



TOO MUCH IS A GOOD THING

by Jorie Latham

Never thought we'd be faced with such a dilemma: to be so overwhelmed with great articles, we couldn't fit them all into one newsletter. But they are all so important, and so full of really solid, interesting information, that we couldn't leave any out...so we have decided to produce a second edition in the coming months. In addition to our usual authors—mostly members of our esteemed steering committee—we sought input from various experts and wow! ...did they ever come through for us. So whether you are wondering what is going on around Pussy's Pond, how the nitrogen problem is being addressed, or if there is any hope of putting an end to methoprene spraying, read on! And just when we thought we knew all about phragmites, one of our "bad guy" invasives, guess what?...these reeds could be "heroes" in resisting sea level rise! Check our next issue for the true story from marine scientist Judith Weis.

Bottom line, it is certainly exciting to have so much going on that relates to Accabonac. I'm going to make this short and let you get on with your reading. Enjoy! And watch for Part II.

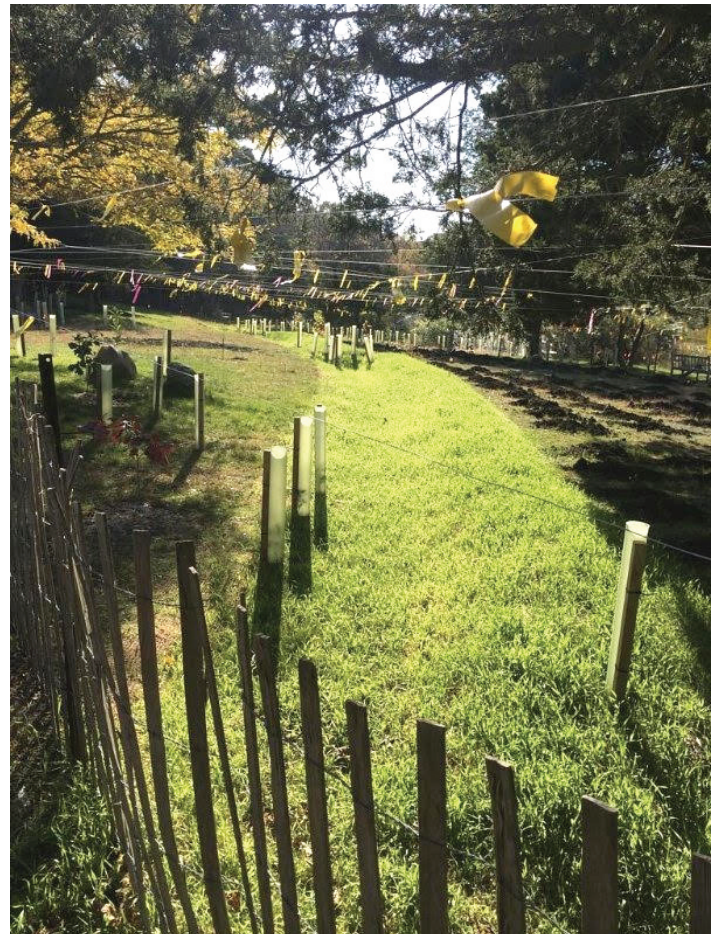
WHAT'S NEW, PUSSY'S POND?

by Michele Carlson, Carlson Design and Planning

You may be wondering what's going on at Pussy's Pond Park—and why??

Earthwork and materials for erosion control have reshaped the landscape! Strange flags flap in the wind to keep hungry birds from eating recently added native seeds and plants! Fences have blocked it off! No one's been inside (except some Spring School classes for planting, water testing and learning that inspired their student opera, *Beyond the Duck Pond*). It's all there to protect emerging vegetation from infancy to maturity.

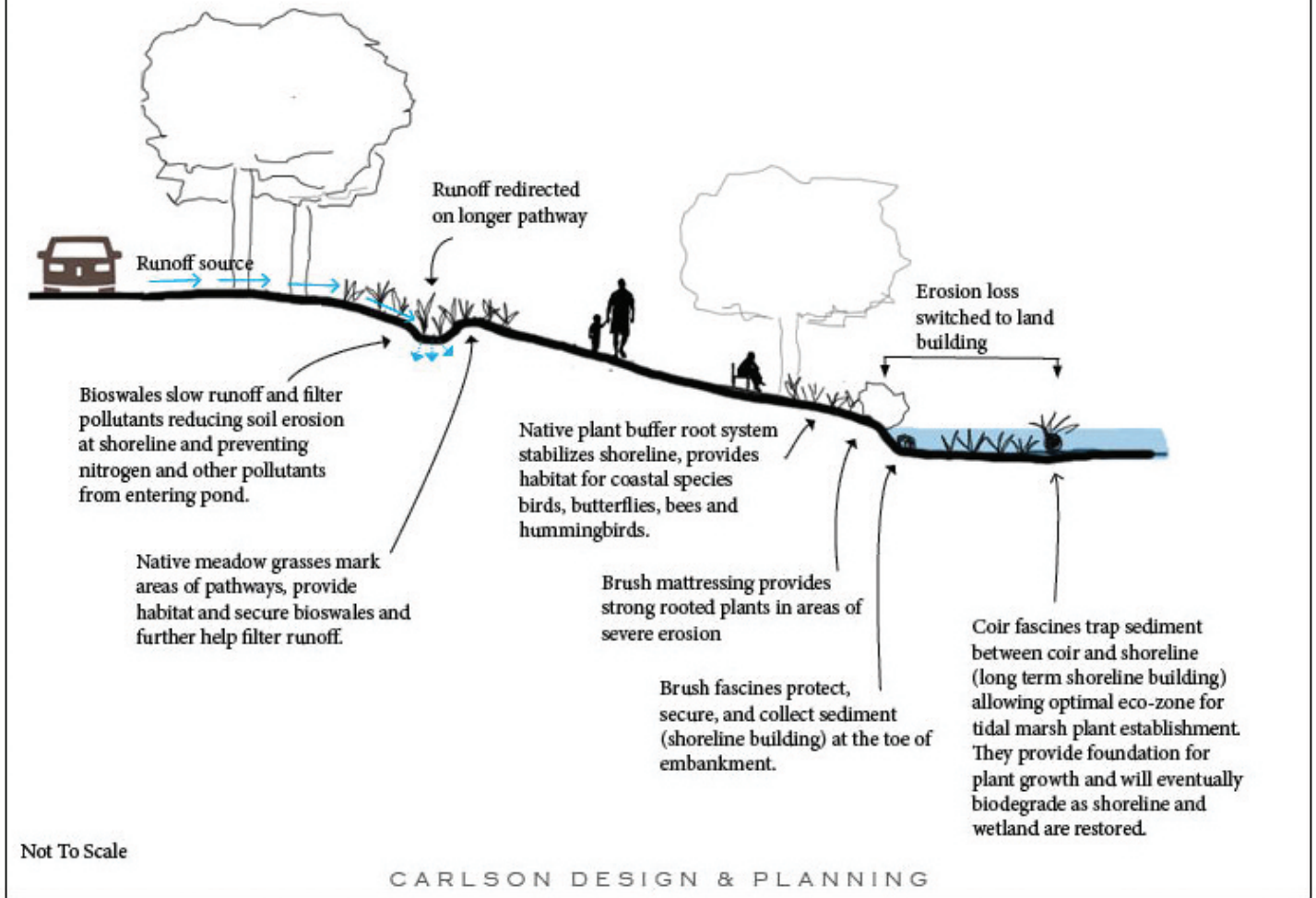
After weeks of watching closely, it finally happened in mid-March... the first fuzzy gray catkin, symbol of spring's arrival, popped open. Hooray! Many more



pussycat-soft catkins will follow. These are flowers of the willow group, and queen of them all is the catkin fondly called Pussy Willow. Several willow species, plus dozens of other native plants, now inhabit formerly bare or sparse zones in the park. Catkins provide valuable early nectar sources for bees during their leanest season. They are also solar-fueled powerhouses for strengthening shorelines and cleansing pollutants that afflict Accabonac Harbor.

Pussy's Pond lies at the head of Accabonac Harbor, a crown jewel of East Hampton for its beautiful salt marsh habitats and abundant birds, fish and shellfish. Close to Springs Elementary School and visited (and loved) by many, it is perfectly positioned to embrace

Pussy's Pond Park Restoration: How it works - Natural System Strategies



and demonstrate modern practices for coastal land stewardship.

A previous study documented Pussy's Pond as a high priority site threatened by water quality problems. Specifically, nutrient and bacteria levels in the pond posed human health concerns and also problems for aquatic life. Though many families visited there, the water was unsafe for human contact, and the many treading feet of kids and ducks had obliterated plants that are important to bind and secure the shoreline. The site had literally lost a lot of ground over the past 20 years.

Carlson Design & Planning was hired by the Town last August, using grant funds the Town had received, to design and implement measures to restore a resilient shoreline zone in the park. With that in mind, the Town chose four targeted restoration measures for use at Pussy's Pond, illustrated below. (For more details, see WHAT'S NEW on our website)

Restoration strategies address the gap between what currently exists and what can be healthy and resilient in the future, to help the site repair and continuously regenerate itself. Using natural system strategies, it's possible to manage the landscape so it is not only a beautiful and people-friendly place, but also one that

supports thriving biodiversity and healthy water quality. In the case of Pussy's Pond, the eroding shoreline, invasive species, abundant waterfowl activity and stormwater runoff from the roadways all contributed to poor water quality. Also, single-family septic systems are never very efficient and often are poorly maintained, resulting in bacteria-laden groundwater seeping toward and breaking out in the park. Situated on a sliver of land nestled between housing-lined roads and Pussy's Pond, the park was simply being asked to do too much with too little.

As spring continues to bring new signs of life to Pussy's Pond Park, the important work there will become more visible and lovelier. While the exact date fences and flags will come down is uncertain, the goal is for late June. Evaluating plant growth and vulnerability will guide this decision. In the meantime, thank you for your patience, your interest and a big thank you to the students and teachers who helped plant the buffer—their eagerness in becoming ecological stewards of local waterfronts is admirable. Using your elementary school opera project to spread the word that ducks and other birds are best to admire without feeding them was awe-inspiring.

20% OF CPF CAN FLOW TO WATER QUALITY!!

by Jorie Latham

There was a real bright spot in November's election: Proposition 1 passed exuberantly, extending the collection of Community Preservation Funds to 2050 and amending the law to allocate 20% of monies collected in any year to water quality programs. This provides a very exciting opportunity for participating East End Towns to be able to tackle the very serious issues threatening the quality of ground water and surface water.

Any project being considered will be brought to an advisory committee (similar to but not the same committee that has been in place to consider land acquisition). Public hearings will be required before any funds are distributed.

Very quickly, the Town began to consider using some of the funds to help pay for improved nitrogen reducing septic systems, especially within the watersheds of bays and harbors, like Accabonac. That will certainly be one good use for the CPF, but we are hopeful that more research will be funded to identify where help is most needed, and how we may deal with the pollution that is already a threat. The technology of nitrogen reduction is developing rapidly now that many communities recognize the peril of allowing the problem to continue. So better systems may soon be available.

There is clearly a great need to do what can be done to prevent nitrogen and other pollutants from getting into the system, but there is also, and more urgently a need to deal with the nitrogen that is already borne in the flow of groundwater from septic systems toward our water bodies.

APC is pleased to be helping support an ongoing study by the Marine Division of Cornell Cooperative Extension, which builds on the work they started in Pussy's Pond, now the site of what appears to be a small beach. This is actually where PRBs (Permeable Reactive Barriers) have been installed to keep nitrogen from entering the pond by sequestering it in layers of wood fibers until it is released as harmless gas in the atmosphere.

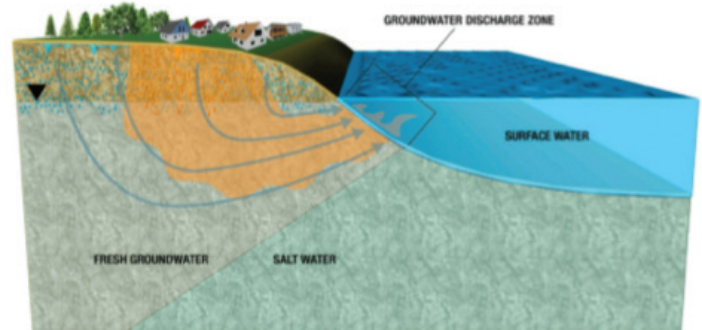
The study is continuing along the creek, seeking other places where the input is greatest and identifying the next location for similar remediation. We feel that this is just the sort of project for which CPF Water Quality money would be best used.

APC HELPS FUND HUNT FOR NITROGEN SOURCES

by Vay David and Kimberly Barbour, CCESC

It's no secret ... excess nitrogen is having a serious negative impact on smaller bodies of water like our

own Accabonac Harbor. With this in mind, APC has contributed funding to an important project, "Locating and Quantifying Groundwater-Derived Nitrogen Seeping into Selected Surface Waters of Accabonac Harbor," being conducted by Cornell Cooperative Extension of Suffolk County. APC was happily able to supplement East Hampton Town's funding for the project, which Kimberly Barbour, CCE's Marine Program Outreach Manager, has described below.



Groundwater enters waterways through submarine groundwater discharge (SGD) points (Figure 1). CCE recently compiled preliminary measurements of nutrients in the Pussy's Pond/Accabonac Harbor complex using SGD sampling and measurement equipment (Trident Probe and Ultrasonic Seepage Meter). The results revealed high concentrations of nitrogen entering the Pond and Harbor at several locations. With these nutrient source areas identified, the next steps are to further quantify nutrient loading into Accabonac Harbor from Pussy's Pond and associated SGD zones—and to test remediation potential in the area.

Ideally, actions should be taken to improve the quality of groundwater seepage in the long-term, including upgrades to septic systems within the watershed, but more immediate actions—the bioextraction of nitrogen from the system using seaweeds (macroalgae) and installation of near-shore permeable reactive-barrier treatment cells (PRBTC)—can ease the short-term nitrogen load. CCE is committed to seeing that all efforts to identify and remediate pollution are quantified and that the most efficient and effective method of alleviation is identified and utilized.



An important component of this type of project is educating the public regarding the efforts that the Town of East Hampton is taking to address nutrient pollution in their waterways and what steps they can take to help improve water quality. The potential for local carry-over uses of the seaweed produced by this project, including for food/feed, compost, agar etc., is also being assessed. A final report will be completed in the near future.

USING THE SCIENCE, GETTING IT RIGHT: An Interview with Kimberly Shaw, Director of Natural Resources

by Nicholas Bryan

Five years ago, Amagansett native Kimberly Shaw was appointed—with a unanimous vote of the East Hampton Town Board—to succeed Larry Penny as Director of Natural Resources. Mr. Penny called her “ideally suited for the job.” In recognition of the anniversary, APC interviewed Kim about her remarkable career and the issues we face in protecting and improving our environment and the health of Accabonac Harbor.



Kim is a graduate of East Hampton High School, where earth science instructor Patricia Hope and marine science teacher Tony Minardi strongly influenced her desire to pursue a career in science. Although marine science was her intended major, “the Jacques Cousteau craze was over,” so she completed a degree in biology at the University of Delaware.

Her first job was with East Hampton’s Planning Department, working part-time at first because, “my sister and I had invested in a hot dog truck.” Due to a huge backlog, there was a concerted effort to get the Planning and Natural Resources Departments up to speed. Part of this effort was to examine the environmental impact of construction on Gerard Drive. Kim reported that the Community Preservation Fund (CPF) is now targeting Gerard, where even new and innovative alternative septic systems won’t work because groundwater is too shallow. She believes the solution for Gerard is probably a voluntary buy-out program similar to what was done at Lazy Point (in cooperation with the federal government) after Hurricane Sandy. Recently, the Town has purchased properties on Gerard and removed their houses.

Kim left Town employ in the early 1990s to work for the Office of Ecology, a division of Suffolk County’s Department of Health Services. At one point, she was head of the county’s Peconic Estuary Program (PEP), which in 2011 received the Coastal America Award. In both jobs, she met and worked with natural resource professionals with whom she continues to collaborate.

We discussed the legislation Town residents resoundingly passed in November, to use 20% of CPF to improve and protect water quality, which will likely include septic improvements (see “20% of CPF ...” on Page 1). She praised the good example Southampton’s Clean Water Institute set by asking manufacturers to meet a 10 – 10 – 30 standard for septics: less than 10 parts per million of nitrogen discharge; no more than \$10,000 to install; and at least a 30-year life expectancy. By contrast, the County’s invitation to septic manufacturers only called for a nitrogen standard of less than 19 parts per million, without referencing costs or system longevity.

The County’s Department of Health recently made a presentation to the East Hampton Town Board about two systems approved by the County: the Singular and the Hydro-Kinetic, both manufactured by Ohio-based Norweco Company. They cost \$13,000 and \$15,000 respectively, with annual maintenance of about \$300 and a \$12 monthly operating cost. (A standard septic system has a \$4,000 installation cost but doesn’t reduce nitrogen.) Rebates financed by the newly approved extension of CPF could be used to offset these additional costs for local residents. Kim said the County is considering allowing these new systems to be shared among multiple houses to reduce costs significantly.

Peter Scully, the County’s wastewater czar, has directed that, by January 1, 2018, all new construction in Suffolk include innovative alternative septic systems. When asked about the Town wanting higher standards than the County, Kim pointed out that Town requirements in Harbor Protection Overlay Districts (HPODs) call for greater separation between

pools and groundwater than the County allows and that Suffolk honors this increased standard. The higher standard also applies to Accabonac Harbor's HPOD where, clearly, much more needs to be done to address water quality issues since the Harbor is now considered an impaired body of water.

She spoke enthusiastically about the joint venture with the Town, Cornell Cooperative Extension of Suffolk County and Accabonac Protection Committee (See APC HELPS FUND on Page ____). The project is designed to locate the sources of nitrogen and other contaminants entering via groundwater in targeted areas in the Harbor.

We also discussed the culvert on Gerard Drive, which has been inoperable for a number of years due to sediment buildup. Kim spoke of the need to use a variety of complex scientific data to determine if it should be reopened and if it should remain operative. While it may seem intuitive that providing an opening between the Harbor and Gardiner's Bay would cleanse the Harbor, she explained, there is insufficient data to support that contention. Indeed, she referenced the deliberate opening of Napeague Harbor and the deleterious effects that resulted; she also pointed out that there have been more shellfish closures in Accabonac since the installation of the culvert.

Kim noted that water entering the Harbor brings sediments and other materials. The sediments pile up in front of the vector control ditches, blocking them and impounding the water up on the marsh, contributing to mosquito breeding and destruction of vegetation. She also thinks there might have been a better location for the culvert. "Water quality monitoring," she said, "is not the only thing that has to be done to determine if multiple openings actually improve water quality. The regular opening of Georgica Pond to flush the contaminants into the ocean is much different than creating a small inlet in Accabonac Harbor. The multiple opening scenario may lead to less tidal flow to flush out the sediments of the Harbor, thus requiring the additional expense of more frequent dredging."

Kim really likes working for the Town and feels well supported by the Board. She values the people in various organizations she regularly partners with and her Town colleagues, enjoying strong working relationships she has developed throughout her career. Kim loves starting a project and being involved in all its aspects, is committed to a science-based approach and understands that change takes time. The success she has enjoyed is proof of the effectiveness of her style and her passion for getting it right.

Thank you, Kim Shaw.

N.B. Following my interview with Ms. Shaw, the Gerard Drive culvert was opened at the direction of the East Hampton Town Trustees.

A PRFCT DAY INDEED!

by Jorie Latham

APC joined forces with PRFCT Earth Project last April to create a PRFCT Earth Day in Springs which began at the Springs Fire House with presentations on alternatives to synthetic fertilizers and pesticides, highlighting the human health and environmental benefits of the toxin-free approach.

Talks also included a briefing on water quality concerns on Accabonac Harbor and other local water bodies and what homeowners and landscapers can do to stop their deterioration.

Afterward, activities on the lawn of Ashawagh Hall, were well attended, including demonstrations on compost tea and a "four-poster" that humanely applies tick repellent to deer while they feed.

The event was enhanced by an art show celebrating Earth Day, featuring local artists and artisans, that was on display at Ashawagh Hall.

Sean O'Neill who, as Director of Education & Outreach at PRFCT Earth Project, was the primary organizer of the event, has since become the Peconic Baykeeper! (See his article on methoprene below.)

PRFCT Earth Project has a lot going on! Examples:

- A book! <https://perfectearthproject.org/products/6>
- PRFCT Earth has been working with Southampton Hospital to transition their grounds to toxin-free. A big win for the Perfect Earth team! <https://perfectearthproject.org/prfct-places>
- Their free Lawn Expert sessions are being held at Bridge Gardens on Tuesdays through October. <https://perfectearthproject.org/events/31>

Lots more coming up, so check their website.

LEAVE IT TO NATURE — NO MORE METHOPRENE

by Sean O'Neill, Peconic Baykeeper

On December 12, 2016, the Suffolk County Legislature once again voted to fund continued use of Methoprene by the Department of Public Works Vector Control to control mosquito populations. Methoprene, an insect growth regulator used in larvicide applications, is known to be toxic to fish and shellfish. APC and other environmental organizations have made impassioned arguments to ban or limit its use in the county for years; sadly, these pleas have fallen on deaf ears. Perhaps a different argument is needed.

Prior to becoming the Peconic Baykeeper (PBK) in May, 2016, I served as a pesticide control specialist for the New York State Department of Environmental Conservation for 6+ years, regulating the very vector control activity described above through permitting, site inspections of both ground and aerial sprays, along with writing violations when they occurred. I

can state Suffolk County Vector Control (SCVC) always made their very best effort to comply with all environmental regulations.

SCVC's position is that methoprene, a known toxicant that has been severely restricted in its use in our neighboring states of Connecticut and Rhode Island due mainly to lobster toxicity concerns, should continue to be used to mitigate human health concerns and the nuisance mosquitos pose. They argue scientific literature does not exist that directly correlates methoprene's use to lobster or other shellfish die offs. They also believe much of the public thinks mosquito spraying is an important part of disease and nuisance control and requests its continuation. Though this may be a logical conclusion, it unfortunately leads to bad policy decisions.

Suffolk County has spent decades—and millions of dollars—on mosquito control, with little demonstrable success. Coupled with previous decisions to disrupt marshland with mosquito ditches and bulkhead, we have created the very stagnant water conditions that lead to larger mosquito populations. Add in spraying that also indiscriminately kills mosquito larvae predators, and we learn that our vector control policies themselves have led to dying marshes unable to control mosquito populations naturally.

The Baykeeper program embraces the precautionary principle that, in the absence of complete scientific knowledge, we shouldn't participate in activities that may cause harm. We know our marshes are in danger and under a broad assault from development, wastewater pollution, stormwater runoff and other pollutants. We know methoprene is toxic to marsh inhabitants that prey on mosquitoes. We know decades of spraying have done little, if anything, to control our mosquito problems. How about we try and let nature work?

Recently, SCVC has made great strides in marsh remediation as part of a holistic approach to vector control. Still, SCVC mainly is an entity armed with spray trucks and contracts for spray helicopters. What if, instead of appropriating money for spraying, we instead equip them to drastically increase their remediation of marsh habitat crucial for mosquito predators that will naturally reduce mosquito populations? This would have the added benefits of reducing erosion, increasing coastal resiliency to flooding, improving wildlife nursery habitat, creating more recreational opportunities for residents, combating sea level rise and improving water quality. In fact, this very work is given priority in SCVC's own "Vector Control and Wetlands Management Long Term Plan." We urge County Legislators to give SCVC the tools to solve the root of the mosquito problem—unhealthy wetlands—rather than continue to spend tax dollars on the ineffective Band-Aid of spraying toxic chemicals.

CALL TO ACTION!

by Jorie Latham

There has been a fair amount of land acquisition going on around the creek lately, thanks to the Town's willingness to use CPF funds to preserve open space, water quality and historical and recreational value. In some cases, properties with houses have been purchased, in which case, the house is removed (unless it is of historic or recreational value and can be maintained in keeping with the mission of the CPF).

Such a property is currently being considered: 888 Springs Fireplace Road. This has generated a great deal of support for acquisition on the part of The Nature Conservancy and many neighbors, including APC, because it adjoins the Maloney property purchased several years ago, which in turn adjoins Merrill Lake Refuge. As Nancy Nagle Kelley, Executive Director of TNC/LI pointed out in a recent letter to the Town, among many desirable benefits of restoring and preserving this 3.5 acres, is providing resilience in the face of sea level rise.

It is very helpful to the Town Board in pursuing acquisition to hear from citizens who are strongly in favor of it. So please, let the board know: address letters to The Honorable Larry Cantwell, Members of the Town Board, East Hampton Town Hall, 159 Pantigo Road East Hampton, NY 11937. The property (also belonging to the Maloney family) can be referred to as "Maloney Property" or by its address at 888 Springs-Fireplace Road.

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2016 Calendar of Events

PRFCT EARTH DAY
Cosponsored with Perfect Earth Project
Saturday, April 23
9:30AM • Springs Firehouse • 179 Fort Pond Blvd.
Expert advice on keeping toxins out of your yard
and out of our water.
Noon - 2PM • Ashawagh Hall Lawn • Springs Fireplace Road
Good Practice Demonstrations • Food • Music

FISHERMAN'S FAIR
Saturday, August 13 • 10AM-3PM
Come play the APC game!

ANNUAL PARTY
Sunday, September 11 • 3-5PM
At Cile Downs' house
956 Springs Fireplace Road

PLEASE HELP IF YOU CAN
While our membership is free, our operations are not. APC does its best to keep expenses to a minimum, and, as an all-volunteer organization, time dictates that we use our energies and resources for other purposes than fund-raising. Please help us continue our special focus on the important issues facing Accabonac by sending along whatever contributions you can to:
Accabonac Protection Committee,
956 Springs Fireplace Road, East Hampton NY 11937.
Thank you in advance for your generosity and support of our efforts!

Monthly meetings are usually held at 9 am the first Monday of each month; you'd be welcome; call us for locations.

WE'VE CHANGED OUR PHONE NUMBER AND EMAIL ADDRESS:
631-903-9598

accabonacprotection@gmail.com
Send us an email if you'd like to receive your next newsletter by email