit
 - 7.04 Posting of Signs Outside State Parks
- 8.00 Preparation and revision of the Statewide Comprehensive Outdoor Recreation Plan and the Statewide Comprehensive Historic Preservation Plan and other plans for public access, recreation, historic preservation or related purposes.
- 9.00 Recreation services program.
- 10.00 Urban Cultural Parks Program.

POWER AUTHORITY OF THE STATE OF NEW YORK

- 1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Authority.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition.

NEW YORK STATE SCIENCE AND TECHNOLOGY FOUNDATION

- 1.00 Corporation for Innovation Development Program.
- 2.00 Center for Advanced Technology Program.

DEPARTMENT OF STATE

- 1.00 Appalachian Regional Development Program.
- 2.00 Coastal Management Program.
- 3.00 Community Services Block Grant Program.
- 4.00 Permit and approval programs:
 - 4.01 Billiard Room License
 - 4.02 Cemetery Operator
 - 4.03 Uniform Fire Prevention and Building Code

STATE UNIVERSITY CONSTRUCTION FUND

1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

STATE UNIVERSITY OF NEW YORK

- 1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the University.
- 2.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.

OFFICE OF TEMPORARY AND DISABILITY ASSISTANCE

- 1.00 Facilities construction, rehabilitation, expansion, or demolition or the funding of such activities.
- 2.00 Homeless Housing and Assistance Program.
- 3.00 Permit and approval programs:
 - 3.01 Certificate of Incorporation (Adult Residential Care Facilities)
 - 3.02 Operating Certificate (Children's Services)
 - 3.03 Operating Certificate (Enriched Housing Program)
 - 3.04 Operating Certificate (Home for Adults)
 - 3.05 Operating Certificate (Proprietary Home)
 - 3.06 Operating Certificate (Public Home)
 - 3.07 Operating Certificate (Special Care Home)
 - 3.08 Permit to Operate a Day Care Center

DEPARTMENT OF TRANSPORTATION

- 1.00 Acquisition, disposition, lease, grant of easement and other activities related to the management of land under the jurisdiction of the Department.
- 2.00 Construction, rehabilitation, expansion, or demolition of facilities, including but not limited to:
 - (a) Highways and parkways
 - (b) Bridges on the State highways system
 - (c) Highway and parkway maintenance facilities
 - (d) Rail facilities
- 3.00 Financial assistance/grant programs:
 - 3.01 Funding programs for construction/reconstruction and reconditioning/preservation of municipal streets and highways (excluding routine maintenance and minor rehabilitation)
 - 3.02 Funding programs for development of the ports of Albany, Buffalo, Oswego, Ogdensburg and New York
 - 3.03 Funding programs for rehabilitation and replacement of municipal bridges
 - 3.04 Subsidies program for marginal branchlines abandoned by Conrail
 - 3.05 Subsidies program for passenger rail service
 - 4.00 Permits and approval programs:
 - 4.01 Approval of applications for airport improvements (construction projects)
 - 4.02 Approval of municipal applications for Section 18 Rural and Small Urban Transit Assistance Grants (construction projects)

- 4.03 Approval of municipal or regional transportation authority applications for funds for design, construction and rehabilitation of omnibus maintenance and storage facilities
- 4.04 Approval of municipal or regional transportation authority applications for funds for design and construction of rapid transit facilities
- 4.05 Certificate of Convenience and Necessity to Operate a Railroad
- 4.06 Highway Work Permits
- 4.07 License to Operate Major Petroleum Facilities
- 4.08 Outdoor Advertising Permit (for off-premises advertising signs adjacent to interstate and primary highway)
- 4.09 Real Property Division Permit for Use of State-Owned Property
- 5.00 Preparation or revision of the Statewide Master Plan for Transportation and sub-area or special plans and studies related to the transportation needs of the State.
- 6.00 Water Operation and Maintenance Program--Activities related to the containment of petroleum spills and development of an emergency oil-spill control network.

URBAN DEVELOPMENT CORPORATION and its subsidiaries and affiliates

- 1.00 Acquisition, disposition, lease, grant of easement or other activities related to the management of land under the jurisdiction of the Corporation.
- 2.00 Planning, development, financing, construction, major renovation or expansion of commercial, industrial, and civic facilities and the provision of technical assistance or financing for such activities, including, but not limited to, actions under its discretionary economic development programs such as the following:
 - (a) Tax-Exempt Financing Program
 - (b) Lease Collateral Program
 - (c) Lease Financial Program
 - (d) Targeted Investment Program
 - (e) Industrial Buildings Recycling Program
- 3.00 Administration of special projects.
- 4.00 Administration of State-funded capital grant programs.

2. FEDERAL AGENCIES

A. DIRECT FEDERAL ACTIVITIES AND DEVELOPMENT PROJECTS

DEPARTMENT OF COMMERCE

National Marine Fisheries Services

1.00 Fisheries Management Plans

DEPARTMENT OF DEFENSE

Army Corps of Engineers

- 1.00 Proposed authorizations for dredging, channel improvements, break-waters, other navigational works, or erosion control structures, beach replenishment, dams or flood control works, ice management practices and activities, and other projects with potential to impact coastal lands and waters.
- 2.00 Land acquisition for spoil disposal or other purposes.
- 3.00 Selection of open water disposal sites.
- Army, Navy and Air Force
- 4.00 Location, design, and acquisition of new or expanded defense installations (active or reserve status, including associated housing, transportation or other facilities).
- 5.00 Plans, procedures and facilities for landing or storage use zones.
- 6.00 Establishment of impact, compatibility or restricted use zones.

DEPARTMENT OF ENERGY

1.00 Prohibition orders.

GENERAL SERVICES ADMINISTRATION

- 1.00 Acquisition, location and design of proposed Federal Government property or buildings, whether leased or owned by the Federal Government.
- 2.00 Disposition of Federal surplus lands and structures.

DEPARTMENT OF INTERIOR

Fish and Wildlife Service

1.00 Management of National Wildlife refuges and proposed acquisitions.

Mineral Management Service

2.00 OCS lease sale activities including tract selection, lease sale stipulations, etc.

National Park Service

3.00 National Park and Seashore management and proposed acquisitions.

DEPARTMENT OF TRANSPORTATION

Amtrak, Conrail

1.00 Expansions, curtailments, new construction, upgrading or abandonments or railroad facilities or services, in or affecting the State's coastal area.

Coast Guard

2.00 Location and design, construction or enlargement of Coast Guard stations, bases, and lighthouses.

- 3.00 Location, placement or removal of navigation devices which are not part of the routine operations under the Aids to Navigation Program (ATON).
- 4.00 Expansion, abandonment, designation or anchorages, lightening areas or shipping lanes and ice management practices and activities.

Federal Aviation Administration

5.00 Location and design, construction, maintenance, and demolition of Federal aids to air navigation.

Federal Highway Administration

6.00 Highway construction.

B. FEDERAL LICENSES AND PERMITS

DEPARTMENT OF DEFENSE

Army Corps of Engineers

- 1.00 Construction of dams, dikes or ditches across navigable waters, or obstruction or alteration of navigable waters required under Sections 9 and 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 401, 403).
- 2.00 Establishment of harbor lines pursuant to Section 11 of the Rivers and Harbors Act of 1899 (33 U.S.C. 404, 405).
- 3.00 Occupation of seawall, bulkhead, jetty, dike, levee, wharf, pier, or other work built by the U.S. pursuant to Section 14 of the Rivers and Harbors Act of 1899 (33 U.S.C. 408).
- 4.00 Approval of plans for improvements made at private expense under US ACOE supervision pursuant to the Rivers and Harbors Act of 1902 (33 U.S.C. 565).
- 5.00 Disposal of dredged spoils into the waters of the U.S., pursuant to the Clean Water Act, Section 404, (33 U.S.C. 1344).
- 6.00 All actions for which permits are required pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).
- 7.00 Construction of artificial islands and fixed structures in Long Island Sound pursuant to Section 4(f) of the River and Harbors Act of 1912 (33 U.S.C.).

DEPARTMENT OF ENERGY

Economic Regulatory Commission

- 1.00 Regulation of gas pipelines, and licensing of import or export of natural gas pursuant to the Natural Gas Act (15 U.S.C. 717) and the Energy Reorganization Act of 1974.
- 2.00 Exemptions from prohibition orders.
- Federal Energy Regulatory Commission
- 3.00 Licenses for non-Federal hydroelectric projects and primary transmission lines under Sections 3(11), 4(e) and 15 of the Federal Power Act (16 U.S.C. 796(11), 797(11) and 808).
- 4.00 Orders for interconnection of electric transmission facilities under Section 202(b) of the Federal Power Act (15 U.S.C. 824a(b)).
- 5.00 Certificates for the construction and operation of interstate natural gas pipeline facilities, including both pipelines and terminal facilities under Section 7(c) of the Natural Gas Act (15 U.S.C. 717f(c)).

6.00 Permission and approval for the abandonment of natural gas pipeline facilities under Section 7(b) of the Natural Gas Act (15 U.S.C. 717f(b)).

ENVIRONMENTAL PROTECTION AGENCY

- 1.00 NPDES permits and other permits for Federal installations, discharges in contiguous zones and ocean waters, sludge runoff and aquaculture permits pursuant to Section 401, 402, 403, 405, and 318 of the Federal Water Pollution Control Act of 1972 (33 U.S.C. 1341, 1342, 1343, and 1328).
- 2.00 Permits pursuant to the Resources Recovery and Conservation Act of 1976.
- 3.00 Permits pursuant to the underground injection control program under Section 1424 of the Safe Water Drinking Water Act (42 U.S.C. 300h-c).
- 4.00 Permits pursuant to the Clean Air Act of 1976 (42 U.S.C. 1857).

DEPARTMENT OF INTERIOR

Fish and Wildlife Services

1.00 Endangered species permits pursuant to the Endangered Species Act (16 U.S.C. 153(a)).

Mineral Management Service

- 2.00 Permits to drill, rights of use and easements for construction and maintenance of pipelines, gathering and flow lines and associated structures pursuant to 43 U.S.C. 1334, exploration and development plans, and any other permits or authorizations granted for activities described in detail in OCS exploration, development, and production plans.
- 3.00 Permits required for pipelines crossing federal lands, including OCS lands, and associated activities pursuant to the OCS Lands Act (43 U.S.C. 1334) and 43 U.S.C. 931 (c) and 20 U.S.C. 185.

INTERSTATE COMMERCE COMMISSION

1.00 Authority to abandon railway lines (to the extent that the abandonment involves removal of trackage and disposition of right-of-way); authority to construct railroads; authority to construct coal slurry pipelines.

NUCLEAR REGULATORY COMMISSION

1.00 Licensing and certification of the siting, construction and operation of nuclear power plants pursuant to Atomic Energy Act of 1954, Title II of the Energy Reorganization Act of 1974 and the National Environmental Policy Act of 1969.

DEPARTMENT OF TRANSPORTATION

Coast Guard

- 1.00 Construction or modification of bridges, causeways or pipelines over navigable waters pursuant to 49 U.S.C. 1455.
- 2.00 Permits for Deepwater Ports pursuant to the Deepwater Ports Act of 1974 (33 U.S.C. 1501).

Federal Aviation Administration

3.00 Permits and licenses for construction, operation or alteration of airports.

C. FEDERAL ASSISTANCE¹

DEPARTMENT OF AGRICULTURE

- 10.068 Rural Clean Water Program
- 10.409 Irrigation, Drainage, and Other Soil and Water Conservation Loans
- 10.410 Low to Moderate Income Housing Loans
- 10.411 Rural Housing Site Loans
- 10.413 Recreation Facility Loans
- 10.414 Resource Conservation and Development Loans
- 10.415 Rural Renting Housing Loans
- 10.416 Soil and Water Loans
- 10.418 Water and Waste Disposal Systems for Rural Communities
- 10.422 Business and Industrial Loans
- 10.424 Industrial Development Grants
- 10.426 Area Development Assistance Planning Grants
- 10.429 Above Moderate Income Housing Loans
- 10.430 Energy Impacted Area Development Assistance Program
- 10.901 Resource Conservation and Development
- 10.902 Soil and Water Conservation
- 10.904 Watershed Protection and Flood Prevention
- 10.906 River Basin Surveys and Investigations

DEPARTMENT OF COMMERCE

- 11.300 Economic Development Grants and Loans for Public Works and Development Facilities
- 11.301 Economic Development Business Development Assistance
- 11.302 Economic Development Support for Planning Organizations
- 11.304 Economic Development State and Local Economic Development Planning
- 11.305 Economic Development State and Local Economic Development Planning
- 11.307 Special Economic Development and Adjustment Assistance Program Long Term Economic Deterioration
- 11.308 Grants to States for Supplemental and Basic Funding of Titles I, II, III, IV, and V Activities
- 11.405 Anadromous and Great Lakes Fisheries Conservation
- 11.407 Commercial Fisheries Research and Development
- 11.417 Sea Grant Support
- 11.427 Fisheries Development and Utilization Research and Demonstration Grants and Cooperative Agreements Program
- 11.501 Development and Promotion of Ports and Intermodal Transportation
- 11.509 Development and Promotion of Domestic Waterborne Transport Systems

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

¹ Numbers refer to the Catalog of Federal Domestic Assistance Programs, 1980 and its two subsequent updates.

- 14.112 Mortgage Insurance Construction or Substantial Rehabilitation of Condominium Projects
- 14.115 Mortgage Insurance Development of Sales Type Cooperative Projects
- 14.117 Mortgage Insurance Homes
- 14.124 Mortgage Insurance Investor Sponsored Cooperative Housing
- 14.125 Mortgage Insurance Land Development and New Communities
- 14.126 Mortgage Insurance Management Type Cooperative Projects
- 14.127 Mortgage Insurance Mobile Home Parks
- 14.218 Community Development Block Grants/Entitlement Grants
- 14.219 Community Development Block Grants/Small Cities Program
- 14.221 Urban Development Action Grants
- 14.223 Indian Community Development Block Grant Program

DEPARTMENT OF INTERIOR

- 15.400 Outdoor Recreation Acquisition, Development and Planning
- 15.402 Outdoor Recreation Technical Assistance
- 15.403 Disposal of Federal Surplus Real Property for Parks, Recreation, and Historic Monuments
- 15.411 Historic Preservation Grants-in-Aid
- 15.417 Urban Park and Recreation Recovery Program
- 15.600 Anadromous Fish Conservation
- 15.605 Fish Restoration
- 15.611 Wildlife Restoration
- 15.613 Marine Mammal Grant Program
- 15.802 Minerals Discovery Loan Program
- 15.950 National Water Research and Development Program
- 15.951 Water Resources Research and Technology Assistance to State Institutes
- 15.952 Water Research and Technology Matching Funds to State Institutes

DEPARTMENT OF TRANSPORTATION

- 20.102 Airport Development Aid Program
- 20.103 Airport Planning Grant Program
- 20.205 Highway Research, Planning, and Construction
- 20.309 Railroad Rehabilitation and Improvement Guarantee of Obligations
- 20.310 Railroad Rehabilitation and Improvement Redeemable Preference Shares
- 20.506 Urban Mass Transportation Demonstration Grants
- 20.509 Public Transportation for Rural and Small Urban Areas

GENERAL SERVICES ADMINISTRATION

39.002 Disposal of Federal Surplus Real Property

COMMUNITY SERVICES ADMINISTRATION

- 49.002 Community Action
- 49.011 Community Economic Development
- 49.013 State Economic Opportunity Offices

- 49.017 Rural Development Loan Fund
- 49.018 Housing and Community Development (Rural Housing)

SMALL BUSINESS ADMINISTRATION

- 59.012 Small Business Loans
- 59.013 State and Local Development Company Loans
- 59.024 Water Pollution Control Loans
- 59.025 Air Pollution Control Loans
- 59.031 Small Business Pollution Control Financing Guarantee

ENVIRONMENTAL PROTECTION AGENCY

- 66.001 Air Pollution Control Program Grants
- 66.418 Construction Grants for Wastewater Treatment Works
- 66.426 Water Pollution Control State and Areawide Water Quality Management Planning Agency
- 66.451 Solid and Hazardous Waste Management Program Support Grants
- 66.452 Solid Waste Management Demonstration Grants
- 66.600 Environmental Protection Consolidated Grants Program Support Comprehensive Environmental Response, Compensation and Liability (Super Fund)

B. STATE AND FEDERAL PROGRAMS NECESSARY TO FURTHER THE LWRP

FEDERAL PROGRAMS

DEPARTMENT OF DEFENSE

U.S. Army Corps of Engineers

- 1. Maintenance of Federal channel at Montauk Harbor, including sand bypassing to reduce downdrift erosion.
- 2. Give lead agency status to Town and coordinate with local agencies before permitting for any dredging, coastal erosion protection, dock or other projects.
- 3. Insure that all actions are consistent with LWRP.

DEPARTMENT OF ENERGY

1. Include Town in radiological emergency planning for Brookhaven National Lab and Northeast Utilities' Millstone Nuclear Power Plant.

ENVIRONMENTAL PROTECTION AGENCY

- 1. Approval of application for No-Discharge Zones in Town's enclosed harbors.
- 2. Promote use of bio-degradeable chemistry and holding tanks for Marine Sanitation Devices (MSD's).
- 3. Promote use of non-polluting bio-degradeable products in contact with surface waters, for example boat and teak cleaners, limiting use of treated wood products, and other marine industry BMP's.
- 3. Public education to reduce non-point sources of pollution into ground and surface waters.

DEPARTMENT OF INTERIOR

U.S. Fish and Wildlife Service

- 1. Endangered species management plans and local support, including for piping plovers and least terns.
- 2. Habitat management plans for USFWS preserves, in cooperation with Town and private conservation organizations.
- 3. Acquire areas containing federally endangered or threatened plant or animal species, including the 98-acre Shadmoor tract in Montauk.

Mineral Management Service

1. Restrict OCS mineral leases to prevent oil spill impacts on coastal resources.

INTERSTATE COMMERCE COMMISSION

1. Do not permit vehicle ferries within the Town.

NUCLEAR REGULATORY COMMISSION

1. Include Town of East Hampton in radiological emergency and evacuation planning for Brookhaven Lab and Northeast Utilities' Millstone Nuclear Power Plant.

DEPARTMENT OF TRANSPORTATION

Coast Guard

- 1. Provide public education for, and enforcement of, No-Discharge Zones.
- 2. Establish tanker-free zone between Block Island and Montauk (**Projects**).
- 3. Establish regulations for MSD's to require bio-degradeable chemistry and holding tanks.
- 4. Regulate personal water craft (PWC's or jetskis) to increase safety, reduce user conflicts and environmental impacts.

Federal Aviation Administration

1. Limit expansion of Montauk airport.

STATE PROGRAMS

EMPIRE STATE DEVELOPMENT

1. Any action or provision of funds for the development or promotion of tourism related activities or development.

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

- 1. Provide funding for State and local activities from the Clean Water/Clean Air Bond Act, and the Environmental Protection Fund.
- 2. Fund upgrade of the Sag Harbor Sewage Treatment Plant.
- 3. Fund and facilitate permitting for wetlands restoration projects (**Projects**).
- 4. Streamline permitting for stormwater abatement projects (**Projects**).
- 5. Facilitate SPDES permit for processing of MSD waste in local scavenger waste treatment plant.
- 6. Work in conjunction with the Town to maintain certified shellfish areas and provide water quality monitoring.

OFFICE OF GENERAL SERVICES

- 1. Prior to any development occurring in the water or on the immediate waterfront, OGS should be consulted for a determination of the State's interest in underwater or formerly underwater lands and for authorization to use and occupy these lands.
- 2. Cease leasing of underwater lands for private use within the Town.

OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION

- 1. In planning, development, construction, major renovation or expansion of recreational facilities or the provision of funding for such facilities within the Town, provide for consultation with the Town as an integral part of such activities.
- 2. Provide funding for State and local projects within the Town from the Land and Water Conservation Fund, Clean Water/Clean Air Bond Act, and the Environmental Protection Fund.
- 3. Planning, development, implementation or the provision of funding for recreation services programs.
- 4. Certification of properties within the National Register Districts.

- 5. Provision of funding for State and local historic preservation activities.
- 6. Review of Type I actions within the National Historic Districts.
- 7. Permit traditional commercial fishing activities in waters adjoining State parklands.
- 8. Reduce impacts of ORV use on natural resources within State parklands.
- 9. Formulate joint management plans in conjunction with the Town, other government agencies and private conservation organizations for OPRHP lands in the Town.
- 10. Consult with Town agencies and adhere to LWRP guidelines for areas within the Town, including Napeague State Park, Hither Hills State Park and Montauk State Park.

DEPARTMENT OF STATE

- 1. Provide funding for the implementation of an approved LWRP.
- 2. Continue technical support from Division of Coastal Resources staff.

DEPARTMENT OF TRANSPORTATION

1. Abate stormwater runoff from State highways, including NYS Route 27 at Georgica Pond, Napeague Harbor, Fort Pond and Lake Montauk; also NYS Route 114 drainage abatement into Georgica Cove.

SECTION XVII

CONSULTATION WITH OTHER AFFECTED FEDERAL, STATE, REGIONAL AND LOCAL AGENCIES

CONSULTATION WITH OTHER AFFECTED FEDERAL, STATE, REGIONAL AND LOCAL AGENCIES

During preparation of the LWRP, the following agencies were consulted:

Federal Agency Consultations

US Army Corps Of Engineers US Environmental Protection Agency US Fish and Wildlife Service Federal Emergency Management Agency National Marine Fisheries Service National Weather Service National Oceanic and Atmospheric Administration Natural Resources Conservation Service Peconic Estuary Program

State Agency Consultations

New York State Department of State New York State Department of Environmental Conservation New York State Office of Parks, Recreation and Historic Preservation New York State Emergency Management Office New York State Department of Transportation

Regional/Local Consultations

Suffolk County Planning Department Suffolk County Department of Health Services Suffolk County Department of Public Works Village of East Hampton Village of Sag Harbor Town of Southampton Marine Science Research Center of SUNY Stony Brook New York State Sea Grant (Stony Brook) Cornell Cooperative Extension Service Group for the South Fork The Nature Conservancy (South Fork/Shelter Island Chapter) Concerned Citizens of Montauk Association of Marine Industries East Hampton Trails Preservation Society Montauk Captains Association Accabonac Protection Committee East Hampton Beach Preservation Society Amagansett Sportfishermen's Association East Hampton Baymen's Association

SECTION XVIII

LOCAL COMMITMENT

XVIII. OBTAINING LOCAL COMMITMENT FOR THE TOWN OF EAST HAMPTON LOCAL WATERFRONT REVITALIZATION PROGRAM

A. INTRODUCTION

During the drafting of the Town's LWRP, considerable public involvement and attention has been focused on the document in its various sections and draft stages, and on particular projects. Community involvement in the LWRP process has included meetings of the Town's Waterfront Advisory Committee, a public opinion survey, public hearings before the Planning Board, widely attended public meetings on draft policy sections, a boater and marina survey, Town Board review at public meetings, presentations to Citizen's Advisory Committees of the Wainscott and Springs communities, television programs on Local TV public access cable channel 27, extensive press coverage, and public meetings for LWRP-related projects. Notes and/or minutes of most meetings have been kept on file in the Town Planning Department or the Town Clerk's office, depending on who convened the gathering.

There have also been meetings, correspondence and telephone contacts, solicited and unsolicited, between Planning Department personnel working on the LWRP and private citizens and user groups interested in particular aspects of the plan. Overall, public comments have resulted in a great number of beneficial changes and revisions of the LWRP document.

Following is a summary of meetings and other public occasions which have resulted in a wide and substantive public airing of LWRP issues, and which is expected to provide broadened public understanding of, and support for LWRP initiatives.

B. TOWN WATERFRONT ADVISORY COMMITTEE

By Resolution #523 of May 5, 1989 the Town Board appointed a Waterfront Advisory Committee (WAC) to oversee development of the LWRP. At its formation the committee included eight citizen members representing a cross section of community interests including commercial fishing, charter boatmen, recreational water users, environmentalists, and baymen. Town Councilperson and later Supervisor Cathy Lester, Town Trustee Tom Knobel, succeeded by Trustee Assistant Clerk Jim McCaffrey, Planning Director Lisa Liquori, Natural Resources Director Larry Penny, and Senior Town Harbormaster Bill Taylor, served on the WAC as ex-officio members to advise and consult on coastal-related matters. In the course of time one committee member, Captain Warren Hader, died of cancer. One member resigned in the first year, two others were inactive, and one new member was appointed. At completion of the Draft LWRP, active WAC members included Rameshwar Das, Chairman, Jim Ash, Lester Black, Brad Loewen, and Dick Mendelman. The WAC held more than 60 meetings, equivalent to thousands of man-hours, discussing, editing and refining the LWRP document. Table XVIII-1 lists meetings of the WAC.

C. PUBLIC OPINION SURVEY

In August, 1989 the WAC conducted a public opinion survey to determine what coastal issues were of importance to Townspeople, and how people were using or enjoying coastal resources in their daily lives. 341 people responded to the survey, about 2/3 year-round residents and 1/3 seasonal residents. The responses reflected a generally high degree of public awareness of the coastal environment. 137 respondents included narrative recommendations on coastal issues of importance to them. A question regarding frequency of use of coastal resources showed that over 90% enjoy coastal views, 83% swim, 67% enjoy subathing on the beach, and about 40% fish, picnic, or hike, and about 30% clam, sail or use power boats. A complete tally of the survey results is on file in the Town Planning Department.

TABLE XVIII-1: Meetings of the East Hampton Town Waterfront Advisory Committee

2. May 15, 1989 34. May 3. May 31, 1989 35. Ap 4. June 12, 1989 36. May 5. June 19, 1989 37. May 6. June 26, 1989 38. Jun 7. July 17, 1989 39. Jun 8. October 17, 1989 40. Jul 9. October 30, 1989 41. October 10. November 13, 1989 42. Jan 11. November 27, 1989 43. May 12. December 18, 1989 44. May 13. January 22, 1990 45. Ap 14. February 5, 1990 46. No 15. March 5, 1990 46. No 16. March 26, 1990 48. Fe 17. April 2, 1990 49. May 18. April 23, 1990 50. May 20. May 21, 1990 51. May 21. June 4, 1990 52. May 22. June 25, 1990 54. Jul 23. July 9, 1990 55. No 24. October 1, 1990 56. De 25. November 19, 1990 57. Jan 26. January 23, 1992 58. Ap 27. May 6, 1992 59. May 28. May 11, 1992 60. Se 29. October 19, 1992 61. Jan	arch 14, 1994 arch 28, 1994 oril 18, 1994 ay 2, 1994 ay 16, 1994 ne 6, 1994 ne 6, 1994 dy 18, 1994 dy 18, 1994 dy 18, 1994 dy 18, 1994 dy 18, 1994 dy 18, 1995 arch 6, 1995 arch 20, 1995 oril 24, 1995 ovember 6, 1995 bruary 12, 1996 arch 11, 1996 arch 18, 1996 arch 25, 1996 arch 25, 1996 arch 25, 1996 dy 22, 1996 ovember 18, 1996 arch 28, 1997 oril 7, 1997 ay 12, 1997 ptember 22, 1997 nuary 12, 1998 agust 31, 1998
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31. March 29, 1993	63. September 28, 1998
32. June 28, 1993	

Dates are from meeting notices and minutes on file in the Town Planning Department.

D. BOATER AND MARINA SURVEY

In the summer of 1990 the Town Natural Resources Department conducted a townwide Boater and Marina survey in response to NYS DEC closure of additional shellfishing areas near marinas under the National Shellfish Sanitation Program (NSSP). The purpose of the survey was to assess the accuracy and local applicability of the boat use formula used in determining required closures under the NSSP standards. Two employees visited the 35 East Hampton marinas throughout the summer on a random basis. Personal interviews were chosen as a survey technique to obtain an accurate population count, to increase public awareness about the East Hampton water quality problems and to clarify why the Town was questioning boat owners and marina operators.

The boater population in East Hampton waters was measured for boater occupancy, jurisdiction of registration, waste treatment and disposal, and boat use patterns. Results were used to estimate the true amount of boat waste pollution reaching the marine environment and to provide more accurate information to the NYS DEC concerning the need for shellfish closures. In addition, the survey provided information to identify how pollution could be reduced through improved services and education.

Results of the survey showed that actual occupancy of boats in marinas was much lower than the assumptions of the NSSP, which applied to the formulas for shellfish closures, would yield a much smaller acreage of closed shellfish beds. The survey also yielded useful information regarding types of MSD's, their use, and impact on septic loading of surface waters, data which was helpful in determining Town strategy for installing pumpout facilities and in applying for *No-Discharge Zone* designations. Detailed results of the survey and its methodology are in file in the Town Planning Department.

E. PUBLIC MEETINGS

Public meetings on the LWRP have been held in a variety of local forums, under the auspices of the Waterfront Advisory Committee, Town Board, Town Trustees, Planning Board, Planning Department and community Citizens Advisory Committees. Some, such as a February, 1992 public information meeting on the Water Resources section, have been large Town meetings where extensive input was received, and later incorporated or responded to in the document. A number of these meetings were televised and shown several times on public access television, LTV Channel 27. Others have been smaller working meetings, such as a series of presentations by the WAC and Planning Department at Town Board work sessions, which were nonetheless extensively reported on in the local press. A variety of meeting notes, agendas, and records of public comments are on file in the Planning Department recording such meetings to varying extent. A summary list follows.

Date	Venue/Sponsor	Subject of meeting
8/7/89	Town Hall, WAC	Public scoping on LWRP issues and concerns
3/9/90	Town Hall, Planning/WAC	Draft Public Access map & recommendations
5/22/91	Town Hall, Planning Board	Adoption of Public Access section into Town Comprehensive Plan
6/12/91	Town Hall, Planning Board	Adoption of Significant Habitats section into Town Comprehensive Plan
2/26/92	EH Firehouse, Planning Dept.	Draft Water Resources section
5/27/92	Town Hall, Planning Board	Adoption of Water Resources section into Town Comprehensive Plan
6/23/95	Town Hall, WAC/Town Bd	Draft Flooding and Erosion section
8/7/95	Accabonac Protection Cmte	Presentation on Flooding and Erosion section
8/18/95	Town Hall, Town Board	Hearing, Harbor Protection Overlay District (HPOD)
8/6/96	Town Hall, Town Board	Work session on Flooding and Erosion section
8/22/96	Town Hall, WAC/Town Board	Slide presentation/discussion on Flooding and Erosion section
9/24/96	LTV, Supervisor	TV presentation of Flooding and Erosion, slideshow
9/25/96	Town Hall, Town Board	Work session on Public Access/Recreation section

TABLE XVIII-2: Public Meetings for the LWRP

Town of East Hampton LWRP

Local Commitment

Date	Venue/Sponsor	Subject of meeting
10/18/96	Town Hall, WAC/Town Board	Presentation/discussion on Public Access/Recreation section
10/24/96	Montauk Firehouse, Town Board	Work group on harbor management for Lake Montauk
10/28/96	Town Hall, Town Board	Work session on Significant Habitats and Commercial Fishing sections
11/19/96	Town Hall, Town Board	Work session on Development, Agricultural Lands, Historic and Visual Resources sections
11/20/96	Montauk Coast Guard, Town Bd	Work group on harbor management for Lake Montauk
12/17/96	Town Hall, Town Board	Work session on Water and Air Resources sections
12/19/96	Montauk Coast Guard, Town Bd	Work group on harbor management for Lake Montauk
1/7/97	Ashawagh Hall, Springs CAC	LWRP overview
1/9/97	Montauk Coast Guard, Town Bd	Work group on harbor management for Lake Montauk
2/5/97	Montauk Coast Guard, Town Bd	Work group on harbor management for Lake Montauk
2/11/97	Town Hall, Town Board	Work session on Projects section
3/4/97	Ashawagh Hall, Springs CAC	Presentation on Projects section
6/25/97	E End Supervisors & Mayors	Presentation on proposed Scenic Areas (SASS) study
8/27/97	E End Supervisors & Mayors	Follow-up on proposed SASS study
11/19/97	Springs School, WAC, schl bd	Presentation on proposed Environmental Education Center

Town of East Hampton LWRP

Local Commitment

Date	Venue/Sponsor	Subject of meeting
12/2/97	Ashawagh Hall, Springs CAC	Water Resource issues
12/3/97	Ashawagh Hall, Sprgs Impr Soc	Presentation on proposed Environmental Education Center
1/22/98	Montauk Firehouse, Town Board, Trustees, WAC, CCOM, AMI	Meeting with marina owners on proposed No-Discharge Zones
2/12/98	Ashawagh Hall, Springs CAC	Planning work group for Springs
4/8/98	Southampton Col., NRD/WAC	Presentation on erosion and climate change
4/14/98	Town Hall, Town Trustees	No-Discharge Zones
4/16/98	Town Dock, Town Board, Trustees, WAC, CCOM, AMI, Montauk Harbor Assn., USCG	Press conference on NDZ, launch of Trustee pumpout boat
5/21/98	Ch. 27 Rvhd, Bay Show, PEP	Peconic Estuary, water quality, LWRP & NDZ
9/19/98	Montauk Firehouse, CCOM	Annual meeting, talks on hurricanes, LWRP
10/13/98	Town Hall, Town Trustees	Presentation on Draft LWRP
10/15/98	Ch. 27, East End Show, LTV	TV interview, LWRP
10/20/98	Town Hall, Town Board	Work session, presentation on LWRP Draft
4/15/99	Town Hall, Town Board	Town Board public hearing on LWRP Draft
11/16 /99	Town Hall, Town Board	Work session, review LWRP comments & draft Erosion Law

F. PUBLIC COMMENTS AND CORRESPONDENCE

A large number of comments and suggestions, oral and written, have been received from the public and from officials of many agencies, in response to the meetings above, to media publicity, or the Town's request. Many suggestions have been incorporated into the LWRP, but the comments and correspondence themselves are too voluminous to include in the LWRP document. Notes of comments and copies of correspondence are on file in the Town Planning Department.

G. PRESS AND OTHER MEDIA

The local press, particularly the East Hampton Star, have done an exemplary job in presenting and explaining to the public the complex and detailed contents of the LWRP. Clippings are on file in the Planning Department, and more exhaustive records are available in the local library or from the newspapers themselves.

The local public access cable television station, LTV Channel 27, has televised a number of the Town Board meetings and public hearings where LWRP issues have been presented, and have on several other occasions provided their studios and technical assistance for producing programs on LWRP policies.

The Town has published a "Boater's Guide to Water Protection" brochure (1997), and as noted in **Proposed Projects, Section XIV**, plans a broad public education effort both on specific LWRP issues and initiatives, and on the overall local program. During summer of 1998 the Town began a print advertising and direct mail program to inform boaters of the impending *No-Discharge Zone* initiative. As a result of the ad campaign and an April press event, several local and regional papers produced feature stories on the *NDZ*. In addition, community groups including CCOM and the Montauk Harbor Association have published a boater's guide (1995), as has the AMI (Association of Marine Industries) (1998), and the Peconic Estuary Program has published an "Ultimate Guide to the Peconic Estuary" (1998). Another LWRP **Project**, a Town Scenic Survey begun in November 1999, received local press and editorial coverage, was exhibited in the East Hampton and Montauk Public Libraries, and was shown in video form on LTV Channel 27, local public access television.

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APPENDICES

- A. RECOMMENDATIONS FOR REACH 3 FROM TOWN OPEN SPACE PLAN
- B. RECOMMENDATIONS FOR REACHES 5-9 FROM TOWN OPEN SPACE PLAN
- C. HARBOR PROTECTION OVERLAY DISTRICT
- D. FERRY LEGISLATION
- E. COASTAL EROSION HAZARD ACT REGULATIONS (EXCERPTED)
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APPENDIX A

RECOMMENDATIONS FOR REACH 3 FROM

TOWN OPEN SPACE PLAN

September 27, 1995

	REACH 3		OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
24-1-52.3	19.3	existing dwelling, historic structures & other historic resources, Gardiner's Bay shorefront, farmland (Miller Fireplace Farm), woodland, cemetery	private conservation/open space subdivision (farmland preservation, protect historic setting and waterfront
39-14-1	7.8	woodland abutting Accabonac Harbor tidal wetlsnds, scenic views, State Significant Habitat, adjoins protected open space, proposed Wilfred J. Miller subwaiver	obtain scenic easement over woodland edge abutting wetlands
39-14-16	8.2	Accabonac Harbor shorefront, tidal wetlands, scenic views, State Significant Habitat, possible water access (Charlie King's Landing)	 open space subdivision obtain public water access
39-14-29	NA	parcel consists of 39-14-29 & 63-3-2 (9.5 acres), Accabonac Harbor shorefront, old field, tidal wetlands, scenic views, State Significant Habitat, adjoins protected open space	private conservation/open space subdivision (preserve land nearest Accabonac Harbor)
42-1-11	NA	parcel consists of 42-1-11, 12, 14, & 16 (4.4 acres), existing dwelling, Accabonac Harbor shorefront, tidal wetlands, woodland, scenic views, adjoins protected open space	obtain conservation easement over wooded shorefront land at north end of property
42-1-12	NA	see 42-1-11	see 42-1-11
42-1-14	NA	see 42-1-11	see 42-1-11
42-1-16	NA	see 42-1-11	see 42-1-11

	REACH 3		OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
62-7-1	<1.0	existing dwelling, contiguous with land zoned A2 Residence	rezone to A Residence
62-7-2	<1.0	contiguous with land zoned A2 Residence, adjoins protected open space, Accabonac Harbor Critical Environmental Area, shallow depth to groundwater	private conservationsee 62-7-1
62-7-3	<1.0	parcel consists of 62-7-3, 5, & 6.1 (1.6 acres), Pollock-Krasner house historic site, contiguous with land zoned A2 Residence, adjoins protected open space	see 62-7-1
62-7-5	<1.0	see 62-7-3	see 62-7-1
62-7-6.1	<1.0	see 62-7-3	see 62-7-1
62-7-6.2	4.0	preserve owned by The Nature Conservancy, tidal wetlands, contiguous with land zoned A2 Residence, State Significant Habitat	see 62-7-1
62-7-7	1.2	see 62-7-6.2	see 62-7-1
62-7-8	1.3	see 62-7-6.2	see 62-7-1
62-7-9	<1.0	see 62-7-6.2	see 62-7-1

	REACH 3		OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
63-3-1.1	10.2	historic dwelling & appurtenant structures, Accabonac Harbor shorefront, tidal wetlands, scenic views, State Significant Habitat	private conservation/open space subdivision (preserve land nearest Accabonac Harbor)
63-3-2	NA	see 39-14-29	see 39-14-29
63-3-10	15.9	Accabonac Harbor shorefront, tidal wetlands, meadow, scenic views, State Significant Habitat, adjoins protected open space, proposed Weitzman subdivision	private conservation/public acquisition
80-2-11.1	26.5	existing dwellings, Accabonac Harbor shorefront, old field & woodland, tidal wetlands, scenic views, State Significant Habitat	private conservation/public acquisition
80-4-3.5	1.7	woodland abutting Accabonac Harbor tidal wetlands (Accabonac Great Meadows), adjoins protected open space	private conservation
80-4-6	1.8	old field, tidal wetlands, driveway access through wetlands, State Significant Habitat, adjoins protected open space	private conservation/public acquisition
83-2-1	37.0	unknown owner, Accabonac Harbor shorefront, tidal wetlands (Accabonac Great Meadows), scenic views, State Significant Habitat, adjoins protected open space	public acquisition

	REACH 3		OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
83-2-2	NA	parcel consists of 83-2-2, 4, 5, 23, & 24 (25.5 acres), existing dwelling & other structures, Accabonac Harbor shorefront, tidal wetlands (Accabonac Great Meadows), Bishop's Hummock, scenic views, State Significant Habitat, adjoins protected open space, partly encumbered by Nature Conservancy conservation easement	private conservation (obtain conservation easement over remaining unencumbered wetlands)
83-2-4	NA	see 83-2-2	see 83-2-2
83-2-5	NA	see 83-2-2	see 83-2-2
83-2-19.1	3.2	Accabonac Harbor shorefront (East Harbor), tidal wetlands (Accabonac Great Meadows), scenic views, State Significant Habitat, adjoins protected open space	private conservation/public acquisition
83-2-20.1	1.4	Accabonac Harbor shorefront (East Harbor), tidal wetlands (Accabonac Great Meadows), scenic views, State Significant Habitat	private conservation/public acquisition
83-2-22.1	3.3	unknown owner, Accabonac Harbor shorefront (East Harbor), tidal wetlands, scenic views, State Significant Habitat	public acquisition
83-2-23	NA	see 83-2-2	see 83-2-2
83-2-24	NA	see 83-2-2	see 83-2-2

	REACH 3		OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
83-3-12	<1.0	Accabonac Harbor shorefront (East Harbor), tidal wetlands, dredged basin & dock, State Significant Habitat	obtain conservation easement prohibiting residential development of property
83-6-5	5.3	existing dwelling, freshwater wetlands (Mud Hole)	partial public acquisition/obtain easement protecting wetlands
83-6-12	2.7	freshwater wetlands (Mud Hole)	obtain easement over wetlands
103-9-21	NA	parcel consists of 103-9-21 & 28 (approx. 7.0 acres), historic dwelling & other buildings, woodland	 access from Robins Way preserve historic setting and woodland
103-9-28	NA	see 103-9-21	see 103-9-21
127-1-5	6.0	woodland, freshwater wetlands (Bellyache Swamp), Local Significant Habitat	obtain conservation easement over wetlands and adjoining woodland
127-1-8	5.4	existing cottages & other structures, woodland, freshwater wetlands (Bellyache Swamp), Local Significant Habitat	see 127-1-5
127-1-14.1	44.9	large woodland block, freshwater wetlands, steep slopes, cemetery (Isaac Conkling grave), trail corridor, Local Significant Habitat, near protected open space, proposed Fresh Pond at Devon subdivision	 open space subdivision trail corridor

APPENDIX B

RECOMMENDATIONS FOR REACHES 5-9 FROM

TOWN OPEN SPACE PLAN

September 27, 1995

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
7-1-2.2	NA	parcel consists of 7-1-2.2 & 2.3 (37.6 acres), Montauk airport, duneland, freshwater wetlands, moorland & downs, State Significant Habitat, adjoins protected open space	rezone to A3 Residence
7-1-2.3	NA	see 7-1-2.2	see 7-1-2.2
7-2-9.22	1.8 under- water	underwater land at Reed Pond dreen, State Significant Habitat	public acquisition
7-2-9.4	2.6 under- water	underwater land adjacent to Town water access, State Significant Habitat	public acquisition
9-1-4	16.4	see 9-1-8.2	see 9-1-8.2
9-1-6	19.0	see 9-1-8.2	see 9-1-8.2
9-1-7	5.4	see 9-1-8.2	see 9-1-8.2
9-1-8.2	272	parcel consists of 9-1-4, 6, 7, & 8.2 (272 acres), Fort Pond Bay shorefront, historic and archaeological resources, Culloden Point, freshwater wetlands, protected species, trails and beach access, beech forest, moorland, State Significant Habitat, proposed Culloden Point subdivision	open space subdivision w/ partial public acquisition

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
12-2-2.19	97.7	large moorland block, woodland, freshwater wetlands	rezone all of property to A3 Residence; open space subdivision (coordinate access and open space with tract to east)/possible golf course location (site-specific DEIS)
12-3-3	15.3	part of large moorland block, woodland, freshwater wetlands	open space subdivision (coordinate access and open space with tract to west)/ possible golf course location (site-specific DEIS)
12-3-7.1	5.4	moorland, freshwater wetlands, Lake Montauk (Great Pond) drainage shed	obtain conservation easement over wetlands
12-3-7.2	4.7	moorland, freshwater wetlands, Lake Montauk (Great Pond) drainage shed	obtain conservation easement over wetlands
12-4-4	20.7 under- water	underwater land adjoining Star Island, State Significant Habitat	public acquisition
12-4-5	<1.0 under- water	underwater land adjoining Star Island causeway, State Significant Habitat	public acquisition
12-4-6	2.2	Lake Montauk (Great Pond) shorefront, beach access, scenic views, State Significant Habitat	public acquisition
13-2-2	1.1	moorland & downs, adjoins Indian Field cemetery, provides access to County parkland	public acquisition

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
13-2-29	3.5	unopened private road off Pocahontas La., moorland & downs, provides access to Indian Field cemetery from County parkland	public acquisition
13-2-31	1.9	farmland (horse pasture), downs, steep slopes, prominent hilltop land (Prospect Hill), scenic views, adjoins protected open space	rezone to A3 Residence
13-2-32	4.1	see 13-2-31	see 13-2-31
13-2-34	5.1	existing dwelling, see 13-2-31	see 13-2-31
13-2-36.2	2.1	downs, steep slopes, prominent hilltop land, scenic views, adjoins protected open space	see 13-2-31
13-2-36.3	2.9	existing dwelling, see 13-2-36.2	see 13-2-31
13-2-39.31	NA	parcel consists of 13-2-39.31, 39.32, 39.33, & 39.34 (12.4 acres), existing dwelling, barns & outbuildings, farmland (Star Top Ranch), steep slopes, prominent hilltop land, scenic views, adjoins protected open space	 rezone to A3 Residence partial PDR (farmland preservation)
13-2-39.32	NA	see 13-2-39.31	see 13-2-39.31
13-2-39.33	NA	see 13-2-39.31	see 13-2-39.31
13-2-39.34	NA	see 13-2-39.31	see 13-2-39.31

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
15-1-14	339.8	moorland, freshwater wetlands, Oyster Pond drainage shed (Ogden's Brook), trails, State Significant Habitat, adjoins protected open space	private conservation/public acquisition
16-1-6.4	12.1	Tuthill Pond shorefront, prominent hilltop land, part used as sand mine	open space subdivision
16-2-6	3.8	SCWA well field, existing structures, moorland & downs, steep slopes, groundwater recharge area	rezone to A Residence
16-2-13	4.3	SCWA water supply facilities (including water tower), steep slopes, groundwater recharge area, prominent hilltop land (Rocky Ridge), archaeological resources, contiguous with land zoned A Residence	see 16-2-6
16-2-17	8.3	freshwater wetlands, steep slopes, archaeological resources, proposed Whaleback Hill subdivision	reduced density subdivision (protect wetlands, slopes, & archaeological resources)
16-2-18	<1.0	existing dwelling, steep slopes, groundwater recharge area, contiguous with land zoned A Residence	see 16-2-6
16-2-19	2.3	SCWA well field, groundwater recharge area	see 16-2-6

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
16-2-22	5.6	historic structure (former Manor barn), freshwater wetlands, steep slopes, archaeological resources	private conservation (protect historic barn & setting)
19-1-7.3	3.9	existing dwelling, moorland & downs, steep slopes, groundwater recharge area, prominent hilltop land, large lot easement	rezone to A Residence
19-1-7.4	2.6	moorland & downs, steep slopes, groundwater recharge area, prominent hilltop land, large lot easement	see 19-1-7.3
19-1-7.5	1.5	see 19-1-7.3	see 19-1-7.3
19-1-7.6	7.6	historic dwelling (Carl Fisher residence) & appurtenant structures, see 19-1-7.4	see 19-1-7.3
19-1-7.7	1.5	moorland & downs, steep slopes, groundwater recharge area, large lot easement	see 19-1-7.3
19-1-7.8	1.3	see 19-1-7.7	see 19-1-7.3
19-1-7.9	1.7	see 19-1-7.7	see 19-1-7.3
19-1-25	3.7	SCWA well field, existing structures, moorland & downs, steep slopes, groundwater recharge area	see 19-1-7.3
19-1-26.6	1.2	moorland & downs, steep slopes, groundwater recharge area	see 19-1-7.3

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
19-1-26.7	1.0	see 19-1-26.6	see 19-1-7.3
19-2-16.1	<1.0	in conjunction 19-2-16.1, 16.2, 16.3, 16.4, 18.1, 18.2, 18.3, 18.4, 18.5, 18.6, 18.7, 20.1, 20.2, & 61 (approx. 8.2 acres) have following characteristics: freshwater wetlands, archaeological resources, Lake Montauk (Great Pond) drainage shed, adjoin protected open space	public acquisition
19-2-16.2	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-16.3	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-16.4	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-18.1	1.2	see 19-2-16.1	see 19-2-16.1
19-2-18.2	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-18.3	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-18.4	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-18.5	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-18.6	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-18.7	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-20.1	<1.0	see 19-2-16.1	see 19-2-16.1
19-2-20.2	<1.0	see 19-2-16.1	see 19-2-16.1

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
19-2-61	<1.0	see 19-2-16.1	see 19-2-16.1
19-5-17	2.8	Squaw Cove shorefront within Lake Montauk (Great Pond), tidal wetlands, scenic views, State Significant Habitat	public acquisition
19-5-18	<1.0	Squaw Cove shorefront within Lake Montauk (Great Pond), tidal wetlands, scenic views, public water access, Stepping Stones Pond outlet, State Significant Habitat	public acquisition
19-5-22.12	<1.0	Lake Montauk (Great Pond) shorefront, tidal wetlands, Peter's Run outlet, State Significant Habitat	public acquisition
19-5-22.13	<1.0 under- water	underwater land, see 19-5-22.5	see 19-5-22.5
19-5-22.5	<1.0 under- water	underwater land at mouth of Peter's Run, State Significant Habitat	public acquisition
19-8-2	9.6	freshwater wetlands, steep slopes, archaeological resources, proposed Woodrush Hollow subwaiver	reduced density subdivision (protect wetlands, slopes, & archaeological resources)
19-9-26	2.1	freshwater wetlands	reduced density subdivision (obtain conservation easement over wetlands)

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
19-10-2	3.3	see 19-9-26	see 19-9-26
19-10-3	2.4	see 19-9-26	see 19-9-26
19-10-4.1	1.8	see 19-9-26	see 19-9-26
19-10-8.1	1.2	see 19-9-26	obtain conservation easement over wetlands
19-10-18	<1.0	see 19-9-26	see 19-10-8.1
20-3-3	18.9	freshwater wetlands, moorland & downs, historic & archaeological resources, adjoins protected open space	rezone to A3 Residencepublic acquisition
20-6-1	29.4	freshwater wetlands, underwater land (Stepping Stones Pond), Lake Montauk (Great Pond) drainage shed, scenic views, trails, State Significant Habitat, adjoins protected open space	private conservation/public acquisition
20-6-10.1	<1.0	freshwater wetlands, Lake Montauk (Great Pond) drainage shed, adjoins protected open space	public acquisition
21-2-24.15	122.8	oceanfront bluffs & moorland, freshwater wetlands & pond, scenic views, Local Significant Habitat, adjoins protected open space	private conservation/open space subdivision (coordinate open space with adjoining land)

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
22-1-7	40.2	oceanfront bluffs (including Caswell's Point) & moorland, freshwater wetlands, trails, Local Significant Habitat	private conservation/open space subdivision
26-1-1.1	22.4	former sand mine with existing dock, Fort Pond Bay shorefront, proposed Benson Point subdivision	open space subdivision
27-2-2.1	NA	parcel consists of 27-2-2.1 & 2.2 (8.7 acres), Port Royal resort and restaurant, beach (Fort Pond Bay shorefront), Velocity Flood Zone	rezone westerly portion to A2 Residence
27-2-2.2	NA	see 27-2-2.1, beach (Fort Pond Bay shorefront), Velocity Flood Zone	see 27-2-2.1
27-2-4.1	1.2	Fort Pond Bay shorefront, Benson Reservation, existing public beach access and beach use, Velocity Flood Zone	public acquisition
27-2-17	47.6	LIRR Montauk train station & rail yard, existing dwelling & two private commercial uses, freshwater wetlands	obtain conservation easement over wetlands
27-3-18	<1.0	freshwater wetlands (Wuchebehsuc), archaeological resources (Massacre Valley), Fort Pond drainage shed, adjoins protected open space	public acquisition

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
27-3-24.7	26.4	Town-owned Fort Hill preserve & Fort Hill cemetery, moorland & downs, archaeological resources, prominent hilltop land, scenic views, Fort Pond drainage shed	rezone to Parks & Conservation
28-0-0 Fort Pond Road, p/o South Edgemere Street, & Echo Terrace;	-	unopened private roads, freshwater wetlands (Wuchebehsuc), historic and archaeological resources (Massacre Valley), Fort Pond drainage shed, steep slopes	abandonment and incorporation into adjacent public land
28-1-1.1	4.3	drainage swale, archaeological resources, proposed Wodnal Subwaiver	reduced density subdivision (protect drainage swale and archaeological resources)
28-1-25.7	2.8	see 27-3-24.7	see 27-3-24.7
28-1-32	<1.0	archaeological resources (Massacre Valley), Fort Pond drainage shed, steep slopes	public acquisition
28-1-33	<1.0	see 28-1-32	see 28-1-32
28-1-34.3	4.3	freshwater wetlands, adjoins protected open space, see 28-1-32	see 28-1-32
28-1-35	1.4	see 28-1-32	see 28-1-32
28-2-9	1.5	freshwater wetlands, adjoins protected open space, proposed Tuma lot line modification	lot line modification with conservation easements over wetlands
28-2-10	2.0	see 28-2-9	see 28-2-9

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
28-3-63.3	<1.0	freshwater wetlands, see 32-1-8.1	 obtain conservation easement over wetlands see 32-1-8.1
28-5-6	4.2	freshwater wetlands	obtain large lot easement, w/ conservation easement over wetlands
28-5-28.1	NA	part of 18-acre tract inc. 28-5-28.2, 28.3, 28.5, 28.5, 45, 50, 51; 28-6-16.3, 17 through 24, 31, 32.1, 32.2; 28-9-1, consisting of farmland (Ocean View Farm) with existing dwelling & farm structures, moorland, freshwater wetlands, historic resources [part of Fort Pond-to-Great Pond (Lake Montauk) stone wall], Fort Pond drainage shed	partial PDR/private conservation (farmland preservation, protection of wetlands & historic features) or semipublic facility
28-5-28.2	<1.0	see 28-5-28.1	see 28-5-28.1
28-5-28.3	<1.0	see 28-5-28.1	see 28-5-28.1
28-5-28.5	<1.0	see 28-5-28.1	see 28-5-28.1
28-5-28.6	<1.0	see 28-5-28.1	see 28-5-28.1
28-5-45	2.3	see 28-5-28.1	see 28-5-28.1
28-5-50	<1.0	see 28-5-28.1	see 28-5-28.1
28-5-51	1.5	see 28-5-28.1	see 28-5-28.1
28-6-16.3	4.3	see 28-5-28.1	see 28-5-28.1

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
28-6-17	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-18	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-19	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-20	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-21	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-22	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-23	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-24	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-31	<1.0	see 28-5-28.1	see 28-5-28.1
28-6-32.1	1.2	see 28-5-28.1	see 28-5-28.1
28-6-32.2	<1.0	see 28-5-28.1	see 28-5-28.1
28-9-1	2.7	see 28-5-28.1, adjoins protected open space	see 28-5-28.1
28-9-45	<1.0	freshwater wetlands, see 32-1-8.1	 obtain conservation easement over wetlands see 32-1-8.1

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
28-9-46.1	47.6	part of 98.8-acre tract inc. 28-9-46.2, oceanfront bluffs with hoodoos, moorland & downs, protected species (globally endangered), freshwater wetlands, historic structures (WW II coastal artillery fire control stations), scenic views, trails, adjoins protected open space, Local Significant Habitat, proposed Robert Bear & Peter Schub (Shadmoor) subdivision	private conservation/open space subdivision (protect historic structures, natural features, & trails)
28-9-46.2	51.3	see 28-9-46.1	see 28-9-46.1
29-1-18.6	<1.0	freshwater wetlands	public acquisition
29-1-19.6	<1.0	freshwater wetlands, adjoins protected open space	public acquisition
30-0-0,31-0-0 Otis Road (between Benson Dr. & Hoppin Ave.);	-	unopened (private) road, freshwater wetlands, Crane Creek drainage into Lake Montauk (Great Pond)	public acquisition
31-1-35	<1.0	freshwater wetlands, Crane Creek drainage into Lake Montauk (Great Pond)	public acquisition
32-1-1	1.0	freshwater wetlands, Stepping Stones Pond and Lake Montauk (Great Pond) drainage shed, adjoins protected open space (Town- owned wetlands)	public acquisition

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
32-1-8.1	5.2	part of 17.7-acre tract inc. 28-3-63.3, 28-9- 45, 32-1-9 through 12, 14, & 15, farmland (horse pasture), freshwater wetlands, Lake Montauk (Great Pond) drainage shed, contiguous with land zoned A Residence	 rezone to A Residence open space subdivision
32-1-8.2	4.7	existing tennis club, freshwater wetlands, moorland, Lake Montauk (Great Pond) drainage shed, contiguous with land zoned A Residence	rezone to A Residence
32-1-9	3.5	see 32-1-8.1	see 32-1-8.1
32-1-10	2.4	see 32-1-8.1	see 32-1-8.1
32-1-11	<1.0	see 32-1-8.1	see 32-1-8.1
32-1-12	<1.0	see 32-1-8.1	see 32-1-8.1
32-1-14	<1.0	see 32-1-8.1	see 32-1-8.1
32-1-15	2.5	see 32-1-8.1	see 32-1-8.1
32-1-21	2.4	unopened road, moorlands, wetlands	rezone to A Residence
32-2-2	<1.0	freshwater wetlands, Lake Montauk (Great Pond) drainage shed, adjoins protected open space	public acquisition
32-2-3	<1.0	see 32-2-2	see 32-2-2
32-2-4	<1.0	see 32-2-2	see 32-2-2

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
32-2-5	<1.0	see 32-2-2	see 32-2-2
32-2-35	<1.0	see 32-2-2	see 32-2-2
32-4-31.1	1.7	freshwater wetlands	private conservation/public acquisition
32-4-32	1.5	freshwater wetlands	private conservation/public acquisition
32-4-33	<1.0	freshwater wetlands	private conservation/public acquisition
32-4-34	<1.0	freshwater wetlands	private conservation/public acquisition
32-6-1.1	96.5	historic dwelling, oceanfront bluffs & moorland (Frisbies Point, Great Bend), freshwater wetlands, scenic views, partly within Montauk Association historic district, Local Significant Habitat	private conservation/open space subdivision (coordinate open space with adjoining land to east, no new development seaward of existing historic dwelling)
32-6-10	12.5	moorland, freshwater wetlands, scenic views, within Montauk Association historic district	 reduced density subdivision consistent with historic district protect wetlands, bluffs, & scenic views
32-6-11	14.3	oceanfront bluffs & moorland, freshwater wetlands, scenic views, within Montauk Association historic district, Local Significant Habitat	see 32-6-10

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
44-1-1	30.0	Town-owned land, former Montauk Landfill now partly used as Montauk Recycling & Transfer Station, eastern part of Hither Hills/Hither Woods open space block (approx. 3,000 acres), scenic views, trail corridor, near public water supply wells, adjoins protected open space	 rezone in part to Parks & Conservation reuse for active recreation facility or allow to revert to natural state
44-1-2	9.6	part of 27.3-acre tract inc. 44-1-3, 4, 6, 7, & 9, steep slopes, protected plant species, prominent hilltop land, scenic views, groundwater recharge area, eastern part of Hither Hills/Hither Woods open space block (approx. 3,000 acres), near public water supply well, trail corridor, proposed Tylin Realty Corp. subwaiver	public acquisition
44-1-3	11.3	antenna farm & appurtenant structures, see 44-1-2	partial public acquisition
44-1-4	1.2	see 44-1-2	see 44-1-2
44-1-6	2.1	existing dwelling, see 44-1-2	partial public acquisition
44-1-7	1.0	see 44-1-2	see 44-1-2
44-1-9	1.8	private road right-of-way, see 44-1-2	see 44-1-3

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
48-0-0 South Davis Avenue (South Davis Drive);	-	unopened private road (unopened from Suffolk County Water Authority property north to Old Midland Rd.), adjoins protected open space	abandonment and incorporation into adjacent Montauk Mountain Preserve
48-1-17.1	2.3	woodland, prominent hilltop land, eastern part of Hither Hills/Hither Woods open space block (approx. 3,000 acres), adjoins protected open space	private conservation
48-3-8.7	95.5	woodland, steep slopes, protected plant species, prominent hilltop land, groundwater recharge area, eastern part of Hither Hills/Hither Woods open space block (approx. 3,000 acres), near public water supply wells, trails, adjoins protected open space	 rezone to A5 Residence & Water Recharge overlay district public acquisition
48-3-10	3.0	woodland, groundwater recharge area, eastern part of Hither Hills/Hither Woods open space block (approx. 3,000 acres), near public water supply wells	rezone to A5 Residence & Water Recharge overlay district
48-3-11	5.0	see 48-3-10	see 48-3-10
48-3-29	<1.0	Montauk Village Association (MVA) green at entrance to Montauk hamlet, scenic views	obtain consent of landowner for rezoning to Parks & Conservation

MONTAUK	REACHES	5-9	OPEN SPACE RECOMMENDATIONS
SCTM # 0300-	Acres	Characteristics	Recommended Disposition
48-3-30	34.3	oceanfront bluffs & moorland, Benson Reservation, duneland, scenic views, public beach access	obtain consent of landowner for rezoning to Parks & Conservation
48-3-36	1.0	Fort Pond shorefront, trails, adjacent to historic structure (Second House), adjoins protected open space	public acquisition
48-3-53.1	5.2	SCWA well site, protected plant species, eastern part of Hither Hills/Hither Woods open space block (approx. 3,000 acres), adjoins protected open space	public acquisition/private conservation if SCWA ceases to use site for public water supply well
48-3-54	4.0	see 48-3-29	see 48-3-29
49-2-8	<1.0	freshwater wetlands	public acquisition
49-4-1	1.9	existing school & other buildings (Little Flower Roman Catholic grade school), playground, open fields	public acquisition in whole or in part if & when property becomes available (for downtown Montauk park and active recreation facilities)
51-1-7.2	<1.0	freshwater wetlands, adjoins protected open space	public acquisition
67-4-34	34.9	oceanfront bluffs & moorland, Benson Reservation, scenic views, public beach access	obtain consent of landowner Montauk Beach Property Owners Association (MBPOA) for rezoning to Parks & Conservation

APPENDIX C

HARBOR PROTECTION OVERLAY DISTRICT

§ 153-3-70 through -75 of East Hampton Town Code and related provisions PUBLIC HEARINGS HAVING BEEN HELD by the Town Board of the Town of East Hampton on January 6, 1995 and August 18, 1995, regarding a Local Law amending Chapter 153 ("Zoning") of the East Hampton Town Code to establish a zoning overlay district to be known as the Harbor Protection Overlay District, to establish regulations for the same, to amend Article XII of Chapter 153 (the Use District [Zoning] Map) to depict the boundaries of the said Harbor Protection Overlay District, and to make certain related amendments to Chapter 153, as more fully set forth in the text of the Local Law, said Local Law is hereby enacted to read as follows:

NOTICE OF ENACTMENT

PLEASE TAKE NOTICE that after a public hearing held pursuant to the requirements of law on January 6, 1995 and August 18, 1995 and at a meeting held by the Town board of the Town of East Hampton, New York on October 6 1995, the following Local Law was adopted:

LOCAL LAW NO. 12 OF 1995

INTRODUCTORY NO. 14 OF 1994

<u>A Local Law providing for the amendment of Chapter 153 ("Zoning") of the</u> <u>East Hampton Town Code to establish a zoning overlay district to be known as the</u> <u>Harbor Protection Overlay District, to establish regulations for the same, to amend</u> <u>Article XII of Chapter 153 (the Use District [Zoning] Map) to depict the boundaries of</u> <u>the said Harbor Protection Overlay District, and to make certain related amendments</u> <u>to Chapter 153 as more fully set forth herein</u>.

BE IT ENACTED by the Town Board of the Town of East Hampton as follows:

SECTION I. - FINDINGS AND OBJECTIVES:

The Town Board finds that the purity and productivity of East Hampton's harbors, bays, creeks, and ponds are essential to the Town's quality of life and to the continued well-being of the Town's citizens.

The Town's surface waters are an important recreational asset for the Town's residents and visitors, whose purity and biological productivity is a mainstay of East Hampton's resort-based economy. The Town's waters support a valuable commercial and recreational finfish and shellfish industry which has regional, State, and national significance. In addition, the State has included many of the Town's surface waters in its list of significant coastal fish and wildlife habitats.

The quality of the Town's surface waters, however, has deteriorated in the face of continued growth and impacts from construction, stormwater runoff associated with shoreside development, septic intrusion from residences and businesses, and other man-made causes. Large shellfishing areas have been closed due to pollution in the past decade.

East Hampton's current regulations do not provide sufficient protection to the Town's waterways. The prevention of water pollution, marine habitat degradation, and visual deterioration is wiser and less costly than attempting to alleviate these problems after they occur. Those who live on or near the Town's harbors and other surface waters derive many benefits from the proximity of these waterways, and they have a special responsibility to help protect them. Accordingly, the Town Board finds that the enactment of this Local Law is in the best interests of the Town and its citizens.

SECTION II. - TOWN CODE AMENDED:

Chapter 153 ("Zoning") of the East Hampton Town Code is hereby amended in part to read as follows:

§ 153-1-20. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

- CATCHMENT BASIN A belowground structure for the receipt and recharge of stormwater runoff.
- DRIVEWAY or PRIVATE DRIVEWAY A way for vehicular ingress and/or egress from a street to a lot, whether or not surfaced or improved.
- FLAG LOT A type of lot (commonly "flag-shaped" in configuration) in which street frontage is provided by a strip of land which is narrow in relation to the remainder of the lot and which extends from the main body of the lot to the street. A lot which does not physically front on or abut a street, but which has access to a street by means of an easement over other property, shall be deemed to be included in this definition.
- FLAG STRIP, FLAG ACCESS STRIP or PANHANDLE The part of a flag lot which provides physical access from the lot to a street and which is narrow in relation to the rest of the lot.
- § 153-3-10. Overlay districts established.

For the purpose of applying additional uniform land use regulations to specific categories of land sharing certain important charactgeristics, there are hereby established the following overlay districts:

- A. Affordable Housing Overlay District (AHO)
- B. Agricultural Overlay District (AGO)
- C. Flood Hazard Overlay District (FHO)
- D. Limited Business Overlay District (LBO)
- E. Water Recharge Overlay District (WRO)
 - F. Harbor Protection Overlay District (HPO)
- § 153-3-70. Harbor Protection Overlay District.
- § 153-3-71. Purpose.

The purpose of the Harbor Protection Overlay District is to maintain or improve surface water quality in East Hampton's major harbors, creeks, and ponds, including Accabonac Creek, Fort Pond (including the arm of Fort Pond north of Industrial Road), Georgica Pond, Great Pond (Lake Montauk), Hog Creek, Napeague Harbor, Northwest Creek, Northwest Harbor, Steppingstones Pond, Three Mile Harbor, Tuthill Pond, and Wainscott Pond. The district is also intended to maintain or improve wildlife habitat in these areas, and to maintain or restore these waterways as closely as possible to their natural condition, so that the Town's citizens and visitors can continue to enjoy and appreciate their natural values.

The Harbor Protection Overlay District will help prevent the entry of stormwater runoff into the Town's waters; gradually require the upgrading of out-moded or inoperable septic systems; preserve important indigenous vegetation; reduce impacts from residential and commercial swimming pools; and upgrade standards for fuel storage tanks.

East Hampton's waterways are among the Town's most prized features. They

support bountiful shellfish and finfish resources, offer prime habitat for local wildlife, offer residents and visitors a place to swim, fish, hunt, boat, observe wildlife, and enjoy scenic beauty and tranquility. The overlay district will help preserve these important benefits for future generations.

§ 153-3-73. Boundaries.

The boundaries of the Harbor Protection Overlay District shall be as shown on the Use District Map. The same may be amended from time to time by local law.

§ 153-3-75. Regulations.

In addition to any other provisions of this chapter which may apply to them, lots, lands, buildings, structures, uses, and activities within the Harbor Protection Overlay District shall be subject to the following restrictions and regulations:

- A.Control of stormwater runoff. The following regulations shall apply to structures or activities which produce or contribute to stormwater pollution of the Town's surface waters:
- (1)No parking lot or private driveway shall hereafter be constructed unless it has either an unimproved surface (e.g., dirt, crushed shells) or an improved surface consisting of one or more of the following materials: poured concrete, hot plant mix asphalt, rapid-curing cut-back asphalt, or quartz gravel.
- (2)No road, private driveway, or parking lot with an improved surface shall hereafter be constructed unless all stormwater generated by the said structure is directed into one or more catchment basins. The said catchment basin or basins shall have a combined volume (in cubic feet) equal to the surface area of the road, driveway, and/or parking area (in square feet), divided by six (6).
- (3)Any road, private driveway, or parking lot which is hereafter constructed with an improved surface shall be maintained so that all stormwater generated by the said structure is actually directed into the catchment basin or basins required by the preceding paragraph. Any catchment basin required by the preceding paragraph shall be kept clean and maintained so that it recharges stormwater into the ground without overflowing.
- (4)No pipe, culvert, drain, or similar conduit may hereafter be constructed or installed which discharges stormwater into wetlands (including surface waters).
- (5)Every principal building or addition to a principal building which is hereafter constructed or erected shall be furnished with gutters and leaders to direct stormwater from roofs into one or more catchment basins. The said catchment basin or basins shall have a combined volume (in cubic feet) equal to the surface area of the roof (in square feet), divided by six (6).
- (6)During construction work the disturbance of natural vegetation and land contours shall be minimized to the maximum extent practicable. Projectlimiting fencing, siltation mesh, strawbales, or similar devices for limiting land disturbance and retarding erosion and siltation shall be used during construction work and during any land clearing or grading in preparation for or associated with construction work.

- B.New sanitary septic systems. The following regulations shall govern the installation of all septic systems after this date, except for septic systems which are installed to replace legally preexisting septic systems:
- (1)No such septic system shall be installed or constructed unless it is set back a minimum of two hundred (200) feet from the surface waters of Accabonac Creek, Fort Pond (including the arm of Fort Pond north of Industrial Road), Georgica Pond, Great Pond (Lake Montauk), Hog Creek, Napeague Harbor, Northwest Creek, Northwest Harbor, Steppingstones Pond, Three Mile Harbor, Tuthill Pond, and/or Wainscott Pond and from the upland boundary of any wetlands contiguous to the foregoing bodies of water. To the extent that any provision of Article IV imposes a lesser wetland setback for septic systems, the requirements of this paragraph shall be controlling with respect to lands within the Harbor Protection Overlay District.
- (2)No septic system leaching pool shall hereafter be installed unless the bottom of the leaching pool is situated a minimum of four (4) feet above the groundwater table.
- C.Existing sanitary septic systems. Any septic system which legally exists on a residential property on January 1, 1996 shall be replaced or upgraded in the following circumstances and to the following extent:
- (1)Every septic system regulated by this subsection shall be replaced or upgraded if:
- (a)A natural resources special permit is required for work to be performed on the lot or parcel containing the septic system; and
- (b)The work to be performed will increase the habitable floor area of a principal building on the lot, or will increase the number of bathrooms within a building on the lot; and
- (c)The septic system in question does not meet the minimum requirements of the Suffolk County Department of Health Services for vertical separation to groundwater, for setback to surface waters, or for septic system capacity, or in that it lacks a septic tank.
- (2)Where this subsection requires that an existing septic system be replaced or upgraded, the new or upgraded septic system shall meet the following requirements:
- (a)It shall comply with the requirements of the Suffolk County Department of Health Services for new septic systems and shall be installed under the supervision of the Sanitation Inspector; and
- (b)It shall be set back a minimum of one hundred fifty (150) feet from the upland boundary of all tidal wetlands (including tidal surface waters) or, if that is not feasible, it shall be set back the maximum practicable distance from the surface waters of Accabonac Creek, Fort Pond (including the arm of Fort Pond north of Industrial Road), Georgica Pond, Great Pond (Lake Montauk), Hog Creek, Napeague Harbor, Northwest Creek, Northwest Harbor, Steppingstones

Pond, Three Mile Harbor, Tuthill Pond, and/or Wainscott Pond and from the upland boundary of any wetlands contiguous to the foregoing bodies of water, taking into consideration such factors as the physical constraints of the site and the location of nearby water supply wells.

D.Limited clearing of lots. Clearing of lots or parcels of land within the Harbor Protection Overlay District shall be restricted as set forth herein.

(1)The total area of a lot which may be cleared of indigenous natural vegetation shall not exceed the following amounts for any lot located wholly or partly within the overlay district:

Lot Area	Maximum Clearing
(square feet)	Permitted

In Residence Districts:

Up to and including	<i>10,000 square feet</i>
39,999	or 35% of lot area,
	whichever is greater

From 40,000 to and	<i>10,000 square feet</i>
including 280,000	+ (lot area X 12.5%)

Greater than 280,000

45,000 square feet

In Commercial Districts:

All lots

10,000 square feet or 50% of lot area, whichever is greater

- In calculating the amount of clearing permitted on a flag lot by this subsection, the area of any flag strip shall be excluded from lot area. Likewise, any clearing for driveway purposes within the flag strip shall not be counted into the permissible amount of clearing.
- (2)Clearing in excess of forty-five thousand (45,000) square feet on any lot in a residence district is prohibited unless the following requirements are met:

(a)The area of the lot, exluding the area of any flag strip but otherwise determined as set forth in § 153-1-20 hereof, exceeds three hundred thousand (300,000) square feet; and

(b)Site plan approval and a special permit have been first obtained from the Planning Board.

E.Swimming pools. The following regulations shall govern the construction or installation of swimming pools:

(1)No swimming pool shall hereafter be constructed or installed unless it is furnished with a system to reduce the use of chlorine disinfectant, such as an ozonator, ionizer, or ultra violet disinfectant system.

(2)No swimming pool shall hereafter be constructed or installed unless the bottom

of the swimming pool is situated a minimum of two (2) feet above the groundwater table. The Building Inspector shall require proof of compliance with this provision before issuing a Certificate of Occupancy.

- (3)No swimming pool shall hereafter be constructed or installed unless it is provided with one or more dry wells which are easily accessible for the evacuation of water from the swimming pool. In the case of a gunite or other evacuable swimming pool, such dry wells shall have a total volume at least equal to ten percent (10%) of the volume of the pool, and in any case not less than four hundred fifty (450) gallons (or approximately the volume of a three (3) foot deep by five (5) foot wide dry well). In the case of a vinyl-lined swimming pool, the total volume of dry wells shall be at least equal to one-half (1/2) the dry well volume required for a gunite pool of the same size.
- (4)No swimming pool shall be drained or have its water discharged into a driveway, storm drain, public or private street, or into wetlands (including surface waters), nor shall any swimming pool be drained or have its water discharged into any receptacle other than a dry well installed as required by this subsection.
- (5)The cleaning of swimming pools or swimming pool surfaces by means of an acid wash is prohibited unless the acids used are completely neutralized before discharge from the swimming pool.
- F.Fuel storage tanks. On lots having one (1) or more fuel storage tanks, whose combined capacity does not exceed one thousand one hundred (1,100) gallons, the installation of each fuel storage tank shall hereafter be subject to the following requirements and restrictions:
- (1)If installed belowground, each tank shall be of double-walled fiberglass manufacture.
- (2)If installed aboveground, each tank shall either:
- (a)be installed within the cellar of a building having a poured-concrete floor, or
- (b)be installed atop an impermeable flat surface, e.g., a concrete pad, which extends at least six (6) inches laterally beyond the outermost sides of the tank and any associated piping, and be installed so that it is open and accessible for inspection on at least three (3) sides.
- § 153-3-79. Surveys and other information.

In order to ensure compliance with the regulations of the Harbor Protection Overlay District, every application for a building permit to construct or erect a building or structure within the said district shall be accompanied by a survey which has been prepared by a licensed surveyor and which depicts the following:

- A.Clearing. The areas of the lot which are proposed to be cleared, and a calculation of the percentage of lot area which will be cleared including all portions of the lot previously cleared.
- B.Depth to groundwater. For projects involving the installation of septic system discharge devices or swimming pools, or which require the installation of catchment basins, the mean depth to groundwater in the areas

proposed for any septic system, swimming pool, or catchment basin.

§ 153-4-37. Relief provision.

A.Principal buildings on small lots. In certain limited cases the local agency issuing a natural resources special permit shall have authority to approve, by natural resources special permit, lesser bluff or wetland setbacks than are required by §§ 153-4-32 or 153-4-34 hereof and lesser wetland setbacks or depths to groundwater than are required by subsections B and C of § 153-3-75 hereof. The dimensional relief authorized by this section may be employed only for one (1) principal building or additions thereto, together with necessary wastewater disposal facilities, and only in the following instances:

(1)The standards for issuance of a natural resources special permit are met; and

- (2)In the determination of the local agency, the dimensional requirements of the above-cited Code provisions cannot be met because the following factors apply:
- (a)The applicable setback requirements cannot be met because of the small size of the lot or the existing location of improvements on the property, even if reductions are made in the size of the principal building or additions or if reasonable reductions are made in yard setbacks; or

(b)For septic systems, the depth to groundwater or setback requirements cannot be met because the small size of the lot, the existing location of improvements, the elevation of the property or the location of nearby water supply wells makes siting a conforming septic system on the property impracticable.

В.... С....

§ 153-5-50. Specific standards and safeguards.

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EXCESS CLEARING IN HARBOR PROTECTION OVERLAY DISTRICT

(1)Lot area, exclusive of any flag strip, must exceed three hundred thousand (300,000) square feet.

(2)No greater than fifteen percent (15%) of the lot area may be cleared, with clearing to be calculated as set forth in Subsection E of § 153-3-65 hereof.

(3)The location, amount, and nature of the proposed clearing shall not have the following adverse effects:

(a)Endangerment of the Town's groundwater or of wetlands (including surface waters) adjacent to or downgradient of the proposed clearing;

(b)Destruction of vegetative buffers adjacent to wetlands (including surface waters) or degradation of important wildlife habitat;

(c)Destruction of vegetation which is rare or unusual in the Town; or

(d)Despoliation of publicly important views or buffers, such as areas which are

visible from natural bodies of water or public streets or which border protected natural lands.

NATURAL RESOURCES SPECIAL PERMIT:

- (9)No Natural Resources Special Permit which is required for projects or activities in tidal waters shall allow the use of wood which has been treated with copper chromated arsenate (CCA), ammoniacal copper quat (ACQ), or creosote unless it can be shown that no reasonable alternative material will serve the purpose for which the CCA-, ACQ-, or creosote-treated wood is intended to be used. In determining whether no reasonable alternative to the proposed wood exists, the Board of Appeals shall take into account the cost of alternative materials, their suitability for the intended use (e.g., structural stability), and any environmental benefit to using alternative materials.
- (10)For structures, lands, or uses located within the Harbor Protection Overlay District, the disturbance of natural vegetation and topography during construction activities shall be minimized to the greatest degree practicable. To this end, project-limiting fencing, siltation mesh, strawbales, or similar devices for controlling land disturbances and retarding erosion and siltation shall be required during construction, and during any clearing or grading of land preparatory to or associated with construction activities.

Article XII. Use District (Zoning) Maps.

[See attached maps.]

SECTION III. - EFFECTIVE DATE:

This Local Law shall take effect immediately upon filing with the Secretary of State as provided by law.

DATED:

BY ORDER OF THE TOWN BOARD TOWN OF EAST HAMPTON, NEW YORK

FREDERICK W. YARDLEY TOWN CLERK

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APPENDIX D

FERRY LEGISLATION

Zoning Code Chapter 153 SEQRA Law Chapter 75 Waterways and Boats Chapter 149

(1153)<u>ADOPT LOCAL LAW</u>: <u>AMEND CHAPTER 153</u> - REGULATION OF FERRY TERMINALS & OTHER PURPOSES

The following resolution was offered by Councilman Pete Hammerle, seconded by Councilwoman Nancy McCaffrey, and adopted:

WHEREAS, a Public Hearing was held by the Town Board of the Town of East Hampton on <u>December 18, 1997</u>, regarding a Local Law amending Chapter 153 ("Zoning") of the Town Code in order to institute improved zoning regulations governing ferry terminals within the Town and to make certain other related changes in the Zoning Code, all as more fully set forth in the text of the Local Law; and

WHEREAS, the Town Board held a public hearing on October 24, 1997 on an earlier version of this Local Law (Introductory No. 36 of 1997), which was very well attended and led to several changes in the proposed law; and

WHEREAS, the Town Board has considered the comments of all persons regarding this revised version of the Local Law (Introductory No. 43), both as submitted in writing and as presented orally at the public hearing; and

WHEREAS, the Town Board has prepared and considered Environmental Assessment Forms which evaluate the potential environmental impacts of the proposed Local Law; and

WHEREAS, the Board has determined that the adoption of this Local Law will not have a significant negative impact on the environment;

NOW, THEREFORE, BE IT RESOLVED, that a negative declaration is hereby made pursuant to the State Environmental Quality Review Act (SEQRA); and

BE IT FURTHER RESOLVED, that the said Local Law is hereby enacted to read as follows:

LOCAL LAW NO. 40 OF 1997

INTRODUCTORY NO. 43 OF 1997

<u>A Local Law providing for the amendment of Chapter 153 ("Zoning") of the East Hampton</u> <u>Town Code in order to institute improved zoning regulations governing ferry terminals within the</u> <u>Town and to make certain other related changes in the Zoning Code, all as more fully set forth in</u> the text of the Local Law, said Local Law to read as follows:

BE IT ENACTED by the Town Board of the Town of East Hampton as follows:

SECTION I. - FINDINGS AND OBJECTIVES:

As the year-round, seasonal, and transient populations of East Hampton Town have grown over the years, congestion on the Town's highways has become an increasingly serious threat to public health and safety and to the economic vitality and general livability of the Town. This increased road congestion may be greatly exacerbated by recent and proposed changes in ferry service on the East End of Long Island. The most significant such change has been the popularity of very large casinos established on the Connecticut mainland near New London, Connecticut, which has greatly increased ferry traffic across Long Island Sound by Long Island residents. Technological changes have also vastly increased the speed and, hence, the potential carrying capacity, of ferries. These new developments have made it imperative that the Town update its zoning regulations concerning ferries and ferry terminals.

The Town Board commissioned a Townwide Transportation Study in 1995, the first such transportation analysis since the 1960's. That study, prepared by a respected engineering firm and completed in June of this year, was incorporated into the Town's Comprehensive Plan in August, following public hearings. The study concluded that "the Town is at a `crossroads' in terms of developing a solution to its worsening traffic congestion in the summer season." The

Transportation Study found that traffic volumes on the Montauk Highway (S.R. 27), the Town's primary thoroughfare, are already at or near capacity for lengthy periods of time in the summer months. The study also found that traffic on the Town's roadways in the summer has been increasing at an annual rate of eight per cent (8%), far faster than the average rate of traffic growth on Long Island.

These findings merely confirm what has already become obvious to Townspeople: summertime road traffic in East Hampton has become so heavy as to undermine the Town's rural atmosphere, create very inconvenient and even dangerous driving conditions on the Town's roads, and generally diminish the quality of life heretofore enjoyed by residents and visitors alike.

In light of the Transportation Study's findings, it is clear that major ferry operations in the Town would substantially worsen the already bad traffic situation, especially if the ferries included vehicle ferries operating between the Town and the Connecticut shore or included high-speed, high-volume passenger ferries transporting passengers to the large Connecticut casinos. The revisions contained in this Local Law are intended to improve and strengthen the Town's zoning regulations as they pertain to ferries, and to thereby reduce the potential traffic and other impacts of such uses.

SECTION II. - TOWN CODE AMENDED:

A. Chapter 153 ("Zoning") of the East Hampton Town Code is hereby amended to add to § 153-1-20, "Definitions," the following terms:

- "AIR TERMINAL An airport or heliport, and all related facilities including hangars, offices, and parking areas.
- BUS TERMINAL A bus depot or similar facility for embarking or disembarking passengers of a bus line, limousine service, taxi service, or other similar business engaged in transporting passengers on the public highways, including any ticket office and all related facilities including parking areas. This term shall also apply to a storage yard for vehicles used in such business if the yard includes administrative offices and/or fueling facilities, but it shall not be construed to include a "taxi company" unless the site from which the "taxi company" operates is also used to embark or disembark passengers and/or includes fueling facilities.
- COLLECTOR STREET Any road now or hereafter designated as a state or county highway, and any of the following town highways: Abraham's Path, Accabonac Highway (Old Accabonac Road), Albert's Landing Road, Alewive Brook Road, Atlantic Avenue, Barnes Hole Road, Bluff Road, Cedar Street, Copeces Lane, Cranberry Hole Road, Cross Highway (between Montauk Highway and Skimhampton Road), Cross Highway (between Albert's Landing Road and Fresh Pond Road), Cross Highway (between Fresh Pond Road and Abraham's Landing Road), Cross Highway (between Abraham's Landing Road and Cranberry Hole Road), Daniel's Hole Road, East Flamingo Avenue, Fireplace Road, Floyd Street, Fort Pond Boulevard, Fresh Pond Road, Further Lane, Hand's Creek Road, Hog Creek Road, Indian Wells Plain Highway, Industrial Road (Montauk), Jenny's Path, King's Point Road, Napeague Meadow Road, Navy Road, Neck Path, Northwest Road, Northwest Landing Road, Old House Landing Road, Old Montauk Highway (the segment running through Hither Hills State Park to downtown Montauk), Old Northwest Road, Old West Lake Drive, Sayres Path, Second House Road, Skimhampton Road, Soak Hides Road, South Fairview Avenue, Spring Close Highway, Springs-Amagansett Road (Old Stone Highway), Springy Banks Road, Stephen Hand's Path, Swamp Road, Town Lane, Town Line Road, Two Holes of Water Road, Wainscott Main Street, Wainscott Northwest Road, Wainscott Stone Road.
- EXCURSION BOAT A vessel used on a commercial basis to take passengers to sea from any port or place within the Town of East Hampton, and which returns those passengers to the point of origin without an intervening stop at any port or other land not located in the Town. As used herein, the term "to sea" shall mean into any harbor, bay, or other waters within or adjoining the Town of East Hampton, including the Atlantic Ocean. This term shall include a vessel employed on a commercial basis for party-fishing trips (commonly called a "party boat"), a vessel used for sight-seeing trips or tours (e.g., a "whale-watching" boat), a dinner cruise vessel, or a vessel employed on gambling trips outside the territorial waters of the State of New York. Compare "ferry."

- FERRY A vessel used in the business of carrying passengers between any port or place in the Town of East Hampton and any other port or place without the Town. Compare "excursion boat."
- FERRY PASSENGER CAPACITY The number of persons which a vessel used as a ferry may lawfully carry, under the rules and regulations of the United State Coast Guard or other regulating authority then in effect. As applied to a "passenger ferry terminal," this term shall mean the sum of the passenger capacities of each ferry regularly docking at or using the terminal, multiplied by the peak number of departures of each such vessel in any twentyfour (24) hour period as shown by the ferry terminal's public sailing schedule.
- FERRY TERMINAL, PASSENGER Any dock, wharf, pier, or other place at which a ferry embarks or disembarks passengers, including ticket offices, parking areas, and all other related facilities. This term shall not include a facility for embarking or disembarking motor vehicles to or from a ferry.
- FERRY TERMINAL, VEHICLE Any dock, wharf, pier, or other place at which a ferry embarks or disembarks passengers and motor vehicles (i.e., trucks, buses, cars, and/or motorcycles), including ticket offices, parking areas, queuing aisles, and all other related facilities.
- RAIL TERMINAL A railroad train station, including rail yards and rail freight facilities whether or not associated with passenger rail service, and all parking areas and related facilities.
- TRUCK TERMINAL A truck depot or similar commercial road freight facility at which goods carried for hire for third parties are loaded or off-loaded, together with all related facilities including parking areas. This term shall also include a storage yard for trucks used in such business if the yard includes administrative offices and/or fueling facilities."

B. Chapter 153 ("Zoning") of the Town Code is hereby further amended at § 153-1-20, "Definitions," by renumbering paragraph C of the subsection entitled "EXPANSION, SUBSTANTIAL" as paragraph D, and by adding a new paragraph C to "EXPANSION, SUBSTANTIAL" to read as follows:

"C.Passenger ferry terminals. In addition to the other provisions of this subsection regarding substantial expansion of structures or uses, a substantial expansion of a "passenger ferry terminal" shall be deemed to result from any increase in "ferry passenger capacity" as defined in this chapter. Such increase shall be regarded as a "substantial expansion" regardless of its magnitude and regardless of whether it is due to an increase in the number of ferries using the terminal, the replacement of one ferry with another having a larger capacity, an increase in the capacity of an existing ferry, an increase in the number of ferry trips daily, or other cause."

C. Chapter 153 ("Zoning") of the Town Code is hereby amended to delete from § 153-1-20, "Definitions," the term "Transportation Terminal."

D. Chapter 153 ("Zoning") of the Town Code is hereby amended at § 153-5-26, "Substantial expansion of existing special permit uses," said section as amended to read as follows:

"Notwithstanding any language to the contrary in the preceding section, an existing special permit use as described therein shall require a special permit in any case where a substantial expansion of such use is undertaken. In such case, the local agency having jurisdiction over the special permit needed for the expansion shall review and decide upon the application for such permit pursuant to the same substantive and procedural standards as are provided for herein for an original special permit. Any special permit issued to authorize a substantial expansion of an existing special permit use shall be conditioned upon conformance by the use to any standards (other than standards concerning initial site location) of §§ 153-5-40, 153-5-45, and 153-5-50 of this Article with which it does not then comply."

E. Chapter 153 ("Zoning") of the Town Code is hereby amended to add new parts entitled "BUS TERMINAL" and "FERRY TERMINAL, PASSENGER" to § 153-5-50, "Specific standards and safeguards," to read as follows:

"BUS TERMINAL:

- (1)The site shall be provided with public rest rooms.
- (2)The site shall be of adequate size to accommodate an improved parking area capable of handling pickup and delivery of passengers as well as areas for long-term parking, all of which areas are large enough for the peak number of passengers anticipated to use the terminal.

FERRY TERMINAL, PASSENGER:

- (1)No special permit shall be issued hereunder unless the Planning Board shall find and determine that the passenger ferry service to be accommodated by the proposed passenger ferry terminal will not result in either of the following adverse effects:
- (a)A significant increase in overall traffic volume on the streets of the Town; or
- (b)An increase in traffic volume along any portion of a state road, county road, or other collector street, or an increase in traffic volume at the intersection of a state road, county road, or other collector street with another state road, county road, or collector street, such that traffic flow on that road segment or at that intersection would be degraded by an amount equivalent to a reduction in the "level of service" of the road segment or intersection by one (1) full grade. For the purpose of applying this standard, "level of service" shall have the meaning ascribed to it in the Highway Capacity Manual prepared by the Transportation Research Board of the National Research Council.
- (2)The site shall be of adequate size to accommodate an improved parking area capable of handling pickup and delivery of passengers as well as areas for long-term parking, all of which areas are large enough for the peak number of passengers anticipated to use the terminal.
- (3)In order to assist the Planning Board in making the determinations required by paragraphs (1) and (2) hereof, every application for a special permit hereunder shall state a maximum ferry passenger capacity for the terminal. The Planning Board shall use this capacity in evaluating the eligibility of the proposed use for a special permit, and may set a lower maximum capacity as a condition of any special permit which it issues if the Board believes this is necessary to ensure compliance with the provisions of this chapter. Any special permit actually issued by the Planning Board shall impose a maximum ferry passenger capacity for the terminal. Said capacity shall not be increased unless a new special permit has first been issued therefor.
 - (4)The limitations on vessel horsepower and capable speed which are found at § 153-11-88 (PASSENGER FERRY TERMINAL) (B) of this Code shall be expressly included as a condition of any special permit issued hereunder.

(5)The site shall be provided with public rest rooms."

F. Chapter 153 ("Zoning") of the Town Code is hereby amended to delete from § 153-5-50, "Specific standards and safeguards," the part entitled "TRANSPORTATION TERMINAL."

G. Chapter 153 ("Zoning") of the Town Code is hereby amended at § 153-11-45, "Schedule of off-street parking requirements," to add the following:

"(30) Passenger ferry

terminal1 per each 3 persons of ferry passenger capacity, as defined herein."

H. Chapter 153 ("Zoning") of the Town Code is hereby further amended to add a new part entitled "FERRY TERMINAL, PASSENGER" to § 153-11-88, "Additional rules for particular principal and accessory uses," to read as follows:

"FERRY TERMINAL, PASSENGER:

- A.Special permit required. No person shall construct, commence to use, or substantially expand a passenger ferry terminal, nor commence any passenger ferry service, without having first obtained a special permit pursuant to Article V hereof which specifically authorizes the proposed use and approves the onshore terminal facility to be employed.
- B.Vessel limitations. No ferry which has more than two thousand (2,000) installed horsepower and the capability of travelling at a speed in excess of twenty (20) knots, nor any vehicle ferry of any description, shall dock at or otherwise make use of any passenger ferry terminal, or be allowed to dock at or make use of such facility, except in case of emergency."

I. Chapter 153 ("Zoning") of the Town Code is hereby further amended at § 153-11-10, "Use Table and Dimensional Table for all districts," at Table I and Table II, to make the additions or deletions shown as follows:

[SEE ATTACHED PORTIONS OF TABLES I AND II, § 153-11-10.]

SECTION III. - SEVERABILITY:

Should any part or provision of this Local Law be decided by the courts to be unconstitutional or invalid, such decision shall not affect the validity of this Local Law as a whole nor any part thereof other than the part so decided to be unconstitutional or invalid.

SECTION IV. - EFFECTIVE DATE:

This Local Law shall take effect immediately upon filing with the Secretary of State as provided by law.

AND BE IT FURTHER RESOLVED, that the Town Clerk is directed to forward copies of this resolution to Town Attorney Robert J. Savage, Deputy Town Attorney Richard E. Whalen, and Planning Director Lisa M. Liquori.

DATED: December 18, 1997 BY ORDER OF THE TOWN BOARD TOWN OF EAST HAMPTON, NEW YORK

> FREDERICK W. YARDLEY TOWN CLERK

(0078)<u>ADOPT LOCAL LAW</u>: AMEND CHAPTER 75 ("ENVIRONMENTAL QUALITY REVIEW")

The following resolution was offered by Councilman Pete Hammerle, seconded by Councilman Job Potter, and adopted:

WHEREAS, a Public Hearing was held by the Town Board of the Town of East Hampton on <u>October 24, 1997</u>, regarding a Local Law amending Chapter 75 ("Environmental Quality Review") of the Town Code in order to designate the issuance of a special permit for a passenger ferry terminal a Type I action under SEQRA, as more fully set forth in the text of the Local Law; and

WHEREAS, the Town Board has considered the comments of all persons regarding this Local Law, both as submitted in writing and as presented orally at the public hearing; and

WHEREAS, the Town Board has prepared and considered Environmental Assessment Forms which evaluate the potential environmental impacts of the proposed Local Law; and

WHEREAS, the Board has determined that the adoption of this Local Law will not have a significant negative impact on the environment, and has previously made a negative declaration pursuant to the State Environmental Quality Review Act (SEQRA) regarding this Local Law and companion legislation, by resolution adopted December 18, 1997;

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the said Local Law is hereby enacted to read as follows:

LOCAL LAW NO. 2 OF 1998 INTRODUCTORY NO. 37 OF 1997

A Local Law providing for the amendment of Chapter 75 ("Environmental Quality Review") of the East Hampton Town Code in order to designate the issuance of a special permit for a passenger ferry terminal a Type I action under SEQRA, said Local Law to read as follows:

BE IT ENACTED by the Town Board of the Town of East Hampton as follows:

SECTION I. - FINDINGS AND OBJECTIVES:

This Local Law is intended to ensure that any application for a special permit to establish, operate, or substantially expand a passenger ferry terminal within the Town will receive a thorough environmental review under SEQRA. New or expanded ferry operations have the potential to seriously worsen the Town's traffic problems and to have other adverse impacts, such as increased parking demand in the Montauk Harbor area. The review of any application for such a permit is therefore enumerated as a Type I action pursuant to SEQRA.

SECTION II. - TOWN CODE AMENDED:

Chapter 75 ("Environmental Quality Review") of the East Hampton Town Code is hereby amended at subsection B of § 75-3-20, "Type I actions," to read as follows:

"(8)The issuance of a special permit authorizing the construction or substantial expansion of a passenger ferry terminal or authorizing the commencement of such use."

SECTION III. - SEVERABILITY:

Should any part or provision of this Local Law be decided by the courts to be unconstitutional or invalid, such decision shall not affect the validity of this Local Law as a whole nor any part thereof other than the part so decided to be unconstitutional or invalid.

SECTION IV. - EFFECTIVE DATE:

This Local Law shall take effect immediately upon filing with the Secretary of State as provided by law.

AND BE IT FURTHER RESOLVED, that the Town Clerk is directed to forward copies of this resolution to Town Attorney Cynthia Ahlgren Shea, Deputy Town Attorney Richard E. Whalen, and Planning Director Lisa M. Liquori.

DATED: January 6, 1998 BY ORDER OF THE TOWN BOARD TOWN OF EAST HAMPTON, NEW YORK

FREDERICK W. YARDLEY, TOWN CLERK

The adoption of the foregoing resolution was duly put to a vote on roll call, which resulted as follows:

VOTE	AYE	
VOTE	AYE	
VOTE	AYE	
VOTE		AYE
VOTE	AYE	
	VOTE VOTE VO	VOTE AYE VOTE AYE VOTE AYE

The resolution was declared duly adopted.

(0077)ADOPT LOCAL LAW:

AMEND CHAPTER 149 ("WATERWAYS AND BOATS") The following resolution was offered by Councilman Pete Hammerle, seconded by Councilman Job Potter, and adopted:

WHEREAS, a Public Hearing was held by the Town Board of the Town of East Hampton on <u>October 24, 1997</u>, regarding a Local Law amending Chapter 149 ("Waterways and Boats") of the Town Code in order to regulate the speed of certain high-powered vessels within Town waters, all as more fully set forth in the text of the Local Law; and

WHEREAS, the Town Board has considered the comments of all persons regarding this Local Law, both as submitted in writing and as presented orally at the public hearing; and

WHEREAS, the Town Board has prepared and considered Environmental Assessment Forms which evaluate the potential environmental impacts of the proposed Local Law; and

WHEREAS, the Board has determined that the adoption of this Local Law will not have a significant negative impact on the environment, and has previously made a negative declaration pursuant to the State Environmental Quality Review Act (SEQRA) regarding this Local Law and companion legislation, by resolution adopted December 18, 1997;

NOW, THEREFORE, BE IT FURTHER RESOLVED, that the said Local Law is hereby enacted to read as follows:

LOCAL LAW NO. 1 OF 1998 INTRODUCTORY NO. 38 OF 1997

<u>A Local Law providing for the amendment of Chapter 149 ("Waterways and Boats") of the</u> <u>East Hampton Town Code in order to regulate the speed of certain high-powered vessels within</u> <u>Town waters, said Local Law to read as follows:</u>

BE IT ENACTED by the Town Board of the Town of East Hampton as follows:

SECTION I. - FINDINGS AND OBJECTIVES:

With recent advances in ship technology and horsepower, it has become increasingly likely that high-powered high-speed vessels will enter Town waters. These vessels, at speed, pose a considerable risk to boaters and other vessel operators. Certain high-powered high-speed vessels with catamaran or other low-water-resistance hulls have also been shown to create wakes which are unusually dangerous to small boats and to bathers in near-shore areas. For these reasons, the Town Board finds that speed restrictions on such vessels, as set forth in this Local Law, are necessary to protect the public health and safety.

SECTION II. - TOWN CODE AMENDED:

A. Chapter 149 ("Waterways and Boats") of the East Hampton Town Code is hereby amended in part to add a new section numbered § 149-8.1, to entitle that section "Use of Town launching ramps," and to relocate and renumber existing subsections C and D of § 149-8, "Speed of boats," as subsections A and B of § 149-8.1.

B. Chapter 149 ("Waterways and Boats") of the Town Code is hereby further amended to add a new subsection C to § 149-8, "Speed of boats," said subsection C to read as follows:

"C.No vessel of more than two thousand (2,000) installed horsepower shall operate at a speed in excess of fifteen (15) miles an hour within or upon town waters. This subsection shall not apply to any government or military vessel, to any vessel for which a limited, one-time written exemption of the Town Harbormaster has been previously obtained, nor to any vessel engaged in a bona fide rescue effort or which is otherwise rendering aid or assistance during an emergency."

SECTION III. - SEVERABILITY:

Should any part or provision of this Local Law be decided by the courts to be unconstitutional or invalid, such decision shall not affect the validity of this Local Law as a whole nor any part thereof other than the part so decided to be unconstitutional or invalid.

SECTION IV. - EFFECTIVE DATE:

This Local Law shall take effect immediately upon filing with the Secretary of State as provided by law.

AND BE IT FURTHER RESOLVED, that the Town Clerk is directed to forward copies of this resolution to Town Attorney Cynthia Ahlgren Shea, Deputy Town Attorney Richard E. Whalen, and Planning Director Lisa M. Liquori.

DATED: January 6, 1998 BY ORDER OF THE TOWN BOARD TOWN OF EAST HAMPTON, NEW YORK

FREDERICK W. YARDLEY, TOWN CLERK

The adoption of the foregoing resolution was duly put to a vote on roll call, which resulted as follows:

SUPERVISOR CATHERINE LESTER	VOTE	AYE	
COUNCILMAN LEN BERNARD	VOTE	AYE	
COUNCILMAN JOB POTTER	VOTE	AYE	
COUNCILMAN PETE HAMMERLE	VOTE		AYE
COUNCILWOMAN PAT MANSIR	VOTE	AYE	

The resolution was declared duly adopted.

APPENDIX E.

COASTAL EROSION HAZARD ACT REGULATIONS

(excerpted)

[Sections **505.1 - 505.4** contain the Purpose, Definitions of terms, Functions of natural features, and Applicability of the Regulations.]

505.5 Coastal erosion management permits; regulatory procedures.

(a) Any person proposing to undertake a regulated activity within a designated erosion hazard area must first obtain a coastal erosion management permit. ["Regulated activity" means the construction, modification, restoration or placement of a structure, or major addition to a structure, or any action or use of land which materially alters the condition of land, including grading, excavating, dumping, mining, dredging, filling, or other disturbance of soil. "Structure" means any object constructed, installed or placed in, on, or under land or water including, but not limited to, a building; permanent shed; deck; in-ground and above ground pool; garage; mobile home; road; public service distribution, transmission or collection system; tank; pier; dock; wharf; groin; jetty; seawall; revetment; bulkhead; or breakwater; or any addition to or alteration of the same.]

[(b) through (e) of this section contains application requirements and jurisdictional information.]

505.6 Standards for issuance of coastal erosion management permits.

A coastal erosion management permit will be issued only if the commissioner finds that the proposed regulated activity:

- (a) is reasonable and necessary, considering reasonable alternatives to the proposed activity and the extent to which the proposed activity requires a shoreline location;
- (b) will not be likely to cause a measurable increase in erosion at the proposed site or at other locations; and
- (c) prevents, if possible, or minimizes adverse effects on:
 - (1) natural protective features and their functions and protective values as described in section **505.3** of this Part;
 - (2) existing erosion protection structures; and
 - (3) natural resources including, but not limited to, significant fish and wildlife habitats and shellfish beds.

505.7 Restrictions on regulated activities within structural hazard areas [shorelands located landward of natural protective features and having shorelines receding at a long-term average annual recession rate of 1 foot or more per year].

- (a) Movable structures [including mobile homes and structures built on skids or piles] may be constructed or placed within a structural hazard area only if a coastal erosion management permit has been granted. Coastal erosion management permit requirements include the following.
 - (1) No permanent foundation is attached to the movable structure and any temporary foundations are removed at the time the structure is moved. Below-grade footings will be allowed if satisfactory provision is made for their removal.

- (2) No movable structure may be placed closer to the landward limit of a bluff than 25 feet.
- (3) No movable structure may be placed or constructed so that, according to accepted engineering practice, its weight places an escessive ground loading on a bluff.
- (4) A plan for the landward relocation of a movable structure, when threatened by shoreline recession, must be included with each coastal erosion management permit application.
- (5) Movable structures, which have been located within an erosion hazard area pursuant to a coastal erosion management permit, must be removed before the receding edge recedes to within 10 feet of the most seaward point of the movable structure.
- (6) Debris from structural damage which may occur as a result of sudden, unanticipated bluff edge failure or erosion must be removed within 60 days of the damaging event.
- (7) The last owner of record, as shown on the latest assessment roll, or real property upon which a movable structure is placed is responsible for removing that structure and its foundation, unless the last owner of record and the owner of the structure, if the structure is not owned by the last owner of record, have made an agreement providing otherwise in a form acceptable to the department.
- (b) The construction or placement of a non-movable structure, or non-movable major addition to an existing structure, is prohibited within structural hazard areas.
- A coastal erosion management permit is required for the installation of public service distribution, transmission, or collection systems for gas, electricity, water, or wastewater. Systems installed to serve coastline development along mainland shorelines must be located landward of the shoreline structures being served.
- (d) Any grading, excavating, or other soil disturbance conducted within a structural hazard area must not direct surface water runoff over a bluff face.

505.8 Restrictions on regulated activities within natural protective feature areas [...containing natural protective features, the alteration of which might reduce or destroy the protection afforded other lands against erosion or high water, or lower the reserves of sand or other natural materials available to replenish storm losses through natural processes.]

- (a) Nearshore areas. The following restrictions and requirements apply to regulated activities in nearshore areas.
 - (1) Excavating, grading, mining, or dredging which diminishes the erosion protection afforded by nearshore areas is prohibited. However, coastal erosion management permits for dredging may be issued for constructing or maintaining navigation channels, bypassing sand around natural and man-made obstructions, or artificial beach nourishment.
 - (2) All development is prohibited in nearshore areas unless specifically allowed by subdivision 505.8(a) of this Part.

- (3) The normal maintenance of structures may be undertaken without a coastal erosion management permit.
- (4) Clean sand or gravel of an equivalent or slightly larger grain size is the only material which may be deposited within nearshore areas. Any deposition will require a coastal erosion management permit.
- (5) A coastal erosion management permit is required for new construction, modification, or restoration of docks, piers, wharves, groins, jetties, seawalls, bulkheads, breakwaters, revetments, and artificial beach nourishment. Docks, piers, wharves, or structures built on floats, columns, open timber, piles, or similar open-work supports having a top surface area of 200 square feet or less, or docks, piers, wharves, or other structures built on floats and removed in the fall of each year are excepted from this permit requirement.
- (b) Beaches. The following restrictions and requirements apply to regulated activities on beaches.
 - (1) Excavating, grading, or mining which diminishes the erosion protection afforded by beaches is prohibited.
 - (2) All development is prohibited on beaches unless specifically allowed by subdivision 505.8(b) of this Part.
 - (3) The normal maintenance of structures may be undertaken without a coastal erosion management permit.
 - (4) The restoration of existing structures that are damaged or destroyed by events nor related to coastal flooding and erosion may be undertaken without a coastal erosion management permit.
 - (5) Non-major additions to exisiting structures may be allowed on beaches pursuant to a coastal erosion managment permit.
 - (6) The following restricitions apply to the use of motor vehicles on beaches:
 - (i) motor vehicles must operate seaward of the upper debris lines at all times.
 On those beaches where no debris line exists motor vehicles must operate seaward of the toe of the primary dune; and
 - (ii) motor vehicles must not travel on vegetation.
 - (7) A coastal erosion management permit for deposition of material on beaches will be issued only for expansion or stabilization of beaches; clean sand or gravel of an equivalent or slightly larger grain size must be used.
 - (8) Beach grooming or clean-up operations do not require a coastal erosion management permit.
 - (9) A coastal erosion management permit is required for new construction, modification, or restoration of docks, piers, wharves, boardwalks, groins, jetties, seawalls, bulkheads, breakwaters, revetments, and artificial beach nourishment. Docks, piers, wharves, or structures built on floats, columns, open timber, piles, or similar openwork supports having a top surface area of 200 square feet or less or docks, piers, wharves, or other structures built on floats and removed in the fall of each year are excepted from this permit requirement.

- (10) Active bird nesting and breeding areas must not be disturbed unless such disturbance is pursuant to a specific wildlife managment activity approved in writing by the department.
- (c) Bluffs. The following restrictions and requirements apply to regulated activities on bluffs.
 - (1) Excavating, grading, or mining of bluffs is prohibited except where:
 - (i) the minor alteration of a bluff is done in accordance with conditions stated in a coastal erosion management permit issued for the construction of an erosion protection structure; or
 - (ii) a bluff cut is made in a direction perpendicualr to the shoreline to provide shoreline access. The ramp slope of bluff cuts must not be steeper than 1:6 and the side slopes must nor be steeper than 1:3, if not terraced or otherwise structurally stabilized. Side slopes and other disturbed non-roadway areas must be stabilized with vegetation or other approved physical means and completed roadways must be stabilized and drainage provided for, all in accordance with terms and conditions of a coastal erosion management permit.
 - (2) Vehicular traffic is prohibited on bluffs.
 - (3) All development is prohibited on bluffs unless specifically allowed by subdivision 505.8(c) of this Part.
 - (4) The normal maintenance of structures may be undertaken without a coastal erosion management permit.
 - (5) The restoration of existing structures that are damaged or destroyed by events nor related to coastal flooding and erosion may be undertaken without a coastal erosion management permit.
 - (6) Non-major additions to existing structures may be allowed on bluffs pursuant to a coastal erosion management permit.
 - (7) A coastal erosion management permit is required for new construction, modification, or restoration of erosion protection structures, walkways, or stairways. Elevated walkways or stairways constructed solely for pedestrian use and built by or for an individual property owner for the limited purpose of providing non-commercial access to the beach are excepted from this permit requirement.
 - (8) Active bird nesting and breeding areas must not be disturbed unless such disturbance is pursuant to a specific wildlife management activity approved in writing by the department.
 - (9) Any grading, excavating, or other soil disturbance conducted on a bluff must not direct surface water runoff over a bluff face.
- (d) Primary dunes. The following restrictions and requirement apply to regulated activities on primary dunes.
 - (1) Excavating, grading, or mining of primary dunes is prohibited.
 - (2) Vehicular traffic is prohibited on primary dunes, except in those areas designated by the department for dune crossing.

- (3) Non-major additions to existing structures are allowed on primary dunes pursuant to a coastal erosion management permit and subject to permit conditions concerning the location, design, and potential impacts of the structure on the primary dune.
- (4) Foot traffic which causes sufficient damage to primary dunes to diminish the erosion protection afforded by them is prohibited. Pedestrian passage across primary dunes must utilize elevated walkways and stairways, or other specially designed dune crossing structures approved by the department.
- (5) All development is prohibited on primary dunes unless specifically allowed by subdivision 505.8(d) of this Part.
- (6) The normal maintenance of structures may be undertaken without a coastal erosion management permit.
- (7) The restoration of existing structures that are damaged or destroyed by events not related to coastal flooding and erosion may be undertaken without a coastal erosion management permit.
- (8) A coastal erosion management permit is required for new construction, modification, or restoration of stone revetments or other erosion protection structures compatible with primary dunes. Such erosion protection structures will only be allowed at the seaward toe of primary dunes and must not interfere with the exchange of sand between primary dunes and their fronting beaches.
- (9) A coastal erosion management permit is required for new construction, modification or restoration of elevated walkways or stairways. Elevated walkways or stairways constructed solely for pedestrian use and built by or for an individual property owner for the limited purpose of providing non-commercial access to the beach are excepted from this permit requirement.
- (10) Clean sand obtained from excavation, dredging, or beach grading may be depositied on a primary dune, or on an area formerly a primary dune, to increas its size or restore it. Such deposition must be vegetatively stabilized using native species tolerant to salt spray and sand budial, e.g. American beach grass. Such deposition requires a coastal erosion management permit.
- (11) Vegetative planting and sand fencing, to stabilize or entrap sand in order to maintain or increase the height and width of dunes, does not require a coastal erosion management permit. Vegetative plantings must be of native species tolerant to salt spray and sand burial, e.g. American beach grass.
- (12) Active bird nesting and breeding areas must not be disturbed unless such disturbance is pursuant to a specific wildlife management activity approved in writing by the department.
- (e) Secondary dunes. The following restrictions and requirements apply to regulated activities in areas identified on coastal erosion hazard area maps as secondary dunes.
 - (1) Secondary dunes must not be excavated, graded, or mined such that the erosion protection afforded by them is diminished.
 - (2) Clean sand obtained from excavation, dredging, or beach grading may be deposited on a secondary dune, or an area formerly a secondary dune, to increase its size or restore it. Such deposition must be vegetatively stabilized using native species

tolerant to salt spray and sand burial, e.g. American beach grass. Such deposition requires a coastal erosion management permit.

- (3) The normal maintenance of structures may be undertaken without a coastal erosion management permit.
- (4) The construction, modification, or restoration of a structure, or major addition to an existing structure, requires a coastal erosion management permit. Permit requirements include:
 - (i) a new structure, or the restoration of, or major addition to an existing structure, must be built on adequately anchored pilings such that at least three feet of open space exists between the lowest, horizontal structural members, e.g. floor joists, and the surface of the secondary dune; and
 - (ii) the space below the lowest horizontal structural members must be left open and free of obstructions.
- (5) Exceptions.
 - (i) The provision in the preceeding paragraph that requires obtaining an erosion area permit for the construction, modification, or restoration of a structure or major addition to an existing structure, does not apply to elevated walkways or stairways constructed solely for pedestrian use and built by or for an individual property owner for the limited purpose of providing noncommercial access to the beach; and
 - (ii) the restoration of existing structures that are damaged or destroyed by events not related to coastal flooding and erosion may be undertaken without a coastal erosion management permit.
- (6) Non-major additions to existing structures are allowed on secondary dunes pursuant to a coastal erosion managment permit.
- (7) Vegetative planting and sand fencing, to stabilize or entrap sand to maintain or increase the height and width of dunes does not require a coastal erosion management permit. Vegetative plantings must be of native species tolerant to salt spray and sand burial such as American beach grass.

505.9 Erosion protection structures.

Construction of erosion protection structures is expensive, often only partially effective over time, and may even be harmful to adjacent or nearby properties. In some areas of the coastline, major erosion protection structures of great length would be required to effectively reduce future damages due to erosion. However, in those instances where properly designed and constructed erosion protection structures will be likely to minimize or prevent damage or destruction to man-made property, private and public property, natural protective features, and other natural resources, construction of erosion portection structures may be allowed. In such cases, the construction, modification, or restoration of erosion protection structures is subject to the following requirements.

(a) A coastal erosion management permit is required for construction, modification, or restoration of erosion protection structures including the modification or restoration of erosion protection structures that were constructed without a coastal erosion management

permit. Normal maintenance of of an erosion protection structure does not require a coastal erosion managment permit.

- (b) All erosion protection structures must be designed and constructed according to generally accepted engineering principles which have demonstrated success, or where sufficient data is not currently available, a likelihood of success, in controlling long-term erosion. The protective measures must have a reasonable probability of controlling erosion on the immediate site for at least 30 years.
- (c) A long-term maintenance program must be included with every permit application for construction, modification, or restoration of an erosion protection structure. That program must include specifications for normal maintenance of degradable materials and the periodic replacement of removable materials.
- (d) All materials used in such structures must be durable and capable of withstanding inundation, wave impacts, weathering, and other effects of storm conditions. Individual component materials may have a working life of less than 30 years only when a maintenance program ensures that they will be regularly maintained and replaced as necessary to attain the required 30 years of erosion protection.
- (e) The construction, modification, or restoration of erosion protection structures must:
 - (1) not be likely to cause any measurable increase in erosion at the development site or other locations; and
 - (2) minimize, and if possible prevent, adverse effects to natural protective features, existing erosion protection structures, and natural resources such as significant fish and wildlife habitats.

[Sections **505.10** - **505.22** of the Regulations contain procedures for Appeal of erosion hazard area designations, Emergency authorization, Bonds and financial security, Variances, Fees, and provisions for adoption of the program by local governments, and for amending Coastal Erosion Hazard Area maps.]

APPENDIX F:

INVENTORY CHECKLISTS AND CRITERIA

SITE CHECKLIST FOR PUBLIC ACCESS & RECREATION INVENTORY DATABASE

Reach # Sheet

S.C.T.M. No(s):

Location:

Coordinates:

ACCESS:

- Visual access, scenic and water viewpoints
- ___Benches
- Pedestrian/natural, #
- Pedestrian/walkway or stairway, #
- ____Town bathing beach
- ___Non-designated bathing beach
- ___Public lands/ road-end
- ___Non-public lands
- Town Nature Preserve
- Private beach club
- ___Launch ramp, #
- ____Boating access w/o ramp, #
- ___ORV access, #
- Parking spaces, #
- ___Bike racks
- Picnic grounds
- ___Camping, # sites

WATER DEPENDENT USES/ FACILITIES:

Boating /Marina

- ___Marina
- Private membership yacht club
- ___Number of slips, #
- Boat dealers/yacht brokers
- ___Fueling
- Pumpout
- Shoreside facil. (toilets/showers/laundry)
- ____Haulage/storage/repair, capacity #
- ___Moorings, #
- Private dock
- Boat, canoe, kayak, windsurfer rentals
- Whale watching trips

Fishing

- Charter boats, #
- Party boats, #
- ____Fishing pier
- Bait & tackle shop
- ____Fish cleaning sink(s)
- ____Surfcasting

Passive/pedestrian uses

- ____Beach walking/jogging
- ___Picnicking
- ____Sunbathing

- ___Beachcombing
- Sandcastle bldg/contests
- ___Bird watching from shore
- ____Seal watching at haulout
- ___Nature walks
- Photography/sketching/painting

WATER-ENHANCED USES/ FACILITIES:

- ___Existing trails, trail systems, Trustee roads
- ____Available trail maps
- ___Bike paths (proposed)
- ___ORV driving
- Area restrictions on ORV use
- ___Childrens camp
- Public swimming pool
- ___Golf
- Miniature golf
- ____Tennis, # courts
- ___Ballfields
- Volley ball nets
- Bike rentals
- Horse rentals, stables
- Wild fruit/berry sources/foraging
- ____Hunting, shooting
- Permitted hunting grounds

Public recreation improvement opportunities:

Acquire public access __Ballfield __Basketball __Benches __Bike racks __Canoe/kayak potential campsite __Dock __ Fishing pier __Garbage cans __Interpretive signs __Launch ramp __Parking __Pedestrian access __Picnic tables __ORV access __Roller blade __Scenic view __Swimming Pool __Tennis __Toilet __Trail __Wetland restoration __

Environmental concerns:

Significant habitat ___NYS ___Local Protected plant species _____ Protected animal species _____ Nesting shorebirds _____ Potential water quality problem __ Erosion reduced recreational opportunity (e.g. beach loss) __ Potential flooding at road-end __

Conflicts, existing and potential:

Conflicts w/ natural resources, recreational resources, habitat or other users ___ Beach driving __ Pedestrian overuse ___ other ___

Use conflicts at or near site: Boats/swimmers __ Fishing/swimming __ Hunters/ hikers, passive users __ Jet skis/ swimming __ ORV's /habitat or natural resources __

ORV's/ passive human activity ___ Private property/ public access ___ Surfcasting/ swimming ___

Recreational uses compatible with new private development:

Dock/fishing pier __ Docks/marina __ Launch ramp __ Pedestrian access to beach __ ORV access __ Swimming __ Trail(s)

Notes:

WATERBODY CHECKLIST FOR RECREATION INVENTORY DATABASE

Reach # Sheet #

S.C.T.M. No(s):

Location:

Coordinates:

WATER USES:

Boating

- ___Sailing/motor
- ___Canoeing/kayaking/rowing
- Wind-surfing
- ___Jet-skiing
- ____Water-skiing
- ___Moorings, #
- ____Overnight anchorage
- Private docks, #

Swimming

- ___Ocean
- ___Bay
- ___Pond
- ___Board surfing
- ____Snorkeling/scuba diving

Fishing

- ___Saltwater, inshore
- ____Saltwater, offshore
- ___Freshwater
- ___Shellfishing
- TOEH hatchery seeded beds
- ___Other

Hunting

____Duck hunting

____Duck blind(s)

Public recreation improvement opportunities:

Acquire public access __ Fishing pier __ Launch ramp __ Wetland restoration __

Environmental concerns:

Significant habitat ___NYS ___Local Protected plant species _____ Nesting shorebirds _____ Potential water quality problem ____

Erosion reduced recreational opportunity (e.g. beach loss)

Conflicts, existing and potential:

Conflicts w/ natural resources, recreational resources, habitat or other users _____ other ______ Use conflicts at or near site: Boats/swimmers __ Fishing/swimming __ Hunters/hikers, passive users __ Jet skis/ swimming ___ ORV's /habitat or natural resources ___ Private property/ public access ___ Surfcasting/ swimming ____

Protected animal species_

Notes:

CRITERIA FOR SITE CHECKLIST

ACCESS:

Launch ramp is an improved surface to launch a boat directly into the water.

Boating access without a ramp indicates the use at a site, not necessarily the ability, to launch boats into the water from the beach. A launch area implies ORV access onto the beach. Launch areas and ORV access both imply pedestrian and visual access.

Pedestrian walkway or stairway is an improved access to the waterfront such as stairs, a boardwalk or a dock, that cannot be used by vehicles. Most marinas are considered to have pedestrian public access. **Pedestrian natural** is a cleared path, also inaccessible to vehicles. Pedestrian includes visual access. **Visual access** is a scenic water view without vehicular or pedestrian access.

Parking space numbers are calculated in the field, or from an approved site plan, or from information provided by the operator of a site.

Bike racks and **Benches** were determined by site inspections or per facility operator.

Picnic grounds are areas with picnic facilities such as tables and BBQ's.

Number of Camping sites were provided by the park operator.

Town bathing beach is a public beach (Town, County, or State) staffed with lifeguard[s] and equipped with a comfort station.

Non-designated bathing beach is used for bathing by the general public, but without facilities. **Private beach club** is a membership-only club, includes homeowner association beaches.

Public lands or road-ends reflect ownership by the Town, State or Federal government.

Non-public lands are owned privately, or semi-publicly, as by homeowner associations and The Nature Conservancy.

Town Nature Preserve is an official Town designation, so listed in the Open Space Plan and defined in Town Code **§103**.

WATER DEPENDENT USES/ FACILITIES:

Boating /Marina

Marina has dock facilities available to the general public for a fee. Recreational facilities provided by the marina are usually available only to guests.

Private yacht club is a marina open to members only, including several marinas owned by homeowner associations.

Number of slips is provided by the marina owner/operator, or from an approved site plan, or determined in the field if the above are unavailable.

Boat dealers/yacht brokers, Fueling, Pumpout, and **Haulage, storage, or repair**, were all determined by site inspections and from interviews with marina owner/operators. Only functional pumpouts were counted. Only marinas that had winter storage of boats on site were counted for Haulage/storage/repair.

Shoreside facilities are restrooms and/or showers and laundry facilities.

Boat, canoe, kayak, or windsurfer rentals information is provided by the facility operator.

Number of moorings is provided by the Town Trustees.

Private dock, residential or other private facility, determined by a field inspection or from aerial photographs.

Whale watching trips are available seasonally, departing from the Viking Dock in Montauk.

Fishing

Number of charter boats is best estimate of current full-time charter boats and does not indicate the boats that offer charter services on a part time basis.

Number of party boats is number currently known to be operating.

Fishing pier is a dock or jetty in common use by local fishermen.

Bait & tackle shop and Fish cleaning sink(s) are determined by a site inspection or per the marina owner/operator.

Surfcasting is available at sites when there is an appropriate beach, and was noted for sites in common use by local fishermen on the basis of interviews.

Passive/pedestrian uses

Beach walking/jogging requires a sandy beach.

Picnicking requires an accessible area that is appropriate for picnicking and may or may not have picnic tables or BBQs available.

Sunbathing indicates a sandy beach with access.

Beachcombing requires an accessible shoreline.

Sandcastle building contests are organized events held at Atlantic Avenue and Hither Hills State Park.

Bird watching from shore is available from almost every site that has visual access of a waterbody, including marinas.

Seal watching at haulout occurs in winter primarily along the north shore of Montauk, although seals may be sighted at other locations.

Nature walks are guided walks sponsored by the Town or an organized group.

Photography/sketching/painting occurs throughout the Town's scenic coastline.

WATER-ENHANCED USES/ FACILITIES:

Existing trails, trail systems, Trustee roads are existing trails, determined from trail maps, aerials photographs, and field inspection. A natural pedestrian access to the waterfront is not counted as a trail.

Available trail maps are pamphlets prepared by the Town, State, County, or Nature Conservancy.

Proposed bike path, primarily located along the LIRR right of way parallel to Montauk Highway from Amagansett to Montauk. Other sites may be recommended for potential bike paths.

ORV driving at a site does not indicate ORV access from the site, but ORV driving at or in front of the site. For example, many pedestrian access points do not provide ORV access although there is driving along the beach accessed by the pedestrian path or walkway. If **No ORV Driving** is indicated where there are **No Area Restrictions** on ORV use, driving is physically limited by the presence of bulkheads, wetland marsh, or other barrier.

Area restrictions on ORV use are Town area and seasonal restrictions as specified in **§43-5** of the Town Code and described in the Beach Driving Ordinances pamphlet. This does not include areas that are temporarily restricted because of nesting shorebirds, or State and County parklands regulations.

Childrens camp is a facility that serves as a day camp or overnight camp.

Public swimming pools are located at private clubs, marinas and camps, and except for the Montauk Downs State Park and Gurney's Inn, are available only for guests. Pools at motels and condominiums not generally open to the public are not included.

Golf courses can be public or private.

Miniature golf is available at Puff'n Putt on Fort Pond in Montauk.

Tennis courts include those available at schools and private facilities.

Ballfields and **Volley ball nets** are determined by site inspection or information provided by park operator. **Bike rentals** and **Horse rentals and stable** are recorded where available.

Wild fruit/berry sources/foraging areas provide good sources of cranberries, blueberries, beach plum, blackberries.

Hunting, shooting and trapping sites were determined with the input of hunters.

Permitted hunting grounds or permit-restricted hunting grounds, are sites that requires an additional hunting access permit from either the Town, County, or State in addition to mandatory NYS hunting licenses.

CRITERIA FOR WATERBODY CHECKLIST

WATER USES:

Boating

Sailing/motor boating in open waters and harbors, primary areas of activity.

Canoeing/kayaking/rowing primary areas of activity.

Wind-surfing popular areas with sufficient wind, but generally sheltered.

Jet-skiing primary areas where practiced (permitted in open waters 500' from the shoreline except for launching and landing, prohibited in enclosed harbors).

Water-skiing in the open waters of the bay, designated area in Three Mile Harbor, permitted in all of southern Lake Montauk.

Number of moorings in Town Trustee regulated areas, provided by the Trustees.

Overnight anchorage in calm waters where permitted; prohibited in Napeague Harbor except for weather emergency.

Number of private docks was counted in the field and/or interpreted from aerial photographs.

Swimming

Ocean from south shore beaches.

Bay on the north shore, including harbors and creeks.

Pond in the the enclosed bodies of water.

Board surfing determined by interviews with surfers.

Snorkeling/scuba diving determined by interviews with divers, including the Submersibles, a diving club at Southampton College.

Fishing

Saltwater, inshore includes surfcasting and fishing off a dock.

Saltwater, offshore by boat.

Freshwater includes brackish coastal ponds.

Shellfishing determined by interviews with baymen, requires Town permit in local waters.

TOEH hatchery seeded beds shown on maps prepared by the Town Hatchery.

Other fishing includes crabbing, eels.

Hunting

Duck hunting where practiced and where requirement of 500' open line of fire can be met. **Duck blind(s)** determined by field inspection and interviews.

APPENDIX G

LOCAL EROSION LAW

WHEREAS, a public hearing was held by the Town Board of the Town of East Hampton on August 17, 2006 regarding the amendment of Chapter 255 ("Zoning") of the East Hampton Town Code in order to better protect the Town's coastline, by implementing the coastal erosion recommendations of the Local Waterfront Revitalization Program ("LWRP") and creating the Coastal Erosion Overlay District to regulate projects which are designed to control or prevent flooding and erosion of the coastline and adjacent upland areas or which may impact coastal resources, all as more fully set forth in the text of the Local Law; and

WHEREAS, such public hearing was held open and public comment was accepted until September 18, 2006;

WHEREAS, the Town Board considered the comments of all persons regarding this Local Law, both as submitted in writing and as presented orally at the public hearing; and

WHEREAS, the adoption of this local law is a Type I action pursuant to the State Environmental Quality State Environmental Quality Review Act (SEQRA); and

WHEREAS, the Town Board has prepared and considered an Environmental Assessment Form which evaluates the potential environmental impacts of the proposed amendment; and

WHEREAS, the Board has determined that the adoption of this Local Law will not have a significant negative impact upon the environment;

NOW, THEREFORE, BE IT RESOLVED, that a negative declaration is hereby made pursuant to the State Environmental Quality Review Act (SEQRA); be it further

RESOLVED, that the said Local Law is hereby enacted to read as follows:

LOCAL LAW NO. __14___ OF 2007

INTRODUCTORY NO. __25__ OF 2006

<u>A Local Law providing for the amendment of Chapter 255 ("Zoning") of the East</u> <u>Hampton Town Code in order to better protect the Town's coastline, by implementing the coastal</u> <u>erosion recommendations of the Local Waterfront Revitalization Program ("LWRP") and</u> <u>creating the Coastal Erosion Overlay District to regulate projects which are designed to control</u> <u>or prevent flooding and erosion of the coastline and adjacent upland areas or which may impact</u> <u>coastal resources, said Local Law to read as follows:</u>

BE IT ENACTED by the Town Board of the Town of East Hampton as follows:

SECTION I. - FINDINGS AND OBJECTIVES:

This Local Law is intended to provide better protection of the Town's shorelines, dunelands, bluffs, beaches, and other coastal resources by enacting the recommendations for coastal flooding and erosion control which are found in Policies #11-17 of the Town's Local

Waterfront Revitalization Program ("LWRP").

The Town of East Hampton has a tradition dating back to its colonial origins of maintaining coastal resources for all its citizens. Many of the beaches in East Hampton are owned by the Town Trustees and have been historically open to public use.

It is the Town Board's intention in adopting this Local Law to preserve and reaffirm the established powers, rights and privileges of the Town Trustees with respect to the management and regulation of the beaches, bottomlands and other lands that they own. Nothing in this Local Law shall be construed as diminishing in any way these powers, rights, and privileges of the Town Trustees.

East Hampton's north and south shores have greatly differing geography and geology with different weather exposures. The Town's south shore Atlantic Ocean beaches are generally more dynamic because of the higher wave energies and greater quantities of sediment being transported. The Town's northerly bay beaches, while more protected, are narrower and more fragile and take longer to recover from storms. They are mostly fed by sediment from bluffs and headlands. Where attempts have been made to stabilize bluffs with hard structures, these sand sources have been restricted, and the resulting deficit in the local sediment budget has led to further narrowing or elimination of beaches.

On undeveloped shores, natural coastal processes, including storm flooding and erosion, establish a dynamic equilibrium of shoreline accretion and recession. Natural protective features such as beaches, dunes, bluffs, sand spits, and wetlands enable the shoreline to absorb and recover from the force of storms. Changes in climate (global warming and the "greenhouse effect") may exert an influence on future storm activity and also cause sea-level to rise, with profound effects on the Town's coast. Such changes would render these natural protective features all the more important. In any case, while future sea level rise and increased storm activity may be uncertain, it is well established that present sea level is rising and statistically certain that storms will be an ever-present threat to the Town's coastal zone.

In the past, siting of development often failed to take into account potential damage from flooding, erosion and coastal storms. Following major storms, homeowners recognizing their precarious predicament built so-called erosion protection structures to protect their property. However, groins, bulkheads and other hard structures have had detrimental effects on adjoining beaches or neighboring property and have often aggravated the erosion problems they were designed to prevent. Their legacy is a disappearance of sandy beaches in many locations, a significant loss for a Town whose way of life and resort economy depend on public access to unspoiled beaches.

The Town's primary objectives in enacting this Local Law are to maintain the public interest in its coastal resources and to protect the health and safety of its residents by preserving, protecting and enhancing the natural protective features of its coast, with due regard for the needs of individual property owners. In practice, this approach to flooding and erosion leads to an emphasis on non-structural or "soft" solutions which will not disrupt coastal processes or damage natural protective features.

This Local Law establishes a coastal erosion overlay district consisting of four zones covering the Town's coastline ("CEOD"). It also establishes regulations for each of four coastal erosion overlay zones. These regulations govern projects which are designed to control or prevent flooding and erosion of the coastline and adjacent upland areas, or which may impact coastal resources.

The Local Law amends the Zoning Code to specifically authorize private property owners to take emergency action, in certain situations, to protect privately-owned structures from damage caused by coastal flooding or erosion. These emergency activities, which are exempt from the normal Natural Resources Special Permit review process, are authorized only in very limited circumstances where immediate action is necessary to prevent substantial damage to a privately-owned structure, and are restricted to only four types of actions: (1) moving the structure landward, (2) making repairs or providing structural support to a damaged structure, (3) depositing sand on the beach in front of the structure, or (4) installing -- on a temporary basis only -- a geotextile tube or sandbag erosion control structure.

With respect to the emergency authorization for geotextile tube or sandbag systems, the Town Board finds that such temporary authorization appropriately balances the difficult and conflicting interests of shorefront property owners and the general public. The Town Board finds that the public's rights to use of the foreshore are paramount, but that emergency measures to protect private buildings and structures are in the overall best interests of the public as well as shorefront land owners. In making this legislative determination, the Town Board specifically finds that the long-term effects of erosion control structures -- including geotextile tube or sandbag systems -- are highly detrimental to East Hampton's environment and economy, and that the use of geotextile tubes or sandbag systems, on a short-term basis only, is warranted only in emergency situations because they offer a somewhat smaller prospect of harm than other types of erosion control structures and are more easily removed.

With respect to downtown Montauk, specifically the hotel and business district, the Board recognizes that it is within an exceptional geological location given its proximity to the Atlantic Ocean and its low elevation and consequent vulnerability to flooding. The Board also recognizes that the Town's economic stability is linked to the survival and prosperity of its business districts. Accordingly, the Board concludes that the downtown Montauk area comprises a unique concentration of economic assets vital to the Town's tourist economy that warrants further study and a long-term solution for coastal erosion.

The Town Board held a public hearing on this proposed Local Law on August 16, 2006 and accepted written comments until September 18, 2006. Over a period of eight months following the public hearing and receipt of written and oral comments, the Town Board carefully reviewed and discussed all of the oral and written comments submitted regarding the proposed legislation. The Town Planning Department in conjunction with the Town Attorney's Office prepared a series of memoranda analyzing the public comments and recommending some proposed modifications to the Local Law as a result thereof. The Town Board held work sessions on November 14, 2006, December 19, 2006, January 23, 2007, February 13, 2007, and April 10, 2007 to discuss the memoranda and come to a consensus as to how the law would be

modified, if at all.

At the end of the discussions, the Town Board prepared a summary memorandum dated April 12, 2007 setting forth the public comments and the Board's responses thereto. (The Town Board's memorandum is incorporated herein by reference). Based upon this analysis, the Board made several modifications to the proposed local law and CEOD map as set forth below.

The Town Board determined that several properties would be more appropriately placed in less restrictive CEOD Zones. The rationale for reducing the recommended CEOD Zone classification is set forth in detail in the Town Board's Memorandum dated April 12, 2007. As a result of these findings, the following parcels will be rezoned as follows:

SCTM	Address	Contiguous Water Body	Zone Proposed Prior to Hearing	Zone Change
006-03-31.1	2 Duryea Avenue	Montauk Harbor	2	4
007-02-06	319 East Lake Dr	Montauk Harbor	2	3
013-01-26	289 East Lake Dr	Montauk Harbor	2	3
013-01-27	297 East Lake Dr	Montauk Harbor	2	3
013-01-28	303 East Lake Dr	Montauk Harbor	2	3
013-01-29	307 East Lake Dr	Montauk Harbor	2	3
013-01-30	311 East Lake Dr	Montauk Harbor	2	3
013-03-17	161 East Lake Dr	Montauk Harbor	2	3
013-03-19	173 East Lake Dr	Montauk Harbor	2	3
023-02-02	23 Bay Inlet Rd	Hog Creek	2	3
023-03-03	176 Waterhole Rd	Hog Creek	2	3
023-03-29	42 Fenmarsh Rd	Hog Creek	2	3
024-04-04	340 Kings Point Rd	Hog Creek	2	3
024-04-17	192 Waterhole Rd	Hog Creek	2	3
026-01-13	120 Navy Rd	Fort Pond Bay	3	none
026-01-14	116 Navy Rd	Fort Pond Bay	3	none
037-02-06	19 Isle of Wight Road	Hog Creek	2	3
039-01-01	38 Fenmarsh Rd	Hog Creek	2	3
039-01-12	14 Kings Point Rd	Hog Creek	2	3
056-05-15	36 Three Mile Harbor Dr	Three Mile Harbor	2	3
056-05-8.1	52 Three Mile Harbor Dr	Three Mile Harbor	2	3
057-04-07	7 Outlook Ave	Three Mile Harbor	2	3
057-04-08	5 Outlook Ave	Three Mile Harbor	2	3
057-04-09	3 Outlook Ave	Three Mile Harbor	2	3
057-04-10	11 Outlook Ave/ 57 Harbor View La	Three Mile Harbor	2	3
057-04-6.1	9 Outlook Ave	Three Mile Harbor	2	3
057-06-02	62 Harbor View La	Three Mile Harbor	2	3
074-02-27.1	18 Three Mile Harbor Dr	Three Mile Harbor	2	3
074-02-28	16 Three Mile Harbor Dr	Three Mile Harbor	2	3

074-02-30	10 Three Mile Harbor Dr	Three Mile Harbor	2	3
074-02-31	8 Three Mile Harbor Dr	Three Mile Harbor	2	3
074-02-36	14 Three Mile Harbor Dr	Three Mile Harbor	2	3
074-07-34.1	37 Springwood Way	Three Mile Harbor	2	3
077-05-1.5	223 Three Mile Harbor-Hog Creek	Three Mile Harbor	2	3
	Hwy			
084-03-7.7	316 Shore Rd	Napeague Bay	2	3
093-03-2.1	Island Rd	Three Mile Harbor	2	3
107-01-01	188 Shore Dr E	Napeague Harbor	2	3
107-01-03	183 Shore Dr E	Napeague Harbor	2	3
107-01-04	176 Shore Dr E	Napeague Harbor	2	3
107-01-05	170 Shore Dr E	Napeague Harbor	2	3
107-01-06	164 Shore Dr E	Napeague Harbor	2	3
107-01-07	160 Shore Dr E	Napeague Harbor	2	3
107-01-10	148 Shore Dr E	Napeague Harbor	2	3
107-01-11	142 Shore Dr E	Napeague Harbor	2	3
107-01-12	136 Shore Dr E	Napeague Harbor	2	3
107-01-13	130 Shore Dr E	Napeague Harbor	2	3
107-01-14	124 Shore Dr E	Napeague Harbor	2	3
107-01-15	118 Shore Dr E	Napeague Harbor	2	3
107-01-16	112 Shore Dr E	Napeague Harbor	2	3
107-01-17	106 Shore Dr E	Napeague Harbor	2	3
107-01-19	90 Shore Dr E	Napeague Harbor	2	3
107-01-36.1	98 Crassen Blvd	Napeague Harbor	2	3
107-01-9.1	154 Shore Dr E	Napeague Harbor	2	3
128-01-32.3	429 Cranberry Hole Rd	Napeague Bay	2	3

The Town Board also determined to make several minor modifications to the proposed Local Law to address concerns raised by the public as to the clarity or efficacy of the law. The changes are set forth in more detail in the Town Board's Memorandum dated April 12, 2007. In all cases, the modifications are not substantial and either result in a (a) reversion to the current provisions of the Town Code by deleting proposed changes; (b) reduction of proposed code requirements on the landowner; or (c) clarification of the proposed change. A summary of the modifications are set forth below by category:

Deletion of Proposed Modifications to Town Code

- The proposed modification to the Town Code changing the setback from 100 feet from the toe of the bluff in the area of Hither Hills in Montauk to 200 feet from the most landward 15 foot contour line has been deleted. (Town Code Sections 255-1-20 (definition of bluff), 255-4-20 (C) & 255-4-40).
- The requirement that a property owner obtain a certification of a licensed engineer in order to undertake an "emergency activity" has been deleted and left to the discretion of the Building Inspector to require it, if necessary. (Town Code

Section 255-4-29).

Reduction of Proposed Town Code Requirements

• On outer bays and harbors, the proposed law increased the required bluff and dune setback for lots less than 40,000 square feet from 50 feet to 100 feet (with an exception for landward additions to a residence). The proposed setback requirement has been reduced to 75 feet for lots less than 30,000 square feet. (Town Code Section 255-4-40).

Clarifications to Proposed Local Law

- The term "reconstruction" now states that the Town Board may create an appellate panel to hear appeals from the Building Inspector's percentage determination of "replacement cost." (Town Code Section 255-1-20).
- The provisions governing reconstruction of nonconforming structures are modified to delete Town Code Section 255-1-42 subsections (D) and (E) and add subsection (C) (2) providing that reconstruction of a non-conforming structure shall require a bluff line or dune crest setback variance if one is required by Town Code Section 255-4-40 unless the reconstruction is required as a result of accidental cause. "Accidental cause" does not include flooding or erosion. This section has been modified to clarify that reconstruction of non-conforming structures is not "prohibited" but may require a bluff or dune crest variance from the Zoning Board of Appeals.
- Town Code Section 255-3-85 (B) (3) & (4) is modified to clarify that the term "alteration" includes enlargement or reduction of the erosion control structure.
- Town Code Section 255-4-29 is modified to add "repair of legally pre-existing coastal erosion structures within Coastal Erosion Overlay District Zones 3 and 4" to the list of permitted emergency activities. This is a clarification of Town Code Section 255-4-29 (G).

Finally, the Town Board has considered concerns raised by two property owners who stated that they did not receive proper notice of the creation of the CEOD. Town Code Section 255-9-30(G) requires written notification to individual property owners when an amendment to the zoning classification of their property is proposed. Based on the concerns raised by these two individuals, the CEOD map has been revised as follows:

- SCTM #300-6-3-31.1 (map has been revised to place this property in CEOD 4 instead of CEOD 2 because the written notice stated the parcel was proposed to be in Zone 4 but the map depicted the parcel in Zone 2)
- SCTM # 300-26-1-13 & 14 (these parcels have been excluded from the rezoning)

The Town Board has determined that the proposed modifications to the law are minor in nature and do not require further public review. All of the proposed changes to the Local Law involve a lesser impact or have completely eliminated any impact originally proposed.

SECTION II. - TOWN CODE AMENDED:

Chapter 255 ("Zoning") of the East Hampton Town Code is hereby amended in part to read as follows: [CHANGES ARE IN BOLD OR INDICATED BY STRIKE OUT]

ARTICLE I General Provisions

§ 255-1-20. Definitions.

As used in this chapter, the following terms shall have the meanings indicated:

BEACH VEGETATION - Beach grass (*Ammophila breviligulata*), as well as the following plants or lichens: beach heather (*Hudsonia tomentosa*), beach plum (*Prunus maritima*), beach pea (*Lathyrus maritimus*), bearberry (*Arctostaphylos uva-ursi*), bayberry (*Myrica pensylvanica*), **dusty miller** (*Artemissia stellariana*), seaside goldenrod (*Solidago sempervirens*), pine barren sandwort (*Arenaria caroliniana*), and reindeer lichen (*Cladonia* species).

BEACH GRASS - See "beach vegetation."

BLUFF - A formation of land which is landward of the natural beach and which rises sharply from its base to a bluff line which is at least two feet higher than the base. A bank or cliff with a precipitous or steeply sloped face lying landward of a beach or body of water, and having a bluff line at least two (2) feet higher than its base or toe. A "bluff" may extend across all or part of a parcel. For the purposes of this chapter, a "bluff" shall not be considered to encompass barrier sand dunes.

BLUFF LINE - The natural land contour running along the top of a bluff beyond which to landward the natural land contours resume a gradual slope.

COASTAL EROSION CONTROL STRUCTURE - See "erosion control structure."

COASTAL EROSION HAZARD AREA MAP (or "CEHA" MAP) - The map issued by the Commissioner of the New York State Department of Environmental Conservation ("DEC") pursuant to Article 34 of the Environmental Conservation Law ("ECL"), as the same may be amended from time to time. Said map delineates the boundaries of erosion hazard areas subject to regulation under Article 34 of the ECL.

COASTAL RESTORATION PROJECT - The deposit of sand or soil on a beach, dune, or the face of a bluff, in order to restore or replace similar material lost to erosion, and the stabilization of such material by planting beach vegetation. This definition shall include the installation of snow fencing or permeable mesh fencing, the placement of biodegradable fabric mesh or biodegradable gels, and the installation of drains and pipes for the control of water runoff, if these devices are designed and used to allow vegetation to grow upon and stabilize the deposited materials.

DUNE (or SAND DUNE) - A naturally occurring accumulation of sand in wind-formed ridges or mounds landward of the beach, often characterized by the natural growth of beach grass

(Ammophila breviligulata). Included in this definition are deposits of fill placed for the purpose of "dune" construction. This definition shall, however, include man-made deposits of sand placed on or landward of a beach for the purpose of "dune" construction.

DUNE, BARRIER - The dune or line or system of dunes which is located immediately landward of the beach, and which forms the first line of defense against flooding caused by abnormally high tides and/or surf. Occasionally one or more relatively small dune forms exist on the seaward side of the barrier dune. For the purposes of this chapter, such dune forms shall be considered to be a subordinate part of the barrier dune. The seaward limit of a barrier dune is the landward limit of its fronting beach.

DUNE CREST - The highest line or ridge **along the top** of the barrier dune.

EROSION - As applied to coastal areas of the Town or to coastal processes, the loss or displacement of land along the coastline from the action of waves, currents, tides, wind-driven water, waterborne ice, or other effects of storms, as well as the loss or displacement of such land from the action of wind, rain, runoff of surface waters, or groundwater seepage.

EROSION CONTROL STRUCTURE (or COASTAL EROSION CONTROL

STRUCTURE) - Every structure sited in or under any body of water, or on or near any shoreline, wetland, beach, or bluff adjacent thereto, which is designed to reduce, retard or prevent erosion of the shoreline or the silting or filling in of a natural or dredged harbor or channel. This definition shall be deemed to include all groins, jetties, seawalls, revetments, bulkheads, breakwaters, gabions, and riprap, as well as any other manmade fabrication or device, including one made of geotextile tubes or sandbags, which is designed to reduce, retard or prevent erosion and which is not included in the definition of "coastal restoration project" found herein. An "erosion control structure" shall constitute a "coastal structure" as defined herein.

GEOTEXTILE TUBE OR SANDBAG SYSTEM - An erosion control structure consisting of one (1) or more synthetic textile tubes or cylinders, or sandbag systems which are filled with sand of grain size and composition compatible with surrounding area beaches, sealed, and placed in or on the beach or shore. This term shall specifically refer to such a structure consisting of not more than two (2) tiers of such tubes or bags, layered one atop the other and placed parallel to the shoreline, and having a finished height of no more than six (6) feet above natural grade.

NEARSHORE AREAS - All lands under salt water which extend seaward from the mean low water line, in a direction perpendicular to the shoreline, for a horizontal distance of one thousand (1,000) feet or to a point where mean low water depth is fifteen (15) feet, whichever is greater.

RECONSTRUCTION - The removal and replacement, in place and in kind, of all or a substantial part of a preexisting building or structure. The rebuilding in place and in kind of all or a substantial part of a building or structure which has been damaged or destroyed

shall be included in this definition. If the cost of the work in question exceeds fifty percent (50%) of the full replacement cost of the structure as estimated by the Building Inspector, it shall be deemed to involve a "substantial part" of the building or structure. Appeals of the Building Inspector's percentage determination of replacement cost may be made to an emergency appellate panel created pursuant to Town Board resolution. Appeals from that panel may be made to the Zoning Board of Appeals. The word "reconstruct" in its various modes and tenses and its participle form refers to the undertaking of a "reconstruction."

SAND DUNE - See "dune."

TIDAL WATERS - [delete current definition in its entirety and replace with the following] **The Atlantic Ocean and any sound, bay, harbor, creek, or other body of salt or brackish water lying within the bounds of the Town, including all waters within the Town which are regularly or periodically subject to fluctuations in depth due to normal tidal action or peak lunar tides, and all lands beneath the same.**

TOWN TRUSTEES (or TRUSTEES) - The Trustees of the Freeholders and Commonalty of the Town of East Hampton, the **independent** public body established pursuant to **a** patent granted by Governor Thomas Dongan in 1686.

UNDERWATER LAND - Land which is ordinarily submerged beneath the waters of a stream, **brook, run, creek,** or pond, lake or other freshwater body watercourse or body of freshwater, and all land lying seaward of the mean high-water line of any tidal waters.

WATERCOURSE - Any natural or man-made water body other than tidal waters and any ordinary surface water drainage channel, whether wet or dry on any particular occasion, including any freshwater stream, spring, brook, run, spring, dreen, creek, rain runoff course or channel, and any permanent or seasonal pond, whether natural or man-made. The underwater land beneath the foregoing water bodies shall be deemed included in this definition. Artificial lined ponds of less than one (1) acre in size which are not situate in the groundwater table shall be deemed excluded from this definition.

WETLANDS - All natural and man-made tidal wetlands, freshwater wetlands, and underwater lands as defined herein **including all swamps, bogs, kettlehole bogs and the like, regardless of the particular types or amounts of vegetation growing thereon or therein or the absence of same.** Artificial lined ponds of less than one (1) acre in size which are not situate in the groundwater table shall be **deemed** excluded from this definition.

WETLANDS, FRESHWATER - [NO CHANGE.]

WETLANDS, TIDAL - All lands lying in the area inundated by tidal action and/or peak lunar tides; **all lands** exhibiting salt marsh peat and saline or brackish soils at their undisturbed surface; all estuaries, salt meadows, tidal flats, and littoral zones; and all lands upon which grow one or more of the following plant species or associations: salt marsh hay (*Spartina patens*), spike-grass (*Distichlis spicata*), black grass (*Juncus gerardi*), saltwater cordgrass (*Spartina*)

alterniflora), saltwort, glasswort (*Salicornia* species), sea lavender (*Limonium carolinanus*), salt marsh bulrush or chairmaker's rush (*Scirpus* species), sand spurry (*Spergularia marina*), groundsel bush (*Baccharis halimifolia*), high tide bush or marsh elder (*Iva frutescens*), cattail (*Typha* species), spikerush (*Eleocharis* species), bent grass (*Agrostis* species), rockweed (*Fucus* species), reed (*Phragmites* species), marsh pink (*Sabatia* species), sea blite (*Suaeda* species), umbrella sedges (*Fimbristylis* species), marsh mallow (*Hibiscus* species), and Triglochin species, narrow leaf cattail and triglochin. Lands lying within or beneath tidal waters shall also be deemed to be "tidal wetlands," regardless of the type or amount of vegetation growing thereon or the absence of the same.

§ 255-1-40. Nonconforming uses.

[NO CHANGE TO THIS SECTION. CORRECTED TITLE IS SHOWN FOR THE BENEFIT OF CODE PUBLICATION.]

§ 255-1-42. Nonconforming buildings and structures.

The following provisions shall apply to and govern all nonconforming buildings and structures, as the same are defined herein, wherever located.

- Expansion of nonconforming structures authorized, generally. Except as-A. provided in § 255-4-32, a building or structure lawfully existing on a nonconforming lot or a nonconforming building or structure located on any lot, which building or structure is used by a conforming use, may be enlarged, reconstructed, altered, restored or repaired, in whole or in part, provided that the degree of nonconformity is not thereby increased and provided that all otherapplicable regulations are complied with. A nonconforming building or structure lawfully existing on any lot, or a building or structure which lawfully exists on a nonconforming lot, may be enlarged, reconstructed, altered, restored, or repaired, in whole or part, provided that the "degree of nonconformity" is not thereby increased. For the purposes of this subsection, an increase in the "degree of nonconformity" shall include an increase in the amount of a nonconforming building's or structure's gross floor area which is located within a required vard, natural resources, or other setback area, or an increase in any portion of a building or structure located above the maximum height permitted or within the required pyramid law setback.
- B. Rule governing nonconforming uses. The provisions of this section do not apply to a building or structure which is used for a nonconforming use. The enlargement, reconstruction, alteration, restoration, or repair of a building or structure used by a nonconforming use shall be governed by the provisions of § 255-1-40 hereof.
- C. Limitations on reconstruction. Reconstruction of a legally pre-existing nonconforming building or structure shall be limited as follows:

- (1) Reconstruction of a nonconforming building or structure shall require the issuance of a natural resources special permit if such is mandated by § 255-4-20 and § 255-4-21 hereof.
- (2) Reconstruction of a nonconforming building or structure shall require a bluff line or dune crest setback variance if such is mandated by § 255-4-40 hereof unless such reconstruction is required as a result of accidental cause including fire. "Accidental cause" shall not include flooding or erosion.

ARTICLE III Overlay Districts

§ 255-3-44. Duties of Building Inspector.

The Building Inspector shall administer the standards and requirements of the Flood Hazard Overlay District which are set forth herein and shall ensure that a natural resources special permit is obtained for any activity in the velocity floodplain which is regulated by § 255-4-20 § 255-4-20B hereof. In the exercise of these duties, the Building Inspector shall have the following powers and responsibilities:

- A. [<u>NO CHANGE</u>.]
- B. [<u>NO CHANGE</u>.]
- C. [<u>NO CHANGE</u>.]
- D. [<u>NO CHANGE</u>.]
- E. [<u>NO CHANGE</u>.]

§ 255-3-80. Coastal Erosion Overlay District.

§ 255-3-81. Purpose.

The purpose of the Coastal Erosion Overlay District is the protection of the Town's natural shoreline and coastal resources. These features require protection because of their important flooding and erosion prevention functions, their scenic qualities, their value for public recreation and water access, and their value as wildlife habitat. The overlay district is divided into four coastal erosion zones, each of which covers sections of the Town's coast which have similar features, characteristics, and storm exposures. The district establishes rules and standards for erosion control structures and projects, which may differ from one zone to the next.

§ 255-3-82. Boundaries.

The Coastal Erosion Overlay District shall encompass all lands, including underwater lands, which are located within any of the following areas: (i) landward of the mean high water line of any tidal waters within the Town, to a line which is two hundred (200) feet landward of said mean high water line, (ii) seaward of said mean high water line, to a line which is one thousand (1,000) feet seaward of the mean low water line of any tidal waters within the Town, or (iii) seaward of the mean high water line, to the contour line at which mean low water depth is fifteen (15) feet. The overlay district shall consist of four coastal erosion zones as shown on the Use District map. The coastal erosion zones constituting the Coastal Erosion Overlay District shall be identified as follows:

- A. Coastal Erosion Overlay Zone 1. Ocean coastal zone, including bluffs, dunes, beaches, and nearshore areas. This zone is predominantly free of erosion control structures.
- B. Coastal Erosion Overlay Zone 2. Bay coastal zone, including bluffs, dunes, beaches, and nearshore areas, which is predominantly free of erosion control structures.
- C. Coastal Erosion Overlay Zone 3. Bay coastal zone, including bluffs, dunes, beaches, and nearshore areas, which contains erosion control structures which are isolated and discontinuous, or which have no substantial flooding or erosion protection function.
- D. Coastal Erosion Overlay Zone 4. Bay coastal zone, including any remaining bluffs, dunes, beaches, and nearshore areas, which contains numerous erosion control structures. Within this zone the loss of natural resources and features such as bluffs, dunes, and beaches means that in many cases erosion control structures provide the only remaining protection against flooding and erosion.

§ 255-3-85. Regulations.

In addition to any other provisions of this Chapter which may apply to them, lots, lands, buildings, structures, uses, and activities within the Coastal Erosion Overlay District shall be subject to the following restrictions and regulations:

- A. Coastal Erosion Overlay Zones, generally.
 - (1) All buildings and other structures, except coastal structures, shall be located and constructed so as to minimize the damage to property and risk to human life which may be caused by flooding and erosion.
 - (2) All construction and related activities, including the clearing and grading of land, shall be undertaken in a manner which minimizes the damage caused to wetlands, beaches, bluffs, dunes, and vegetation growing thereon by flooding and erosion.
- **B.** Regulation of erosion control structures.

- (1) In Coastal Erosion Overlay Zone 1:
 - (a) The construction, placement, or installation of new erosion control structures is prohibited.
 - (b) The repair, reconstruction, or alteration of all lawfully existing erosion control structures shall require the issuance of a natural resources special permit.
 - Notwithstanding the provisions of the foregoing subparagraph
 (b), the repair, reconstruction, or alteration of existing erosion control structures which are constructed perpendicular to the shoreline, such as groins and jetties, is prohibited. The construction, placement, or installation of any such new erosion control structure built perpendicular to the shoreline is also prohibited.
 - (d) Notwithstanding the provisions of the foregoing paragraph (c), the alteration or removal of groins, jetties, or other existing erosion control structure constructed perpendicular to the shoreline, is permitted upon issuance of a building permit when such alteration would result in a reduction of the size or length of the structure and a public or environmental benefit. The Building Inspector may consult with other Town agencies and the Town Trustees to ensure that the alteration would result in a public or environmental benefit.
- (2) In Coastal Erosion Overlay Zone 2:
 - (a) The construction, placement, or installation of new erosion control structures is prohibited.
 - (b) Subject to the exception set forth in subsection (c) below, the repair, reconstruction, or alteration of existing erosion control structures is prohibited. This prohibition shall not apply to erosion control structures installed to ensure the safe navigability of boat channels; the construction, repair, reconstruction, or alteration of any such structure shall require the issuance of a natural resources special permit.
 - (c) Nothwithstanding the provisions of the foregoing paragraph (b), the alteration or removal of groins, jetties, or other existing erosion control structure constructed perpendicular to the shoreline, is permitted upon issuance of a building permit when such alteration would result in a reduction of the size or length of the structure and a public or environmental benefit. The

Building Inspector may consult with other Town agencies and the Town Trustees to ensure that the alteration would result in a public or environmental benefit.

- (3) In Coastal Erosion Overlay Zone 3:
 - (a) The construction, placement, or installation of new erosion control structures is prohibited.
 - (b) Subject to the exception set forth in subsection (c) below, the repair, reconstruction, or alteration of existing erosion control structures which are constructed perpendicular to the shoreline, such as groins and jetties, is prohibited. This prohibition shall not apply to erosion control structures installed to ensure the safe navigability of boat channels; the construction, repair, reconstruction, or alteration of any such structure shall require the issuance of a natural resources special permit.
 - (c) Notwithstanding the provisions of the foregoing paragraph (b), the alteration or removal of groins, jetties, or other existing erosion control structure constructed perpendicular to the shoreline, is permitted upon issuance of a building permit when such alteration would result in a reduction of the size or length of the structure and a public or environmental benefit. The Building Inspector may consult with other Town agencies and the Town Trustees to ensure that the alteration would result in a public or environmental benefit.
 - (d) The repair, reconstruction, or alteration (including enlargement or reduction in size) of all other lawfully preexisting erosion control structures shall require the issuance of a natural resources special permit.
- (4) In Coastal Erosion Overlay Zone 4:
 - (a) Subject to the exception set forth in subparagraph (d) below, the construction, placement, or installation of new erosion control structures shall require the issuance of a natural resources special permit.
 - (b) Subject to the exception set forth in subparagraph (d) below, the alteration (including enlargement or reduction in size) of existing erosion control structures shall require the issuance of a natural resources special permit.

- (c) Subject to the exception set forth in subparagraph (d) below, the repair or reconstruction of existing erosion control structures shall require the issuance of a natural resources special permit. If such structures are lawfully preexisting, repair or reconstruction may be authorized by means of an expedited administrative natural resources special permit, pursuant to § 255-4-28 hereof.
- (d) Notwithstanding the provisions of the foregoing subparagraphs (a) through (c) and subject to the exception set forth in subparagraph (e) below, the repair, reconstruction, or alteration of existing erosion control structures which are constructed perpendicular to the shoreline, such as groins and jetties, is prohibited. The construction, placement, or installation of any such new erosion control structure built perpendicular to the shoreline is also prohibited. These prohibitions shall not apply to erosion control structures installed to ensure the safe navigability of boat channels, but work on any such structure shall require the issuance of a natural resources special permit.
- (e) Notwithstanding the provisions of the foregoing subparagraph
 (d), the alteration or removal of groins, jetties, or other existing erosion control structure constructed perpendicular to the shoreline, is permitted upon issuance of a building permit when such alteration would result in a reduction of the size or length of the structure and a public or environmental benefit. The Building Inspector may consult with other Town agencies and the Town Trustees to ensure that the alteration would result in a public or environmental benefit.

ARTICLE IV Protection of Natural Features Resources

§ 255-4-10. Purpose of Article. [deleted in entirety and replaced with the following]

The regulations in this Article are adopted to protect and perpetuate some of the Town's most important natural resources. Rapid growth and development have encroached upon or despoiled many of the Town's wetlands, watercourses, tidal waters, natural drainage areas, watersheds and water recharge areas, as well as its beaches, dunes, bluffs, and other coastal features. These natural resources which are threatened by the Town's growth constitute important physical, social, scenic, aesthetic, recreational, and economic attributes of the Town. The provisions of this Article are therefore designed to preserve and maintain these natural resources by minimizing their disturbance. Such protection will benefit the Town and its people in many ways, among which are the

following:

- A. The protection of wetlands, watercourses, tidal waters, and marine habitat from damage caused by pollution, turbidity, siltation, or direct destruction, thereby protecting stocks of fish, shellfish, and other marine organisms, as well as the wildlife and vegetation which depend upon these resources for their survival.
- B. The protection of the Town's underground water supply and the quality of its tidal and fresh waters, through the preservation of natural filtration areas, natural vegetative buffers, and recharge sites.
- C. The lessening of danger to life and property caused by coastal flooding and storms.
- **D.** The preservation of beaches and other coastal habitat needed to sustain rare or threatened coastal birds, as well as fragile coastal vegetative communities.
- E. The preservation of the Town's beaches, dunes, bluffs, wetlands, marshes, and other coastal resources, which together are integral to the character of East Hampton and to its social and economic well-being.

§ 255-4-12. Natural resources.

The following are hereby designated as natural resources which are in need of special protection as provided in this Article:

- A. Tidal and freshwater wetlands. All tidal and freshwater wetlands as defined in this Chapter, including all wetlands shown or identified as such on the Freshwater Wetlands Map for Suffolk County, promulgated by the Department of Environmental Conservation pursuant to the Freshwater Wetlands Act (Article 24 of the New York Environmental Conservation Law).
- B. Tidal waters and watercourses, and nearshore areas, as defined in this Chapter.
- C. Beaches, dunes, bluffs, and the vegetation which grows thereon, all as defined in this Chapter.

[The following subsection is to be deleted in its entirety and replaced with the following] **§ 255-4-15.** Legislative findings regarding the functions and benefits of natural resources.

The Town Board finds that the natural resources regulated under this Article have important benefits for the Town and its people. Among these benefits, many of which have been expressly recognized by the New York State Legislature in the Environmental Conservation Law, are those set forth below.

- A. Tidal wetlands, generally. Tidal wetlands constitute one of the most vital and productive components of the natural world. The many and multiple values of such wetlands include the following:
 - (1) Marine food production. Tidal wetlands are a nursery and sanctuary for many species of crustaceans, shellfish, and finfish. These wetlands produce nutrients and sustain macro- and microscopic marine organisms and vegetation which are essential to the terrestrial and marine food chains. Two-thirds (2/3) of the commercially harvested fish and shellfish and two-thirds (2/3) of sport fish depend on the marsh-estuarine system of the tidal wetlands at some point in their life cycle.
 - (2) Wildlife habitat. Tidal wetlands are the breeding, nesting, and feeding grounds for many forms of waterfowl, shorebirds, and other wildlife, and are needed by many species as cover from predators.
 - (3) Flood and storm control. Tidal wetlands provide valuable protection from coastal storms and floods. Their hydrologic water absorption and storage capacity minimizes erosion and flood damage; their hydraulic and hydrographic functions serve as a natural buffer protecting upland and developed areas from storm tides and waves.
 - (4) Recreation. Tidal wetlands directly or indirectly provide thousands of opportunities per year for the pursuit of hunting, fishing, boating, hiking, bird watching, photography, and recreational activities, to the enjoyment of many East Hampton residents and visitors and to the benefit of the Town's economy.
 - (5) Pollution control. Tidal wetlands serve as an invaluable and irreplaceable biological and chemical oxidation basin in which organic run-off and organic pollution are oxidized, metabolized, and converted into useful nutrients. The vast quantities of oxygen necessary for these processes derive from the photosynthetic mechanism of tidal wetlands.
 - (6) Sedimentation control. Tidal wetlands are an essential settling and filtering basin for the absorption of silt and organic matter which would otherwise obstruct channels and harbors to the detriment of navigation.
 - (7) Education and research. Tidal wetlands afford a wide range of opportunities for scientific research, outdoor biophysical laboratory work, and living educational classroom programs, having great

training and education value for Town residents and visitors of all ages.

- (8) Open space and aesthetic appreciation. Tidal wetlands comprise a large part of the remaining natural and unspoiled areas along the Town's coastline. The public benefit of these natural open areas in a growing, changing Town is significant. Tidal wetlands offer unique open space and aesthetic qualities while sustaining their other natural values.
- B. Benefits of specific types of tidal wetlands. Tidal wetlands consist of several ecological zones, including high marsh or salt meadow; coastal fresh marsh; intertidal marsh; the littoral area; coastal shoals, bars, and flats; and nearshore areas. In addition, the upland areas adjoining tidal wetlands serve to protect the wetlands and contribute in important ways to their productivity. The functions and benefits of certain types of tidal wetlands include the following:
 - High marsh or salt meadow tidal wetlands. High marsh or salt (1) meadow constitutes an extensive zone of salt marshes which receive only occasional tidal flooding coincident with extreme lunar tides and occasional storms. Since their photosynthetic productivity is lower than intertidal marshes and coastal fresh marshes and since flushing of the biological products of the high marsh or salt meadow to the estuary is less efficient than in intertidal and coastal fresh marshes, salt meadows or high marshes, while vital to marine food production, are slightly less important in this regard than intertidal or coastal fresh marshes. Because of their size and location, however, salt meadows or high marshes are as important for the absorption of silt and organic material and for flood, hurricane, and storm control as intertidal marshes and coastal fresh marshes. Furthermore, because they are generally located as to first receive run-off and other materials from the upland, they have an important role in cleansing ecosystems, although their value in this respect is generally slightly less than in intertidal and coastal fresh marshes because of the lessened tidal influence in high marshes or salt meadows. Because these wetlands are usually located adjacent to intertidal marshes and because their values are similar, salt meadows or high marshes must be stringently protected. Even small portions of these areas are very important resources, although slightly less so than intertidal marshes and coastal fresh marshes.
 - (2) Intertidal marsh and coastal fresh marsh tidal wetlands. Intertidal and coastal fresh marsh wetlands are the most biologically productive of all tidal wetlands areas. Furthermore, since they receive twice-daily tidal flushing, the products of vegetative photosynthetic

activity and decomposition in these zones are readily transported to adjacent waters for use in the estuarine food chain. Their intertidal location makes them among the most effective wetland zones for flood, hurricane, and storm protection. Both their intertidal location and their highly productive nature makes these wetlands among the most effective wetland zones for cleansing ecosystems and for absorbing silt and organic material. Because of these high values and their sensitive location at the land and water interface, intertidal and coastal fresh marshes must be stringently protected. Even small portions of these zones are critically important natural resources.

- (3) Nearshore areas and the littoral zone. Nearshore and littoral areas are the habitat of hard and soft clams, ovsters, mussels, and scallops, as well as many other types of marine organisms. The shellfish help to support the still significant portion of the Town's population which makes its living from the sea, and also support a recreational shellfishery. Baitfish and other marine species living in these areas are crucial links in the maritime food chain. Along the bay and ocean coastlines of the Town, nearshore bottomland areas play an important role in controlling the erosion of the Town's coastline. Shallow nearshore areas cause waves to collapse or break, thus dissipating wave energy before it is expended on beaches, bluffs, or dunes. They also function as reservoirs of sand and gravel which can be returned to the beaches. Sandbars, which are located in nearshore areas, control the orientation of incoming waves and limit their power, thereby also helping to protect shorelines during storms. The roots of aquatic vegetation in nearshore areas bind fine-grained silts, clavs, and organic matter to form a cohesive bottom that resists erosion. This vegetation also assists in trapping sediments.
- C. Benefits of Freshwater wetlands. Freshwater wetlands are highly productive natural areas which are necessary to the survival of many species of fish, birds, amphibians, reptiles, and mammals. The numerous and varied values of such wetlands include the following:
 - (1) Freshwater fisheries. In areas with open water, freshwater wetlands are the spawning and nursery grounds for a number of fish species within the Town, several of which are harvested by recreational fishermen. These include yellow perch, smallmouth and largemouth bass, and pickerel. Freshwater wetlands provide the nutrients needed to sustain the aquatic food chain, while purifying stormwater runoff into open waters and helping to regulate the amounts of dissolved oxygen and nitrogen in these waters.
 - (2) Wildlife and plant habitat. Freshwater wetlands have unparalleled value as wildlife habitat. Most local species of wildlife depend upon

their existence to at least some degree. In addition, many species of birds found in the Town at certain times of year are migratory and require freshwater wetlands for nesting or wintering purposes. Freshwater wetlands are also the habitat of numerous species of plants, shrubs, and trees, many of which are specifically adapted to the saturated soil conditions of these wetlands. The eastern end of Long Island, including East Hampton, has an unusually high percentage of the State's rare and threatened plant species; many of these species survive only in freshwater wetlands.

- (3) Flood and stormwater control. Freshwater wetlands slow the runoff of stormwaters and temporarily store these waters, thus helping to protect adjacent upland areas from flooding.
- (4) Recreation. Freshwater wetlands offer important opportunities for hunting, fishing, boating, hiking, bird watching, photography, and other recreational activities, to the enjoyment of many East Hampton residents and visitors and to the benefit of the Town's economy. In addition, freshwater wetlands contribute to these recreational pursuits well beyond their immediate boundaries, because of their ability to sustain populations of birds and wildlife.
- (5) Water supply and water quality. Freshwater wetlands are themselves a source of surface water and, under appropriate hydrological conditions, serve to recharge the Town's groundwater supplies and to maintain surface water flow. Freshwater wetlands also serve as chemical and biological oxidation basins that help to cleanse the water that flows through them. The wetlands absorb silt and organic matter, thereby preventing sedimentation of ponds and other open waters and preserving water quality.
- (6) Education and research. Because of their high biological productivity and the variety of plant and animal species that they support, freshwater wetlands benefit the Town's residents and visitors by providing outdoor laboratories and living classrooms for studying and appreciating natural history, ecology, and biology.
- (7) Open space and aesthetic appreciation. Freshwater wetlands afford visual variety in many different settings. Freshwater wetlands contribute to the Town's sense of open space and provide a sense of connection with the natural world. These are important elements of the Town's character which underpin its success and survival as both a year-round and resort community.
- D. Benefits of Beaches. East Hampton's coastal area is characterized by beaches, dunes, and bluffs. These landforms, and the vegetation growing on

them, are among the most important natural resources of the Town. The scenic beauty of the Town's beaches, as well as the dunes and bluffs which lie behind them, is a signature of the Town. The value of these features in protecting the Town's coastlands cannot be overstated. Beaches themselves have several important functions, among which are the following:

- (1) Flooding and erosion control. Beaches protect shorelands from flooding and erosion by dissipating wave energy that would otherwise be expended against the toe or face of bluffs and dunes, or which would send stormwaters spilling onto upland property. Beaches which are high and wide protect shorelands from erosion and flooding more effectively than beaches that are low or narrow. Beaches also act as a reservoir of sand and other unconsolidated material for littoral transport along the shore and for the formation of protective offshore sandbars and shoals.
- (2) Wildlife habitat. Beaches have habitat value, particularly for such shorebirds as the endangered piping plover and least tern. A variety of migratory and resident shorebirds, including piping plover and least tern, are directly dependent on beach habitat for their continued survival.
- (3) Recreation. Beaches are perhaps the single most important economic asset of the Town. They attract tourists and second home owners to the Town for a myriad of reasons. If East Hampton's beaches were to become significantly damaged or depleted, and their attraction for visitors thereby reduced, the economic impacts on the Town could well be incalculable.
- E. Benefits of Bluffs. Bluffs are a natural and scenic asset of the Town. Their many important functions include the following:
 - (1) Flooding and erosion control. Bluffs protect shorelands and coastal development by absorbing the wave energy associated with open water. Bluffs are also an important source of depositional material for beaches and for offshore sandbars and shoals. Through their own gradual erosion, bluffs provide material to maintain these other coastal features and thus to limit erosion on other sections of the coastline.
 - (2) Wildlife habitat. Bluffs provide habitat for certain types of birds. This is particularly true on the ocean side of Montauk, where high, steep bluffs of clay and glacial till afford nesting areas for bank swallows.
 - (3) Scenic Vistas. Bluffs provide a natural barrier to development behind

them and help preserve the natural scenic vista from the shoreline and surface waters.

- F. Benefits of Dunes. Dunes are a significant part of East Hampton's coastal aesthetic. They also play an important role in protecting upland areas from storm damage and flooding and, for this reason, were among the first natural features in the Town to be protected by municipal regulation. Among the important functions of dunes are the following:
 - (1) Flooding and erosion control. Like beaches and bluffs, dunes are of the greatest protective value during conditions of storm-induced high water. Because dunes often protect some of the Town's most biologically productive areas as well as developed coastal areas, their value as protective features is especially great. The two primary protective functions of dunes are prevention of wave overtopping and the storage of sand for coastal processes. High, vegetated dunes are more stable and thus provide a greater degree of protection than low, unvegetated ones. The keys to maintaining a stable dune system are the establishment and maintenance of beach vegetation and the assurance of a dependable supply of sand to nourish the dunes.
 - (2) (Reserved.)
- G. Benefits of Beach Vegetation. Beach and dune vegetation, such as beach grass but including other types of vegetation indigenous to the coastal zone, traps sand and organic matter and holds it in place, thereby helping dunes and bluffs to retain their cohesiveness against the erosive forces of wind and waves. By trapping sand and other material, beach vegetation allows dunes to increase in size and slows the rate of bluff erosion. Beach vegetation is therefore vital in protecting coastal areas from the effects of storms.

§ 255-4-20. Activities requiring Natural Resources Special Permits. [deleted in entirety and replaced with the following]

No person shall undertake any of the activities listed herein without first having obtained a natural resources special permit therefor, pursuant to Article V of this Chapter:

- A. Wetlands.
 - (1) On or within any freshwater or tidal wetland, or within one hundred fifty (150) feet of any boundary of the same:
 - (a) Clearing or grading land.
 - (b) Digging, dredging, or excavating land, or depositing fill or other material upon land.

- (c) Building, constructing, erecting, reconstructing, enlarging, altering, or placing any structure or other improvement whatsoever in or upon land.
- (2) On or within any freshwater or tidal wetland, or within two hundred (200) feet of any boundary of the same:
 - (a) Constructing or installing on or in land any cesspool, septic tank, or other structure, system, or device for the disposal of sewage or other liquid wastes.
 - (b) Constructing or installing on or in land any structure, system, or device for the receipt or storage of fuel or any other liquid except water.
- (3) Filling or altering any wetland.
- B. Beaches.
 - (1) On or within any beach, or within one hundred fifty (150) feet of the inland boundary of any beach:
 - (a) Clearing or grading land.
 - (b) Digging, dredging, or excavating land, or depositing fill or other material upon land.
 - (c) Building, constructing, erecting, reconstructing, enlarging, altering, or placing any structure or other improvement whatsoever in or upon land.
 - (2) On or within any beach, or within two hundred (200) feet of the inland boundary of any beach:
 - (a) Constructing or installing on or in land any cesspool, septic tank, or other structure, system, or device for the disposal of sewage or other liquid wastes.
 - (b) Constructing or installing on or in land any structure, system, or device for the receipt or storage of fuel or any other liquid except water.
- C. Bluffs.
 - (1) Within one hundred fifty (150) feet of the bluff line on all lands which

lie along the Atlantic Ocean east of Map No. 174, Montauk, and within one hundred (100) feet of the bluff line on all other lands:

- (a) Clearing or grading land, including the bluff itself.
- (b) Digging, dredging, or excavating land, including the bluff itself, or depositing fill or other material upon land.
- (c) Building, constructing, erecting, reconstructing, enlarging, altering, or placing any structure or other improvement whatsoever in or upon land.
- (2) On or within any bluff, clearing, grading, filling, cutting, removing, or otherwise altering the bluff, or undertaking any other activity enumerated in Subsection C (1) above.
- D. Dunes.
 - (1) Within one hundred fifty (150) feet of the dune crest on all lands which lie along the Atlantic Ocean east of Map No. 174, Montauk, and within one hundred (100) feet of the dune crest on all other lands:
 - (a) Clearing or grading land.
 - (b) Digging, dredging, or excavating land, or depositing fill or other material upon land.
 - (c) Building, constructing, erecting, reconstructing, enlarging, altering, or placing any structure or other improvement whatsoever in or upon land.
 - (2) On or within any dune, wherever located, clearing, grading, filling, cutting, removing, or otherwise altering the dune, or undertaking any other activity enumerated in Subsection D (1) above.
- E. Waters and nearshore areas.
 - (1) On or within any nearshore area, tidal water, or watercourse:
 - (a) Digging, dredging, or excavating land, or depositing fill or other material upon land.
 - (b) Building, constructing, erecting, reconstructing, enlarging, altering, or placing any structure or other improvement whatsoever in or upon land. This provision shall not apply to

fish traps.

- (2) Filling or altering any watercourse or tidal water.
- (3) Constructing, creating, or enlarging, or filling or diminishing in size, any artificial pond or other man-made water body which exceeds ten thousand (10,000) square feet in surface area or which, regardless of size, is situate in the groundwater table.
- F. Velocity floodplain. On any lands lying in the VE flood hazard zone within the Flood Hazard overlay district:
 - (1) Clearing or grading land.
 - (2) Digging, dredging, or excavating land, or depositing fill or other material upon land.
 - (3) Building, constructing, erecting, reconstructing, enlarging, altering, or placing any structure or other improvement whatsoever in or upon land.
- G. Beach vegetation. Clearing, removing, uprooting, burying, or otherwise damaging any beach vegetation, or replacing the same with lawn, sod, or turf. This section shall not be deemed to require a permit for the planting of beach vegetation in a manner which does not disturb existing beach vegetation.
- § 255-4-21. Reduced Natural Resources jurisdiction. [deleted in entirety and replaced with the following]

The distance of one hundred fifty (150) feet contained in subsection A (1) of § 255-4-20 hereof shall be deemed to be reduced to one hundred (100) feet for:

- A. Minor addition to residence. Building, constructing, erecting, or placing one (1) addition, extension, enclosure, or porch or deck addition, not exceeding one hundred fifty (150) square feet in gross floor area, onto an existing residence, together with any clearing, grading, digging, or filling necessarily associated with the same.
- B. Minor accessory structure. Building, constructing, erecting, or placing an accessory building or structure, not exceeding one hundred fifty (150) square feet in gross floor area and having no plumbing, on a lot containing a residence, together with any clearing, grading, digging, or filling necessarily associated with the same.
- C. Reconstruction. The reconstruction or repair of any lawfully preexisting

building or structure.

- **D.** Other restrictions or approvals. This section shall not be deemed to authorize any reconstruction or other work prohibited by § 255-1-40 or § 255-1-42 hereof, nor to exempt an applicant from the necessity of obtaining permits or approvals from other agencies, such as the New York State Department of Environmental Conservation or the Town Trustees.
- § 255-4-26. Building permits limited.
 - A. [NO CHANGE.]

B. [<u>NO CHANGE.</u>]

C. Referral to Planning **Department** Director or Natural Resources **Department** Director.

[deleted in entirety and replaced with the following]

- (1) No building permit may issue on any lot which abuts or contains any wetland, watercourse, or tidal water, or which contains any beach, dune, bluff, or other natural resource designated in § 255-4-12 hereof, until the application for such building permit shall have been referred by the Building Inspector to the Planning Department and/or Natural Resources Department, which shall verify the presence and location of all such designated natural resources on or near the lot.
- (2) Upon verifying the presence and location of any natural resource designated in § 255-4-12, the Planning Department and/or Natural Resources Department shall so inform the Building Inspector, in writing. The Building Inspector shall then determine, based upon the presence and location of any natural resource reported by the Planning Department and/or Natural Resources Department, whether a natural resources special permit is required for the activity, improvement, work, or use in question. If a natural resources special permit is required for such activity, improvement, work, or use, no building permit shall be issued until such natural resources special permit has been obtained or the project has been amended so as to avoid the need for the natural resources special permit.
- (3) The owner of a lot or his agent may request an inspection of said lot for the purpose of ascertaining whether natural resources regulated under this Article exist on or near the lot. Any such lot inspection request shall be submitted to the Building Inspector, who shall refer said request to the Planning Department and/or Natural Resources Department. The Planning Department and/or Natural Resources Department shall perform the lot inspection immediately upon receipt

of a referral by the Building Inspector, and shall deliver to the Building Inspector a written statement, within twenty (20) days of the receipt of such lot inspection referral, as to the presence and approximate location of any natural resources on or near the subject lot. The Planning Department's and/or Natural Resources Department's statement on a lot inspection, however, shall not constitute the verification of natural resources which is required by the subparagraphs (2) and (3) above.

D. [NO CHANGE.]

[The following subsection is to be deleted in its entirety and replaced with the following] **§ 255-4-28.** Coastal restoration projects and repair or reconstruction of coastal structures.

- A. Expedited permit review. An expedited administrative natural resources special permit may be obtained, pursuant to the provisions of § 255-8-84 hereof, for any of the following:
 - (1) The undertaking of a coastal restoration project as defined herein.
 - (2) The repair or reconstruction, in-place and in-kind, of a lawfully preexisting coastal structure other than an erosion control structure.
 - (3) The repair or reconstruction, in-place and in-kind, of a lawfully preexisting erosion control structure in Coastal Erosion Overlay Zone 4 of the Coastal Erosion Overlay District.
 - **B.** Meaning of in-place and in-kind. For the purposes of this section, work which involves the relocation, enlargement, or extension of a coastal structure, or the replacement of any part of the structure with materially different components or materials, shall not be considered to be in-place and in-kind.
 - C. Meaning of lawfully preexisting. For the purposes of this section, a structure shall be deemed "lawfully preexisting" only if (i) it received all governmental approvals necessary at the time of its construction or any subsequent alteration, (ii) it is substantially complete and in existence, and (iii) it has not deteriorated to the point at which it is no longer functional for its intended purpose.
 - D. Other restrictions or approvals. This section shall not be deemed to authorize any reconstruction or other work prohibited by § 255-1-40 or § 255-1-42 hereof, nor to exempt an applicant from the necessity of obtaining permits or approvals from other agencies, such as the New York State Department of Environmental Conservation or the Town Trustees.

- E. Minor Maintenance. Minor maintenance, in place and in kind, to any documented existing dock is permitted, provided that each of the following conditions are satisfied:
 - (1) The maintenance work proposed does not exceed the aggregate of 25% of the total existing dock area, number of pilings or linear footage of bulkhead;
 - (2) The materials to be used, method of installation and disposal or material removed are approved in writing by the Natural Resources Department;
 - (3) A building permit is first obtained incorporating such reasonable conditions as may be necessary; and
 - (4) No minor maintenance building permits totaling an aggregate of more than 25% has been issued within the prior three years.
 - F. Upon receipt of an application for a building permit under subsection E above, the Building Inspector shall refer the matter to the Town Engineer, the Natural Resources Director, and the Planning Department Director to assist him in determining whether the work proposed is of a type described therein or instead represents activity, such as expansion of a structure, new work, repair of damage more than one year old, etc., for which a natural resources special permit must be obtained. Nothing herein shall be deemed to exempt an applicant from the necessity of obtaining approvals or permits other than those required by this Chapter, such as a permit from the Town Trustees or the New York State Department of Environmental Conservation.

§ 255-4-29. Emergency activities.

The provisions of this section shall apply to emergency activities within the Coastal Erosion Overlay District which are immediately necessary to protect the public health, safety, or welfare, or to protect publicly- or privately-owned buildings and structures from major structural damage. For the purposes of this section, emergency activities are actions: (i) designed to protect buildings or structures from major structural damage, if those buildings or structures are in imminent peril of incurring such damage because of flooding or erosion, or (ii) designed to prevent a structural failure of all or part of a building or structure which has already incurred major structural damage because of flooding or erosion. Emergency activities shall be limited to the following actions: moving a building or other structure to a location which is landward of its existing location; making alterations to the building or structure, solely to repair damage already caused by flooding or erosion or to prevent a structural failure of all or part of the building or structure; depositing sand fill seaward of the building or structure; installing a geotextile tube or sandbag system, with provision for its eventual removal as required by this section; or repair of lawfully pre-existing coastal erosion structures in Coastal Erosion Overly Zones 3 or 4. Whenever emergency activities are undertaken, damage to natural resources, features, or systems shall be avoided or minimized. Emergency activities shall

be governed by the following rules and procedures:

- A. Notification of Building Inspector. Prior to the commencement of any emergency activity described in this section, the Building Inspector shall be notified in writing and shall determine whether to authorize the proposed emergency activity under the provisions of this section. Such written notification shall clearly and conspicuously state that it is a request to undertake an emergency activity pursuant to this section and shall include the following information:
 - (1) Description of the proposed action and the manner in which it is to be undertaken.
 - (2) Location map and plan of the proposed action.
 - (3) Any additional information which the Building Inspector may reasonably require to properly evaluate the proposed action, including the report of a licensed professional engineer.
- B. Findings by Building Inspector. In authorizing an emergency activity the Building Inspector shall:
 - (1) Find that the proposed action constitutes a permissible emergency activity as described in this section.
 - (2) Determine that the proposed emergency activity can and will be carried out in a manner which will cause the least adverse impact on the public health, safety, or welfare and the least harm to natural resources, features, and systems.
 - (3) Where applicable, coordinate with and consider the comments of the Town Trustees or their authorized representatives.
 - (4) Determine that (i) the building or structure in question is in imminent peril of incurring major structural damage as a result of flooding or erosion, and the proposed emergency activity is necessary to prevent such damage, or (ii) the building or structure has already incurred major structural damage because of flooding or erosion, and the proposed emergency activity is necessary to repair such damage or to prevent a structural failure of all or part of the building or structure. In making this determination, the Building Inspector may consult the Town Engineer or the Town Fire Marshal and may require the applicant to provide an evaluation and/or certification from a licensed professional engineer.
- C. Determination of Building Inspector. The Building Inspector shall, in writing, authorize or refuse to authorize a proposed emergency activity

within five (5) business days of his receipt of the notification (including all required information) described in Subsection A hereof. If the Building Inspector authorizes the proposed activity, his authorization shall specify the following:

- (1) Description of the emergency activity for which the authorization is issued.
- (2) Address and location of the property where the emergency activity is to be conducted.
- (3) Name and address of the person or persons authorized to conduct the emergency activity.
- (4) **Period of validity of the authorization.**
- (5) Terms and conditions of the authorization.
- D. Conditions to determination. The Building Inspector may authorize any emergency activity which is specified in this section and which is warranted by the circumstances. He may impose conditions commensurate with the emergency and reasonably related to the emergency activity which he authorizes. Such conditions may include, but shall not be limited to, the following:
 - (1) Removal of damaged buildings or structures or portions thereof, if those damaged buildings, structures, or parts thereof are or have become hazardous to human health or safety, or if said buildings, structures, or parts thereof present a threat of damage to other buildings or structures or to natural resources.
 - (2) Removal of any building or structure which has been constructed, erected, or placed, or any material which has been placed or deposited, without benefit of a building permit, natural resources special permit, or other required permit or approval.
 - (3) Restoration of any natural resource which has been or may be damaged by the emergency activity.
 - (4) The posting of an undertaking and security which the Building Inspector may reasonably determine to be necessary to ensure the completion of restoration work, the removal of structures, or the completion of other work required by his authorization.
- E. Duration of emergency authorization. An authorization for the undertaking of emergency activity pursuant to this section shall be valid for a period of time not to exceed six (6) months. Such authorization may be renewed for

one (1) additional period not to exceed three (3) months, provided that: (i) the person seeking to undertake the emergency activity requests such renewal in writing, (ii) the activity thus far undertaken pursuant to the Building Inspector's authorization is in full compliance with the terms and conditions of that authorization, and (iii) the Building Inspector finds that an emergency situation as described in this section still exists. All emergency activity authorized under this section shall be completed prior to the expiration of said emergency authorization or the activity shall be deemed work subject to and requiring a natural resources special permit pursuant to the other provisions of this article.

- F. Removal of geotextile tube or sandbag systems. Where the Building Inspector authorizes installation of a geotextile tube or sandbag system as an emergency activity pursuant to this section, his determination authorizing the work shall specify that the applicant will remove the geotextile tube or sandbag system in its entirety, and will complete any restoration work required by the Building Inspector's authorization, prior to the expiration of that authorization. In the event that the geotextile tube or sandbag system is not fully removed from the property in question by the expiration date of the authorization, or the required restoration work has not been completed by that date, the Town shall have the right to enter upon the property to remove the system and/or to perform the uncompleted restoration work, and shall have the right to use any security posted in connection therewith in order to undertake these tasks.
- G. Exceptions to emergency power. Notwithstanding anything herein to the contrary, the provisions of this section shall not allow the Building Inspector to authorize the following activities:
 - (1) Repair, reconstruction, or alteration of existing coastal erosion structures located within Coastal Erosion Overlay Zones 1 or 2.
 - (2) (Reserved)

§ 255-4-30. Wetland setbacks. [deleted in entirety and replaced with the following]

The following minimum setbacks or other restrictions shall apply to all lots, lands, uses, activities, and structures within the Town. These setbacks or other restrictions shall apply whether or not the particular lot, land, use, activity, or structure requires a natural resources special permit or other permit or approval, but are subject to certain exceptions set forth in § 255-4-43 hereof and to the provisions of §§ 255-3-70 et seq. hereof relating to the Harbor Protection Overlay District.

A. Construction prohibited within wetlands. No building or other structure shall be erected, constructed, placed, enlarged or reconstructed on or within a wetland.

- B. Sewage disposal devices. No sewage disposal device or structure shall be constructed, placed, or installed within one hundred fifty (150) feet of the upland boundary of a wetland. (See also § 255-3-75B.)
- C. All other structures. Except as set forth in § 255-4-43 hereof, no building or other structure shall be erected, constructed, placed, enlarged or installed within one hundred (100) feet of the upland boundary of a wetland.
- D. Clearing. The clearing of vegetation or the establishment of turf, lawn, or landscaping shall not be undertaken within fifty (50) feet of the upland boundary of a wetland.

§ 255-4-40. Coastal setbacks, including bluff and dune setbacks.

[deleted in entirety and replaced with the following]

The following minimum setbacks or other restrictions shall apply to all lots, lands, uses, activities, and structures within the Town. These setbacks or other restrictions shall apply whether or not the particular lot, land, use, activity, or structure requires a natural resources special permit or other permit or approval, but are subject to certain exceptions set forth in § 255-4-43 hereof.

- A. Seaward face of bluff or dune. No building or other structure shall be erected, constructed, placed, enlarged or reconstructed on a bluff or seaward of the bluff line or dune crest.
- B. Atlantic Ocean; generally. Along the Atlantic Ocean, no building or other structure shall be erected, constructed, placed, enlarged or reconstructed within one hundred (100) feet of the bluff line or dune crest or, where no bluff line or dune crest exists, within one hundred (100) feet of the landward boundary of the beach; provided, however, that the oceanfront areas described in subsections C, D & E below shall be governed by the provisions of those subsections.
- C. Atlantic Ocean; eastern Montauk. Along the Atlantic Ocean, on all lands lying east of the eastern boundary of Map No. 174, Montauk, no building or other structure shall be erected, constructed, placed, enlarged or reconstructed within one hundred fifty (150) feet of the bluff line or dune crest or, where no bluff line or dune crest exists, within one hundred fifty (150) feet of the landward boundary of the beach.
- D. Outer bays and harbors. Along the shorelines of Northwest Harbor, Gardiner's Bay, Napeague Bay, Fort Pond Bay, and Block Island Sound, no building or other structure shall be erected, constructed, placed, enlarged or reconstructed within the following distances of the bluff line or dune crest or,

where no bluff line or dune crest exists, within the following distances of the landward boundary of the beach:

- (1) On lots having a lot area of less than thirty thousand (30,000) square feet: seventy-five (75) feet.
- (2) On lots having a lot area of less than eighty thousand (80,000) but greater than or equal to thirty thousand (30,000) square feet: one hundred (100) feet.
- (3) On lots having a lot area of eighty thousand (80,000) square feet or more: one hundred fifty (150) feet.
- (4) Nothwithstanding the foregoing, on lots having a lot area of less than eighty thousand (80,000) square feet, an addition to a legally pre-existing structure that is situated landward of the existing structure, the required setback shall be fifty (50) feet.
- E. Inner harbors. Along the shorelines of Northwest Creek, Three Mile Harbor, Hog Creek, Accabonac Creek, Napeague Harbor, Great Pond (Lake Montauk) and the tributaries thereto, no building or other structure shall be erected, constructed, placed, enlarged or reconstructed within the following distances of the bluff line or dune crest or, where no bluff line or dune crest exists, within the following distances of the landward boundary of the beach:
 - (1) On lots having a lot area of less than forty thousand (40,000) square feet: fifty (50) feet.
 - (2) On lots having a lot area of forty thousand (40,000) square feet or more: one hundred (100) feet.
- F. Clearing. The clearing of vegetation or the establishment of turf, lawn or landscaping shall not be undertaken within fifty (50) feet of the bluff line or dune crest, or where no bluff line or dune crest exists, the landward boundary of the beach.
- § 255-4-43. Exceptions to setbacks. [deleted in entirety and replaced with the following]

The following structures, uses, and activities shall not be required to conform to the minimum setbacks from natural features or other prohibitions which are specified in this Article, to the extent set forth below:

A. Coastal structures. The wetland, bluff line, and dune crest setbacks contained in §§ 255-4-30 and 255-4-40 hereof shall not apply to any coastal structure for which a natural resources special permit is issued pursuant to

Article V hereof.

- B. Pervious residential driveways. The wetland setbacks contained in § 255-4-30 hereof shall not apply to a pervious driveway or walkway serving residential property. Any such driveway or walkway shall, however, be set back as great a distance as practicable from the upland boundary of all wetlands.
- C. Subdivision access. The wetland setbacks contained in § 255-4-30 hereof shall not apply to a street or common driveway serving lots in a subdivision approved by the Planning Board, provided that the Planning Board makes an express finding in its resolution approving the subdivision that, pursuant to this subsection, there is no feasible way to provide the lots served by the street or common driveway with suitable access if the wetland setbacks contained in § 255-4-30 hereof are required to be met, and provided further that a natural resources special permit is obtained for the street or common driveway pursuant to Article V hereof. Wherever such setback relief is granted by the Planning Board, it shall be the minimum relief necessary to provide safe and reasonable access to the lots in question.
- D. Marinas and other uses in the Waterfront district. The wetland setbacks contained in § 255-4-30 hereof shall not apply to any structure on a lot in the Waterfront (WF) use district or to any structure which is part of a lawfully existing marina or recreational marina in any district, provided that the structure is either water-dependent in that it is used for the servicing of boats, the unloading of fish, or the like, or for some other reason cannot feasibly be located landward of the otherwise applicable setback line.
- E. Reconstruction of nonconforming structures. The reconstruction of nonconforming buildings and structures shall be exempt from the setback requirements of this article only as set forth below:
 - (1) The reconstruction, as defined herein, of a nonconforming building or structure shall be exempt from compliance with the wetland setback requirements of § 255-4-30 hereof.
 - (2) The reconstruction, as defined herein, of a nonconforming building or structure shall only be exempt from compliance with the bluff line or dune crest setback requirements of § 255-4-40 hereof if such reconstruction is undertaken because of accidental damage or destruction, pursuant to and as described in § 255-1-42D hereof.

§ 255-4-80. Interpretation.

If the Building Inspector, in administering or enforcing any provision of this chapter, is in doubt as to the existence, location, boundary, or extent of any natural feature, area, resource or

system, including but not limited to those designated in § 255-4-15 255-4-12 hereof, he shall consult with the Natural Resources Director and/or Planning Director, who shall provide the Building Inspector with a written determination regarding the same. Where the Natural Resources Director or Planning Director informs the Building Inspector in writing as to the existence, location, boundary, or extent of any such natural feature, area, resource, or system, either in response to the Building Inspector's inquiry or without such an inquiry, this determination shall be binding upon the Building Inspector and the affected property owner for all purposes under this chapter, unless and until a different determination shall have been rendered by the Zoning Board of Appeals pursuant to the authority given it in Article VIII hereof.

§ 255-4-85. Limitation of subdivision Subdivision of land.

[deleted in entirety and replaced with the following]

Notwithstanding any other provision of this Code to the contrary, except the provisions of § 255-4-43 hereof regarding access to subdivision lots, no property shall be subdivided so as to create any lot on which a principal building, structure, or use cannot be sited in compliance with all of the setback requirements contained in this Article. This section shall not be construed to prevent the Planning Board from requiring setbacks of whatever greater size it deems reasonable and necessary in a particular subdivision application.

ARTICLE V

§ 255-5-50. Specific standards and safeguards.

[NO CHANGE TO THIS SECTION EXCEPT TO FOLLOWING SUBSECTION.]

NATURAL RESOURCES SPECIAL PERMIT:

[deleted in entirety and replaced with the following]

The specific standards and safeguards for a natural resources special permit are fully set forth at § 255-5-51 hereof. All references in this chapter to such standards and safeguards for natural resources special permits shall be deemed to refer to the provisions of § 255-5-51, and those provisions shall be deemed part of § 255-5-50 for all purposes hereunder.

§ 255-5-51. Specific standards and safeguards for Natural Resources Special Permits.

Because of their number and complexity, the specific standards and safeguards applicable to natural resources special permits under § 255-5-50 hereof are set forth in this section. These standards and safeguards shall apply to every natural resources special permit as though set forth in their entirety in § 255-5-50.

A. Natural resources special permits, generally. This special permit shall be issued by the Board of Appeals, which agency shall have exclusive and complete jurisdiction over the administration of such permit in accordance

with the provisions of this section. In reviewing any application for a natural resources special permit, the Board of Appeals may refer the matter to the Planning Department and the Town Trustees (where applicable) for a recommendation. In the event of any such referral, the Planning Department and the Town Trustees (where applicable) shall make a recommendation in writing to the Board of Appeals within thirty (30) days of the date of the referral. However, in the event that additional information is required by the Planning Department to complete its review, it shall notify the applicant within ten (10) days of the date of the referral what additional information is needed and, in such event, the Planning Department shall submit its recommendation to the Board of Appeals within twenty (20) days after receipt of the requested information from the applicant.

- B. Delegation of natural resources special permits. Pursuant to the provisions of § 255-8-84 hereof, which authorize the Planning Department to process and issue certain natural resources special permits, the Board of Appeals may delegate such review and approval of individual applications to the Planning Department in any manner which the Board deems best suited to this purpose. With regard to any permit, class of permits, or permit application for which such a delegation has been duly made, references in this Chapter to the Board of Appeals shall be construed, where appropriate, to mean the Planning Department.
- C. Compatibility with purposes of Chapter. The building, structure, use, or activity for which a natural resources special permit is sought must be found to be compatible with the purposes set forth in § 255-1-11 and § 255-4-10 of this Chapter.
- D. Preservation of natural resources. All structures and uses, other than coastal structures, shall be located on upland and shall be located so that no natural resource, feature, or system designated in § 255-4-12 hereof will be diminished in size, polluted, degraded, or lost, or placed in peril thereof, in order to establish such structure or use. If there is inadequate upland for the structure or use proposed, minimal exceptions to the requirements of this section may be authorized in the permit, but only after:
 - (1) Alternative reasonable uses of the property are determined not to exist; and
 - (2) Alternative designs entailing smaller buildings or structures, reduced yard or other setbacks, or diminished or reconfigured areas of use are determined not to be effective in preventing loss of or potential damage to designated natural features, or the only such designs are found to be infeasible or unlawful.
- E. Coastal structures, generally. A coastal structure may be placed at any

location on a lot if the structure and the uses associated therewith are found not to be detrimental to any natural resource, feature, or system designated in § 255-4-12 hereof. No permit shall issue for any structure which would unduly interfere with tidal flow or marine life or habitat, or which would destroy other than the minimal practicable areas of beach vegetation, wetland vegetation, or eel grass (*Zostera marina*). For the purposes of this section, a structure will be deemed in violation of the preceding sentence and ineligible for a natural resources special permit if the structure, together with all similar structures likely to be sited in the vicinity should it be approved, would cause such undue interference or destruction.

- F. Erosion control structures. No natural resources special permit shall be issued for the construction, placement, installation, repair, reconstruction, replacement, or alteration of a erosion control structure unless the application for such permit, in addition to complying with the general requirements for issuance of special permits and the requirements of the preceding subsection regarding coastal structures, and subject to the provisions of § 255-3-85 hereof, satisfies the following requirements:
 - (1) If the application involves a new erosion control structure, the applicant shall demonstrate that erosion control on the project site cannot adequately be accomplished by means of a coastal restoration project, as defined herein, with periodic renourishment or renewal of sand or other materials.
 - (2) If the application involves a new coastal erosion control structure in Coastal Erosion Overlay Zones 1, 2 or 3, the applicant shall demonstrate that: (i) the erosion control structure is immediately necessary to prevent the loss or destruction of a principal building or structure on the applicant's lot, or to prevent severe damage to such building or structure, (ii) the threatened loss, destruction, or severe damage to a principal building or structure cannot reasonably be prevented by some alternative means, such as relocating the building or structure or undertaking a coastal restoration project, as defined herein, and (iii) the erosion control structure is of the minimum size, design, and physical extent needed to prevent the threatened loss, destruction, or severe damage.
 - (3) The construction, installation, or other work proposed for the erosion control structure, as well as future repair, maintenance, or restoration of the same, shall not:
 - (a) Interfere with the littoral transport of sand or other sediment, so as to cause substantial damage to or a measurable increase in erosion of the project site or downdrift beaches, dunes, bluffs, or shoreline.

- (b) Cause the loss of identified habitat for important wildlife or native vegetation, including marine life and marine habitat.
- (c) Exacerbate flood damage by generating floodborne flotsam.
- (4) The erosion control structure shall be designed and constructed according to generally accepted engineering principles, such that the structure will have a reasonable probability of controlling erosion on the project site for a period of at least thirty (30) years.
- (5) All materials used in the erosion control structure shall be non-toxic, durable, and capable of withstanding the icing, weathering, inundation, wave impact, and other meteorological and hydrographic conditions to which they will be exposed for a period of at least thirty (30) years. Individual components of the structure may have a working life of less than thirty (30) years if a maintenance program required in connection with the issuance of a permit will ensure that these components are regularly maintained and replaced as necessary to attain the required thirty (30) years of erosion control.
- (6) The application shall include a long-term program for the repair, maintenance, or restoration of the structure. That program must include standards for the normal maintenance or replacement of degradable materials and the replacement of sand and vegetative cover. The Zoning Board of Appeals shall require the filing of an appropriate legal instrument against the subject property at the Office of the Suffolk County Clerk in form acceptable to the Town Attorney, that shall require the applicant and all future owners of the property to follow the long-term program for the repair, maintenance, or restoration of the structure. The Zoning Board of Appeals may require that the applicant for an erosion control structure assure the required maintenance by posting an appropriate undertaking and security with the Town.
- G. Water-dependent facilities. The provisions of Subsection F above shall not apply to bulkheads and similar structures which are part of a water-dependent facility in the Waterfront (WF) use district, or which are part of a lawfully existing marina or recreational marina in any district.
- H. Docks. No dock, pier, wharf, or similar structure (hereafter, "dock") may be authorized by natural resources special permit on residential property or underwater lands adjacent thereto, unless the dock complies with the following standards or limitations, which are in addition to the other standards enumerated in this article for issuance of a natural resources special permit, including those specified with regard to coastal structures in Subsection E above:

- (1) If the property in question is already improved with a lawfully preexisting fixed dock, a natural resources special permit may authorize the reconstruction of that dock or its replacement with a new fixed dock.
- (2) If the property in question is not already improved with a lawfully preexisting fixed dock, the only type of dock which may be authorized by natural resources special permit is a floating dock, which shall be construed to mean that the dock meets the following requirements:
 - (a) The horizontal weight-bearing construction on which persons and objects stand (which is itself commonly called the "dock") shall be no greater than five (5) feet in width and shall be designed so that it floats on the surface of the water (i.e., so that it is a "floating dock");
 - (b) Every part of the dock except the pilings shall be designed and shall be used so that it is removed during the winter months and reinstalled in the spring (i.e., so that the dock, excepting only the pilings, is "fully removable");
 - (c) The dock shall be designed and sited so that, with the exception of the pilings, no part of the dock (including any catwalk and any ramp between a catwalk and the remainder of the dock) will contact the bottomland during a normal low tide;
 - (d) The dock shall be the minimum length necessary to reach a point where the water depth at the seaward terminus of the dock (inclusive of any catwalk) is three (3) feet at mean low water, provided, however, that such point shall not in any case be more than eighty (80) feet seaward of mean high water, as measured on a perpendicular line from the mean high water mark;
 - (e) Notwithstanding the provisions of subparagraphs (a) and (b) above, when necessary to maintain a floating dock in a floating condition through a normal tide range, access between the dock and shore may be provided by means of an elevated fixed walkway (commonly called a "catwalk") not more than five (5) feet in width, provided, however, that no such catwalk shall extend more than forty (40) feet seaward of mean high water, as measured on a perpendicular line from the mean high water mark; and
 - (f) A catwalk shall provide, in appropriate circumstances, for

passage by the public along the beach or foreshore, e.g., by means of a removable or raised section (allowing vehicular passage) or steps or a ramp (allowing pedestrian passage).

- (3) Before approving a dock under the provisions of paragraph (2) above, the Board of Appeals shall have first considered all reasonable alternatives which will allow the applicant to safely access and utilize a boat (e.g., rig line and pulley, free swinging mooring).
- (4) In considering whether to issue a natural resources special permit for a dock, the Board of Appeals shall consider whether the dock will have any of the following harmful effects:
 - (a) Whether the dock will impair navigation;
 - (b) Whether the dock will unduly interfere with the public use of waterways for swimming, boating, fishing, shellfishing, waterskiing, and the like;
 - (c) Whether the dock will unduly interfere with transit by the public along the public beaches or foreshore;
 - (d) Whether the dock will significantly impair the use or value of waterfront property adjacent to or near the dock;
 - (e) Whether the dock will cause degradation of surface water quality;
 - (f) Whether the dock will result in the destruction of beds of eel grass (*Zostera marina*) or shellfish;
 - (g) Whether the dock will unduly restrict tidal flow or water circulation; and
 - (h) Whether the dock will despoil views from public parklands or roadways.
- I. CCA and other treated wood. No natural resources special permit which is required for projects or activities in tidal waters shall allow the use of wood which has been treated with copper chromated arsenate (CCA), ammoniacal copper quat (ACQ), or creosote unless it can be shown that no reasonable alternative material will serve the purpose for which the CCA-, ACQ-, or creasote-treated wood is intended to be used. In determining whether no reasonable alternative to the proposed wood exists, the Board of Appeals shall take into account the cost of alternative materials, their suitability for the intended use (e.g., structural stability), and any environmental benefit to

using alternative materials.

- J. Harbor Protection Overlay District. For structures, lands, or uses located within the Harbor Protection Overlay District, the disturbance of natural vegetation and topography during construction activities shall be minimized to the greatest degree practicable. To this end, project-limiting fencing, siltation mesh, straw bales, or similar devices for controlling land disturbances and retarding erosion and siltation shall be required during construction and during any clearing or grading of land preparatory to or associated with construction activities.
- K. Deposit of materials within Coastal Erosion Overlay District. Apart from structures approved pursuant to this Chapter, no fill or other material may be placed or deposited on beaches, dunes, or nearshore areas within the Coastal Erosion Overlay District except clean sand or gravel, having particles of a size equivalent to or slightly larger than that of the materials naturally occurring at the site in question. Where appropriate such deposited material shall be stabilized by the planting of vegetation.

ARTICLE VI Site Plan Review

Site Plan Revi

§ 255-6-35. Exceptions.

The following uses and activities shall not require site plan review and approval, to the extent indicated:

- A. [delete in entirety and replaced with the following] Coastal restoration projects and repair or reconstruction of coastal structures. Coastal restoration projects and the repair or reconstruction of lawfully preexisting coastal structures, where such work is undertaken pursuant to § 255-4-28 hereof.
- **B.** [deleted in entirety and replaced with the following] **Fuel tanks, fuel dispensers,** and hazardous materials storage facilities. Site plan review shall not be required for the demolition, removal, or replacement of existing fuel tanks, fuel lines, fuel dispensers, or other hazardous or toxic materials storage facilities where such demolition, removal, or replacement is required by Article 12 of the Suffolk County Sanitary Code, provided that:
 - (1) Approval of such work has been obtained from the Suffolk County Department of Health Services; and
 - (2) An application for a building permit has been reviewed by the Natural Resources Department and/or Planning Department and the Office of Fire Prevention and a building permit has been issued incorporating the recommendations of those agencies pursuant to the provisions of §

255-11-88 hereof.

C. [<u>NO CHANGE</u>.]

ARTICLE VIII Zoning Board of Appeals

§ 255-8-45. [<u>RESERVED</u>]

§ 255-8-50. Standards.

[<u>NO CHANGE EXCEPT -</u> <u>REPEAL Subsection E; transfer substance to § 255-8-62A.</u>]

§ 255-8-60. Limitations on certain variances.

[<u>NO CHANGE EXCEPT -</u> <u>REPEAL Subsection C and REPEAL Subsection E.</u>]

§ 255-8-62. Variances in Flood Hazard Overlay District and Coastal Erosion Overlay District.

- A. Variances from requirements of Flood Hazard Overlay District. A variance from the Town's Flood Hazard Overlay District requirements shall be deemed an area variance. Nevertheless, pursuant to Article 36 of the Environmental Conservation Law and notwithstanding anything to the contrary in § 255-8-50D hereof or in § 267-b of the Town Law or any other provision of the Town Law relating to the standards for grant of area variances, the review of variances from the requirements of said Overlay District shall be governed by the following provisions:
 - (1) The Board of Appeals shall not grant any variance from the requirements of the Flood Hazard Overlay District (found at § 255-3-40 et seq. hereof), unless the Board shall find and fully set forth in its determination that the applicant has shown exceptional hardship, which shall mean that:
 - (a) The applicant cannot reasonably comply with the requirement from which a variance is sought; and
 - (b) Grant of the variance will not result in an undue threat to human health or safety, will not result in an undue risk of damage to public or private property, will not increase flood heights, and will not cause extraordinary public expense.

- (2) The applicant shall have the burden of establishing the existence of exceptional hardship and shall show that, in view of the flood hazard, the variance sought is the minimum variance necessary to afford him relief. In deciding whether to grant a variance under this subsection, the Board shall consider the following factors:
 - (a) The degree of difficulty which the applicant would have in complying with the requirement;
 - (b) The expected heights, velocity, duration, rate of rise, and sediment transport of floodwaters at the applicant's property, and the effects of wave action, if applicable;
 - (c) The extent of the danger to life and property due to flooding or flood-caused erosion of the applicant's land;
 - (d) The susceptibility of any proposed structure or use, or its contents, to flood damage and the effects of such damage on the applicant;
 - (e) The importance of the benefits provided to the community by the applicant's proposed structure or use;
 - (f) The applicant's need for a waterfront location, where applicable;
 - (g) The availability of alternative locations for the proposed structure or use which are not as subject to flooding or erosion damage;
 - (h) The compatibility of the proposed structure or use with existing and anticipated development in its vicinity;
 - (i) The relationship of the proposed structure or use to the Town's Comprehensive Plan and floodplain management program for the area;
 - (j) The safety of vehicular access to the applicant's property in times of flood;
 - (k) The cost of governmental services associated with flooding of the applicant's property, such as search and rescue operations, post-storm clean-up, and restoration of public facilities and utilities; and
 - (l) The dangers associated with search and rescue operations

involving the applicant's property during periods of flooding.

- (3) Notwithstanding the foregoing, a variance may be granted for the repair or rehabilitation of an historic structure, as defined herein, if the requirements of subparagraph (1) (b) above are met and the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure.
- B. Limitation on Variances from requirements of Coastal Erosion Overlay District. Any variance from the prohibition of erosion control structures in certain areas of the Town, as set forth in § 255-3-85B hereof, shall be deemed an area variance and subject to the standards set forth in § 255-8-50 hereof. Nevertheless, pursuant to Article 34 of the Environmental Conservation Law and notwithstanding anything to the contrary in § 255-8-50 hereof or in § 267-b of the Town Law or any other provision of the Town Law relating to the standards for grant of area variances, the Zoning Board of Appeals shall not grant a variance to allow the construction, placement, installation, maintenance, repair, replacement, or alteration of an erosion control structure which extends perpendicular to the shoreline (such as a groin or jetty), unless such structure is necessary to ensure the safe navigability of a boat channel.
- § 255-8-84. Administrative natural resources special permits.
 - A. [<u>NO CHANGE</u>.]
 - B. [<u>NO CHANGE</u>.]
 - C. [<u>NO CHANGE</u>.]
 - D. Receipt of applications. [deleted in entirety and replace with the following] All applications for administrative natural resources special permits shall be submitted to and received for the Town by the Building Inspector, in the same manner as he receives and processes all other applications for natural resources special permits. The Building Inspector shall accept only applications which he finds to be facially complete and for which the appropriate fee has been received. One (1) copy of each application accepted shall be forwarded immediately to the Planning Department, the Town Engineer, the Director of Natural Resources, and the Town Trustees (where applicable). Within five (5) days after receipt of the application, the Town Engineer and the Director of Natural Resources shall advise the Planning Department as to whether they require additional information from the applicant.
 - E. Initial staff review. Review of applications. [deleted in entirety and replaced with the following] The Planning Department shall review every application forwarded to the Department by the Building Inspector for completeness.

Within ten (10) days after receipt of the application by the Town Building Inspector, the Planning Department shall issue either a notice of complete application as specified below or a request to the applicant for additional information. The Department shall thereafter collect and compile any information necessary to an informed and thorough review of the application, shall conduct a site inspection, and shall formulate its analysis and recommendations regarding proper disposition of the application, including appropriate mitigation measures in the event a permit should issue. The Department shall solicit comments and recommendations from the Department of Natural Resources, the Town Engineer, and the Town Trustees (where applicable) which shall have a maximum of fourteen days to respond. After receipt of all information necessary to meet the above requirements, and at the end of any comment period prescribed in Subsection F, the Planning Department shall either issue an administrative natural resources special permit or shall refer the matter to the Zoning Board of Appeals for public hearing and decision because one (1) or more of the conditions listed in Subsection J below are found to exist. If for any such reason it is determined that a particular application cannot be further processed administratively by the Planning Department, the Board of Appeals shall be so informed by the Department, and the Board shall schedule and hold a public hearing on the application at the earliest practicable time and shall thereafter proceed to decide the application in the usual manner.

F. Complete application. Publication and notice; comment period. [deleted in entirety and replaced with the following] Except as to applications made pursuant to § 255-4-28 hereof for coastal restoration projects or the repair or reconstruction of certain coastal structures, which are governed by the provisions of Subsection H, once an application is deemed complete the Planning Department shall send a notice of complete application to the Board of Appeals, the official newspaper, and the applicant. If one or more official Town forms have been designed for these purposes, such forms shall be employed. Notice sent by the Department to the official newspaper shall be in form ready to be published, shall state that the application is one which may result in the issuance of a permit by the Department without a public hearing being held thereon, and shall inform the public that comments on the application or requests that a public hearing be held must be received by the Town within twenty (20) days after the date of publication in the official newspaper (the "notice date"). Notice sent by the Department to the applicant must inform the applicant of his responsibilities to post the property and to mail copies of the notice of application or other similar approved form to all neighboring property owners as detailed in § 255-9-23 hereof. Notices sent by the Department to the applicant for forwarding to neighbors shall inform such persons that comments on the application or requests that a public hearing be held thereon must be received by the Town within twenty (20) days of the "notice date."

- G. Further staff review. Final administrative processing. [deleted current language and replaced with the following] If none of the conditions listed in subsection J below are found to exist, a draft natural resources special permit may be prepared by the Department. This permit shall be mailed by the Planning Department with a cover letter informing the applicant that, unless he submits to the Planning Department within ten (10) days a written request for modification of the draft permit or an objection to one (1) or more conditions of the draft permit, the final permit will issue as originally drafted. Any objection or modification request so submitted shall be considered by the Planning Department, which may elect to modify the final permit accordingly. If such a modification is made, the final permit issued by the Planning Department shall reflect the modification; otherwise it shall be identical to the originally issued draft.
- H. Final administrative processing. [deleted in entirety and replaced with the following] Expedited review for coastal restoration projects and the repair or reconstruction of certain coastal structures. In the case of an application for a coastal restoration project or for the repair or reconstruction of certain coastal structures, as enumerated in and pursuant to § 255-4-28 hereof, the publication, notice, and public comment requirements of Subsection F shall not apply. In such applications, after receipt of all information required by the Planning Department pursuant to Subsection E, the Department shall either issue an administrative natural resources special permit or within five (5) days or refer the matter to the Zoning Board of Appeals, in accordance with the procedures for all other administrative natural resources special permits. At the request of an applicant for an expedited permit under this subsection, the Planning Department may waive the preparation and mailing of a draft permit as would be required by Subsection G. Where the Planning Department finds that the work proposed is neither a coastal restoration project nor the repair or reconstruction of a coastal structure as authorized in § 255-4-28, the application may not be processed under this subsection and shall be subject to the procedural requirements governing all other applications for administrative natural resources special permits.
- I. Appeals; hearing de novo. [deleted in entirety and replaced with the following] An applicant may appeal the Planning Department's decision not to issue an administrative natural resources special permit or the imposition in any permit issued by the Department of one (1) or more particular conditions. Any such appeal shall be deemed procedurally and for all other purposes an entirely new application to the Board of Appeals for a non-administrative natural resources special permit, and the Board of Appeals shall hear and decide the matter on that basis. The Board may make use of documents and materials already submitted by the applicant or produced by the Planning Department. No new fee shall be charged an applicant for the further processing of the application.

J. [<u>NO CHANGE</u>.]

ARTICLE XII Use District (Zoning) Maps

AMENDED TO SHOW COASTAL EROSION OVERLAY DISTRICT (ZONE 1 through ZONE 4 inclusive) - SEE ATTACHED MAPS.

SECTION III. - SEVERABILITY:

Should any part or provision of this Local Law be decided by the courts to be unconstitutional or invalid, such decision shall not affect the validity of this Local Law as a whole nor any part thereof other than the part so decided to be unconstitutional or invalid.

SECTION IV. - TOWN LAW SUPERSEDED:

To the extent that the limitation imposed upon the grant of variances from the provisions of § 255-3-85B may be inconsistent with the general area variance standards set forth in § 267-b of the New York Town Law, or any other provision of the Town Law relating to the standards for grant of variances, those provisions of the Town Law are hereby superseded pursuant to the Town's powers under the New York Municipal Home Rule Law, the Statute of Local Governments, and the State Constitution, as well as the powers accorded the Town in Article 34 of the New York Environmental Conservation Law.

SECTION V. - EFFECTIVE DATE:

This Local Law shall take effect immediately upon filing with the Secretary of State as provided by law.

DATED: [insert]

BY ORDER OF THE TOWN BOARD TOWN OF EAST HAMPTON, NEW YORK

FRED L. OVERTON, TOWN CLERK

APPENDIX H

LOCAL CONSISTENCY LAW

WHEREAS, a public hearing was held by the Town Board of the Town of East Hampton on June 16, 2005, and held open for public comments until July 1, 2005, regarding a proposed Local Law adding Chapter 150 ("LWRP Local Consistency Review Law") to the Town Code in order to better protect the Town's coastline, by instituting a framework for agencies of the Town of East Hampton to incorporate the policies and purposes contained in the Town of East Hampton Local Waterfront Revitalization Program (LWRP) when reviewing applications for actions or direct agency actions within the coastal area; and to assure that such actions and direct agency actions by the Town are consistent with the LWRP policies and purposes; and

WHEREAS, the Town Board has considered the comments of all persons regarding this Local Law, both as submitted in writing during the comment period and as presented orally at the public hearing; and

WHEREAS, the adoption of this local law is an unlisted action pursuant to the State Environmental Quality Review Act (SEQRA); and

WHEREAS, the Town Board has prepared and considered an Environmental Assessment Form which evaluates the potential environmental impacts of the proposed amendment; and

WHEREAS, the Board has determined that the adoption of this Local Law will not have a significant negative impact upon the environment;

NOW, THEREFORE, BE IT RESOLVED, that a negative declaration is hereby made pursuant to the State Environmental Quality Review Act (SEQRA); and

NOW, THEREFORE, BE IT RESOLVED, that the said Local Law is hereby enacted to read as follows:

LOCAL LAW NO. __22___ OF 2005

INTRODUCTORY NO. _16____ OF 2005

<u>A Local Law providing for the addition of Chapter 150 ("LWRP Local Consistency</u> <u>Review Law") to the East Hampton Town Code in order to better protect the Town's</u> <u>coastline, by instituting a framework for agencies of the Town of East Hampton to</u> <u>incorporate the policies and purposes contained in the Town of East Hampton Local</u> <u>Waterfront Revitalization Program (LWRP) when reviewing applications for actions or</u> <u>direct agency actions within the coastal area; and to assure that such actions and direct</u> <u>actions by the Town are consistent with the LWRP policies and purposes, said Local</u> <u>Law to read as follows</u>: BE IT ENACTED by the Town Board of the Town of East Hampton as follows:

SECTION I: Findings and Objectives:

The Town Board has determined to add Chapter 150 ("LWRP Local Consistency Review Law") to the Town Code in order to better protect the Town's coastline, by instituting a framework for agencies of the Town of East Hampton to incorporate the policies and purposes contained in the Town of East Hampton Local Waterfront Revitalization Program (LWRP) adopted , when reviewing applications for actions or direct agency actions within the coastal area; and to assure that such actions and direct agency actions by the Town are consistent with the LWRP policies and purposes.

SETION II: Town Code Amended:

Section 150-10. Title.

This Local Law will be known as the Town of East Hampton Local Waterfront Revitalization Program Consistency Review Law

Section 150-20. Authority.

This local law is adopted as a local law pursuant to the authority conferred in Article IX of the New York State Constitution; Section 10 of the New York Statute of Local Governments; Article 2, Section 10 of the Municipal Home Rule Law and Article 42 of the Executive Law, Waterfront

Revitalization of Coastal Areas and Inland Waterways Act of the State of New York. Section 150-50(H) is hereby adopted using the supercession authority under New York State Town Law, § 23 of the Municipal Home Rule Law.

Section 150-30. Purpose.

- A. The purpose of this Local Law is to provide a framework for agencies of the Town of East Hampton to incorporate the policies and purposes contained in the Town of East Hampton Local Waterfront Revitalization Program (LWRP) when reviewing applications for actions or direct agency actions within the coastal area; and to assure that such actions and direct actions by the Town are consistent with the LWRP policies and purposes.
- B. It is the intention of the Town of East Hampton that the preservation, enhancement and utilization of the unique coastal area of the Town take place in a coordinated and comprehensive manner to ensure a proper balance between protection of natural resources and the need to accommodate population growth and economic development. Accordingly, this Local Law is intended to achieve such a balance, permitting the beneficial use of coastal resources while preventing loss of living coastal resources and wildlife; diminution of open space

areas or public access to the waterfront; disruption of natural coastal processes; impairment of scenic or historical resources; losses due to flooding, erosion and sedimentation; impairment of water quality; or permanent adverse changes to ecological systems.

C. The substantive provisions of this Local Law shall only apply while there is in existence a Town of East Hampton Local Waterfront Revitalization Program which has been adopted in accordance with Article 42 of the Executive Law of the State of New York.

Section 150-35. Definitions.

- A. "Actions" include all the following, except minor actions:
 - (1) projects or physical activities, such as construction or any other activities that may affect natural, man-made or other resources in the coastal area or the environment by changing the use, appearance or condition of any resource or structure, that:
 - (i) are directly undertaken by an agency; or
 - (ii) involve funding by an agency; or
 - (iii) require one or more new or modified approvals, permits, or review from an agency or agencies;
 - (2) agency planning and policymaking activities that may affect the environment and commit the agency to a definite course of future decisions;
 - (3) adoption of agency rules, regulations and procedures, including local laws, codes, ordinances, executive orders and resolutions that may affect coastal resources or the environment; and
 - (4) any combination of the above.
- B. "Agency" means any board, agency, department, office, other body, or officer of the Town of East Hampton.
- C. "Coastal area" means that portion of New York State coastal waters and adjacent shorelands as defined in Article 42 of the Executive Law which is located within the boundaries of the Town of East Hampton, as shown on the coastal area map on file in the office of the Secretary of State and as delineated in the Town of East Hampton Local Waterfront Revitalization Program (LWRP).
- D. "Coastal Assessment Form (CAF)" means the form, a sample of which is appended to this local law, used by an agency to assist in determining the consistency of an action with the Local Waterfront Revitalization Program.

- E. "Consistent" means that the action will fully comply with the LWRP policy standards, conditions and objectives and, whenever practicable, will advance one or more of them.
- F. "Direct Agency Actions" mean actions planned and proposed for implementation by an agency, such as, but not limited to a capital project, rule making, procedure making and policy making.
- G. "Environment" means all conditions, circumstances and influences surrounding and affecting the development of living organisms or other resources in the coastal area.
- H. "Local Waterfront Revitalization Program, or LWRP" means the Local Waterfront Revitalization Program of the Town of East Hampton, approved by the Secretary of State pursuant to the Waterfront Revitalization of Coastal Areas and Inland Waterways Act (Executive Law, Article 42), a copy of which is on file in the Office of the Clerk of the Town of East Hampton.
- I. "Minor actions" include the following actions, which are not subject to review under this chapter:
 - (1) maintenance or repair involving no substantial changes to an existing structure or facility;
 - (2) replacement, rehabilitation or reconstruction of a structure or facility, in kind, on the same site, including upgrading buildings to meet building or fire codes, except for structures in areas designated by local Coastal Erosion Hazard Area law where structures may not be replaced, rehabilitated or reconstructed without a permit;
 - (3) repaving of existing paved highways not involving the addition of new travel lanes;
 - (4) street openings and right-of-way openings for the purpose of repair or maintenance of existing utility facilities;
 - (5) maintenance of existing landscaping or natural growth, except where threatened or endangered species of plants or animals are affected, or in Nature Preserves or within the Harbor Protection Overlay District (HPOD);
 - (6) granting of individual setback and lot line variances, except in relation to a regulated natural feature;
 - (7) minor temporary uses of land having negligible or no permanent impact on coastal resources or the environment;

- (8) installation of traffic control devices on existing streets, roads and highways;
- (9) mapping of existing roads, streets, highways, natural resources, land uses and ownership patterns;
- (10) information collection including basic data collection and research, water quality and pollution studies, traffic counts, engineering studies, surveys, subsurface investigations and soils studies that do not commit the agency to undertake, fund or approve any action;
- (11) official acts of a ministerial nature involving no exercise of discretion, including building permits and historic preservation permits where issuance is predicated solely on the applicant's compliance or noncompliance with the relevant local building or preservation code(s);
- (12) routine or continuing agency administration and management, not including new programs or major reordering of priorities that may affect the environment;
- (13) conducting concurrent environmental, engineering, economic, feasibility and other studies and preliminary planning and budgetary processes necessary to the formulation of a proposal for action, provided those activities do not commit the agency to commence, engage in or approve such action;
- (14) collective bargaining activities;
- (15) investments by or on behalf of agencies or pension or retirement systems, or refinancing existing debt;
- (16) inspections and licensing activities relating to the qualifications of individuals or businesses to engage in their business or profession;
- (17) purchase or sale of furnishings, equipment or supplies, including surplus government property, other than the following: land, radioactive material, pesticides, herbicides, or other hazardous materials;
- (18) adoption of regulations, policies, procedures and local legislative decisions in connection with any action on this list;
- (19) engaging in review of any part of an application to determine compliance with technical requirements, provided that no such determination entitles or permits the project sponsor to commence the action unless and until all requirements of this Part have been fulfilled;

- (20) civil or criminal enforcement proceedings, whether administrative or judicial, including a particular course of action specifically required to be undertaken pursuant to a judgment or order, or the exercise of prosecutorial discretion;
- (21) adoption of a moratorium on land development or construction;
- (22) interpreting an existing code, rule or regulation;
- (23) designation of local landmarks or their inclusion within historic districts;
- (24) emergency actions that are immediately necessary on a limited and temporary basis for the protection or preservation of life, health, property or natural resources, provided that such actions are directly related to the emergency and are performed to cause the least change or disturbance, practicable under the circumstances, to coastal resources or the environment. Any decision to fund, approve or directly undertake other activities after the emergency has expired is fully subject to the review procedures of this Part;
- (25) local legislative decisions such as rezoning where the Town Board determines the action will not be approved.
- J. "Waterfront Advisory Committee" (WAC) means the Waterfront Advisory Committee of the Town of East Hampton, as created pursuant to this Chapter.

Section 150-40. Management and Coordination of the LWRP

- A. The Town Supervisor shall be responsible for overall management and coordination of the LWRP. In performing this task the Supervisor shall:
 - (1) Inform the Town Board, Town Trustees and other Town agencies or boards on implementation, priorities, work assignments, timetables, and budgetary requirements of the LWRP.
 - (2) Make applications for funding from State, Federal, or other sources to finance projects under the LWRP.
 - (3) Coordinate and oversee liaison between Town agencies and departments, including but not limited to the Town Board, Town Trustees, Planning Board, Zoning Board of Appeals, and Planning, Natural Resources and Harbormasters Departments of the Town, and with other nongovernmental bodies, to further implementation of the LWRP.
 - (4) Prepare an annual report on progress achieved and problems

encountered in implementing the LWRP, and recommend actions necessary for further implementation to the appropriate Town agency or the Town Board.

- (5) Perform other functions regarding the coastal area and direct such actions or projects as are necessary, or as the Town Board may deem appropriate, to implement the LWRP.
- B. In order to foster a strong relationship and maintain an active liaison among the Town agencies responsible for implementation of the LWRP, the Town Supervisor shall convene at least annually a Town LWRP coordinating council, including but not limited to representatives of the Town Board, Town Trustees, Planning Board, Zoning Board of Appeals, Waterfront Advisory Committee, and such other Town departments or individuals charged with LWRP implementation as the Senior Harbormaster, Highway Superintendent, Natural Resources Director, Planning Director, Director of Parks and Recreation, Director of the Town Shellfish Hatchery, Director of Emergency Services and Civil Defense Coordinator.

Section 150-45. Waterfront Advisory Committee.

- A. A Committee is created and shall be hereafter known as the "Waterfront Advisory Committee of the Town of East Hampton" (WAC). The WAC shall meet at least annually to review the Supervisor's annual progress report and shall advise the Town Board on LWRP implementation and on policy, project and budget priorities, as well as on amendments to the LWRP. The WAC may also perform other functions regarding the coastal area as the Supervisor or Town Board may assign to it from time to time.
- B. The Town Board of the Town of East Hampton is hereby authorized to appoint five (5) persons to said Committee, all of whom shall be residents of the Town of East Hampton. Of the members of the Committee first appointed, one (1) shall hold office for a term of one (1) year, one (1) for a term of two (2) years, one (1) for a term of three (3) years, one (1) for a term of four (4) years and one (1) for a term of five (5) years from and after the expiration of the terms of their predecessors in office. Thereafter, all members shall be appointed for a term of five (5) years. Vacancies shall be filled by the Town Supervisor by appointment for the unexpired term. Members may be removed by the Town Board for cause and after public hearing.
- C. The Town Board shall annually appoint one (1) committee member to serve as chairperson of the Committee. Upon failure of the Town Board to appoint a chairperson, the members of the Committee shall elect a chairperson.
- D. The Committee may employ such persons as may be needed, as authorized by the Town Board, and shall have the power to adopt rules of procedure for the

conduct of all business within its jurisdiction.

Section 150-50. Review of Actions.

- A. Whenever a proposed action is located in the Town's coastal area, a Town agency shall, prior to approving, funding or undertaking the action, make a determination that it is consistent with the LWRP policy standards summarized in Section I herein. No action in the coastal area shall be approved, funded or undertaken by an agency without such a determination.
- B. The Town Planning Department shall be responsible for coordinating review of actions in the Town's coastal area for consistency with the LWRP, and will advise, assist and make consistency recommendations for other Town agencies in the implementation of the LWRP, its policies and projects, including physical, legislative, regulatory, administrative and other actions included in the program. The Planning Department will also coordinate with NYS DOS regarding consistency review for actions by State or Federal agencies.
- C. The Planning Department will assist each agency with preliminary evaluation of actions in the coastal area, and with preparation of a Coastal Assessment Form (CAF). Whenever an agency receives an application for approval or funding of an action, or as early as possible in the agency's formulation of a direct action to be located in the coastal area, the agency shall refer to the Planning Department for preparation of a CAF, a sample of which is appended to this local law. The Planning Department staff will coordinate their preliminary evaluation with permitting or other review by each agency or the agencies considering an action.
- D. The Planning Department shall require the applicant to submit all completed applications, EAFs, and any other information deemed necessary to its consistency recommendation. The recommendation shall indicate whether, in the opinion of the Planning Department, the proposed action is consistent with or inconsistent with one or more of the LWRP policy standards and objectives and shall elaborate in writing the basis for its opinion. The Planning Department shall, along with its consistency recommendation, make any suggestions to the agency concerning modification of the proposed action, including the imposition of conditions, to make it consistent with LWRP policy standards and objectives or to greater advance them.
- E. If an action requires approval of more than one agency, decision making will be coordinated between agencies to determine which agency will conduct the final consistency review, and that agency will thereafter act as designated consistency review agency. Only one CAF per action will be prepared. If the agencies cannot agree, the Planning Director shall designate the consistency review agency.
- F. Upon recommendation of the Planning Department, the agency shall consider

whether the proposed action is consistent with the LWRP policy standards summarized in Section I herein. Prior to making its determination of consistency, the agency shall consider the consistency recommendation of the Planning Department. The agency shall render a written determination of consistency based on the CAF, the Planning Department recommendation and such other information as is deemed necessary to its determination. No approval or decision shall be rendered for an action in the coastal area without a determination of consistency. The designated agency will make the final determination of consistency.

- G. Where an EIS is being prepared or required, the draft EIS must identify applicable LWRP policies and standards and include a discussion of the effects of the proposed action on such policy standards. No agency may make a final decision on an action that has been the subject of a final EIS and is located in the coastal area until the agency has made a written finding regarding the consistency of the action with the local policy standards referred to in Section I herein.
- H. In the event the Planning Department's recommendation is that the action is inconsistent with the LWRP, and the agency makes a contrary determination of consistency, the agency shall elaborate in writing the basis for its disagreement with the recommendation and state the manner and extent to which the action is consistent with the LWRP policy standards. No agency except the Town Board or Town Trustees shall issue such an overruling determination without a majority plus one vote of all members qualified to vote.
- I. Actions to be undertaken within the coastal area shall be evaluated for consistency in accordance with the following summary of LWRP policies, which are derived from and further explained and described in the Town of East Hampton LWRP, a copy of which is on file in the Town Clerk's office and available for inspection during normal business hours. Agencies which undertake direct actions shall also consult with Town of East Hampton LWRP Section XIV, Projects of the LWRP, in making their consistency determination. The action shall be consistent with the policies to:
 - (1) Revitalize deteriorated and underutilized waterfront areas (Policy 1).
 - (2) Retain and promote recreational water-dependent uses (Policy 2).
 - (3) Strengthen economic base of small harbor areas by encouraging traditional uses and activities (Policy 4).
 - (4) Ensure that development occurs where adequate public infrastructure is available to reduce health and pollution hazards (Policy 5).
 - (5) Streamline development permit procedures (Policy 6).

- (6) Protect significant and locally important fish and wildlife habitats from human disruption and chemical contamination (Policies 7, 8).
- (7) Maintain, promote and expand commercial fishing opportunities (Policies 9, 10).
- (8) Minimize flooding and erosion hazards through non-structural means, carefully-selected, long-term structural measures and appropriate siting of structures (Policies 11, 12, 13, 14, 16, 17).
- (9) Safeguard economic, social and environmental interests in the coastal area when major actions are undertaken (Policy 18).
- (10) Maintain and improve public access to the shoreline and to water-related recreational facilities while protecting the environment (Policies 2, 19, 20, 21, 22).
- (11) Protect and restore historic and archeological resources (Policy 23).
- (12) Protect and upgrade scenic resources (Policy 25).
- (13) Conserve and protect agricultural lands (Policy 26).
- (14) Site and construct energy facilities in a manner which will be compatible with the environment, which are dependent upon the need for a waterfront or water location (Policies 27, 29, 40).
- (15) Prevent ice management practices which could damage significant fish and wildlife and their habitats (Policy 28).
- (16) Protect surface and groundwaters from direct and indirect discharge of pollutants and from overuse (Policies 30, 31, 32, 33, 34, 35, 36, 37, 38).
- (17) Perform dredging and dredge spoil disposal in a manner protective of natural resources (Policies 15, 35).
- (18) Handle and dispose of hazardous wastes and effluent in a manner which will not adversely affect the environment (Policies 8, 30, 36, 39).
- (19) Protect air quality (Policies 41, 42, 43).
- (20) Protect tidal and freshwater wetlands (Policy 44).
- J. If the agency determines that an action will be inconsistent with one or more LWRP policy standards or objectives, such action shall not be undertaken unless

the agency makes a written finding that:

- no reasonable alternative exists to the proposed action which will not substantially hinder the achievement of such LWRP policy standards or objectives; and
- (3) the action will be undertaken in a manner which will minimize all adverse effects on such LWRP policy standards or objectives; and
- (3) the action will advance one or more other LWRP policy standards or objectives; and
- (4) the action will result in a benefit to the project sponsor that is greater than any detriment to the Town.

Such a finding shall constitute a determination that the action is consistent with the LWRP policy standards.

K. Each agency shall maintain a file for each action made the subject of a consistency determination, including any recommendations received from the Planning Department. Such files shall be made available for public inspection upon request.

Section 150-55. Enforcement.

The Town Building Inspectors, Town Attorney, Code Enforcement Officers, Marine Patrol Personnel, Sanitation Inspector and Natural Resource Director shall be responsible for enforcing this Chapter. No action in the coastal area which is subject to review under this Chapter shall proceed until a written determination has been issued from the designated agency that the action is consistent with the Town's LWRP policy standards. In the event that an activity is being performed in violation of this Chapter or any conditions imposed thereunder, the Building Inspector or any other authorized official of the Town shall issue a stop work order and all work shall immediately cease. No further work or activity shall be undertaken on the project so long as a stop work order is in effect.

Section 150-60. Violations.

A. A person who violates any of the provisions of, or who fails to comply with any condition imposed by, this Chapter shall have committed a violation, punishable by a fine not exceeding five hundred dollars (\$500.00) for a conviction of a first offense and punishable by a fine of one thousand dollars (\$1000.00) for a conviction of a second or subsequent offense. For the purpose of conferring jurisdiction upon courts and judicial officers, each week of continuing violation shall constitute a separate additional violation.

B. The Town Attorney is authorized and directed to institute any and all actions and proceedings necessary to enforce this local law. Any civil penalty shall be in addition to and not in lieu of any criminal prosecution and penalty.

Section 150-65. Severability.

The provisions of this local law are severable. If any provision of this local law is found invalid, such finding shall not affect the validity of this local law as a whole or any part or provision hereof other than the provision so found to be invalid.

Section 150-70. Effective Date.

This local law shall take effect immediately upon its filing in the office of the Secretary of State in accordance with Section 27 of the Municipal Home Rule Law.

SECTION III. - SEVERABILITY:

Should any part or provision of this Local Law be decided by the courts to be unconstitutional or invalid, such decision shall not affect the validity of this Local Law as a whole nor any part thereof other than the part so decided to be unconstitutional or invalid.

SECTION IV. - EFFECTIVE DATE:

This Local Law shall take effect immediately upon filing with the Secretary of State as provided by law.

AND BE IT FURTHER RESOLVED, that the Town Clerk is directed to forward copies of this resolution to: Town Attorney Laura Molinari; Planning Director Marguerite Wolffsohn; Chief Building Inspector Donald T. Sharkey; the Director of Natural Resources Larry Penney; the East Hampton Town Trustees; Ordinance Enforcement Director Dominic Shirrippa; Superintendent of Parks and Recreation Ken Scott; Planning Board; Zoning Board of Appeals; Architectural Review Board; Senior Harbormaster Ed Michels; and Superintendent of Highways Christopher Russo.

BY ORDER OF THE TOWN BOARD TOWN OF EAST HAMPTON, NEW YORK

FRED L. OVERTON, TOWN CLERK