October 14, 2022

Ken Klint, President Seabrook Village Association, Inc. 203 Surf Drive Mashpee, Massachusetts 02649-3726

Re: Red Brook Restoration

Dear Mr. Klint:

Various Seabrook Village lot owners and, hence, members of the Seabrook Village Association, Inc. (see Land Court Document, Number 185196, enclosed, and later twice amended) have expressed concern about the restoration project proposed for Red Brook and about their own liability that could follow. I have researched those subjects, and I am writing now to convey my response. In my opinion, the proposed restoration is not likely to expose any lot owner to liability, but on the other hand, it is probably too late to change the plans to replace the pond with a stream.

Because the area's characteristics and recent history are known better by the Association than me, I will touch on only the most salient points.

According to the Horsley Witten Group's June 2022 "Red Brook Culvert Replacement Feasibility Study" (hereinafter, Study), the areas downstream of Red Brook Road were discontinued as commercial cranberry bogs by 1971. Study, page 3. The upstream bogs were abandoned and flooded in the 1970s and 1980s. Study, p. 3. While the upstream bogs operated, Red Brook was impounded by a 200-foot-long earthen berm along which runs Red Brook Road. Study, p. 4. Such earthen berms or dams were authorized by legislation that favored cranberry growers.

An owner or lessee of land appropriated or which he desires to appropriate to the cultivation and growth of cranberries may erect and maintain a dam upon and across a stream to flow and irrigate said land, subject to this chapter so far as applicable; but he shall not erect and maintain a dam across a navigable stream or across the outlet of a great pond, without a license therefor from the department of environmental management. Mass. Gen. Laws ch. 253, §39, amended by St.1991, c 552, §131 (copy enclosed).

Cranberry bogs also enjoy a special exemption under the Massachusetts Wetlands Protection Act. See Mass. Gen. Laws ch.131, §40, 24th paragraph (copy enclosed).

Apparently, the earthen berm or dam was subject to a Pare Corporation evaluation for the Office of Dam Safety. That evaluation was updated in 2017 and again at the end of 2021. The Pare Corporation assessed the dam as "an Intermediate sized, Significant (Class II) hazard potential" dam. Such evaluations are rendered pursuant to the Code of Massachusetts Regulations, Title 302, Chapter 10, Section 10.06 (copy enclosed).

Red Brook flows beneath Red Brook Road by means of a culvert with a concrete sluice gate with wooden stop logs or their replacements. Study, p. 4. That culvert has badly degraded, does not meet the Massachusetts River and Stream Crossing Standards, Study p. 3 (see enclosed "Technical Guidelines"), and has been identified as a "significant barrier to flow and the migration of fish and other aquatic species." Study, p. 3.

Red Brook marks the boundary between Mashpee and Falmouth, Study, p. 3, and apparently, the boundary bisects the culvert through which Red Brook flows. Red Brook Road is a town way in Mashpee. (See the enclosed list of Mashpee's "Town Owned Roads" and Massachusetts General Laws Chapter 82, Section 21, the statute enabling towns to lay out their own roads.) The status of Red Brook Road in Falmouth has not been posted.

Ownership of the dam and the culvert seems to be unsettled. In one of the newspaper articles appended to the Study, it was reported that the Office of Dam Safety considers Kenneth Masters, Jr. to be the owner, but his family disputes it. Most likely, the Masters family once owned the dam and, possibly, the culvert, but whether the family still retains ownership is another matter. Certainly, Mashpee's listing of Red Brook Road as "Town Owned" (instead of being subject to a public easement for use as a way) implies ownership of the area beneath it. That designation, however, may be accurate for only most of the road - that is, the other stretches of the way.

Although a determination of ownership might be helpful, it would entail a comprehensive exploration of the records in the towns and in the Barnstable Registry of Deeds, and the result could be inconclusive. It also may be unnecessary. In its january 5, 2021 update, Pare Corporation reported:

Discussions with personnel present during the inspection indicated that the town of Mashpee will be assuming maintenance responsibility for this dam in the future.

I cannot imagine that the Masters family will protest.

At this juncture, I need to step back in order to review some matters relating to what has already occurred. The federal Rivers and Harbors Act originated in 1899 and has been amended several times. Section 10 extends the reach of the Act beyond navigable waters and on to any work that affects the course, location, condition, or physical capacity of such waters. In recent years, the federal government, through that

enactment, the Clean Waters Act, and similar legislation, has been pushing coastal states and communities to restore waterways to their natural state. For example, the National Seashore, Truro, Wellfleet, and the Commonwealth have developed an ambitious proposal to restore the Herring River watershed. The National Seashore and Truro have also embarked on a project to return Pilgrim Lake to a saltwater embayment.

With funding from the National Oceanic and Atmospheric Administration, the Massachusetts Department of Environmental Management (now, the Department of Conservation and Recreation) took by eminent domain land in and around Waquoit Bay to establish the Waquoit Bay Estuarine Research Reserve. In order to qualify for that designation and for the financial assistance that accompanies it, the federal government must find that "the law of the coastal state provided long-term protection for reserve resources." 16 U.S.C. 1461(b)(2)(B). In line with that requirement, the Reserve. initiating its planning for the future of Waquoit Bay and its vicinity, engaged the Louis Berger Group, Inc. to research, coordinate, and develop an overarching plan for the area. The Berger Group, Inc., in consultation with the United States Fish and Wildlife Service, the Massachusetts Division of Marine Fisheries, the Town of Mashpee, the Town of Falmouth, the Massachusetts Department of Fish and Game, the Mashpee Wampanoag Tribe, and Trout Unlimited, developed a series of proposals that was issued as its December 16, 2010 "Waquoit Bay Stream Restoration Master Plan." Included in the Master Plan's "Restoration Opportunities" were "Diadromous Fish Habitat" and "Cold Water Fish Habitat," and listed under "Restoration Priority Criterion" were "Stream Flow/Hydrology" and "Restoration Area (fish/wildlife)." Developed with other agencies and as part of the Reserve's planning during the past 12 years were these objectives and approach:

The Waquoit Bay watershed, like most coastal areas in the Northeast U.S., has a long history of human alteration. Even the lands and waters that are now protected within the Reserve and appear "natural" have been altered from their pre-colonial condition and may not be providing the full ecological functions that they once did (or could). Restoration planning on the Reserve falls into three major areas for this planning period. These are river restoration projects, sand plain grassland restoration, and forest restoration.

Throughout the planning process, it seems, the Reserve has been responsive to the federal government's goal of re-establishing segments of the natural environment.

After the Master Plan was developed, Pare Corporation submitted its dam evaluation to the Office of Dam Safety. The initial report found the dam to be in poor condition, and each of the two updates found worsening conditions.

The office of Dam Safety is a component of the Massachusetts Department of Conservation and Recreation which, according to its website, administers the Waquoit Bay National Estuarine Research Reserve. Also, within the Department of Conservation and Recreation is the Department of Fish and Game, and one of its components is the Division of Ecological Restoration. It was the Division of Ecological Restoration that commissioned the "Red Brook Culvert Replacement and Restoration Feasibility Study." Given the Department of Conservation and Recreation's day-to-day involvement with the Waquoit Bay Estuarine Research Reserve and given the Reserve's emphasis upon collaboration, it seems likely that the Division of Ecological Restoration was well aware of the Master Plan and the other reports and evaluations. Indeed, to facilitate the process and to save both time and expense, the Division may well have furnished the Horsley Witten Group with those earlier materials.

If that was the context for the Horsley Witten Study, then it is not surprising that the first sentence in the report is the following:

The Horsley Witten Group, Inc. (HW) is pleased to provide this report to the Massachusetts Division of Ecological Restoration (DER) summarizing our initial feasibility study and design of dam removal/culvert improvements and <a href="stream restoration">stream restoration</a> opportunities for the Red Brook Road in Mashpee and Falmouth [emphasis added]. Study, p.1.

In other words, 12 years into the planning process stream restoration was a given, and only the details and parameters of it needed further attention.

With restoration of fish in upper Red Brook being paramount, Horsley Witten had to model the stream depth and stream velocity that the new culvert would produce, and in that regard, Horsley Witten noted that brook trout need a minimum channel depth of 0.3 feet and that, in bursts, they can swim 3 feet per second. The corresponding data for alewives were 0.5 feet and 3.5 feet. Study, p. 37. After developing a model to project the force of Red Brook's flow through the new culvert, Horsley Witten stated, "Modeling results indicate that no velocity barriers would be created as a result of dam removal that would inhibit passage of Alewife." Study, p. 37. The unmentioned brook trout, however, might encounter some difficulty upstream. See Table 5 and Table 6. Study, p. 37.

Horsley Witten proposes to replace a five-foot-wide concrete pipe culvert with an eight-foot-wide concrete box culvert to enable both fish and wildlife to pass under Red Brook Road. Study p. 39. This design should allow the free flow of water from points upstream of Red Brook Road. As a result, instead of an impoundment (Red Brook Pond) above Red Brook Road, there will be only the Red Brook threading its way through the former cranberry bogs. Needless to say, this will comport with the federal government's push for a pre-colonial state, but some of the Association's homeowners would rather have Red Brook Pond.

In that regard, it might be worth having an engineer, rather than a lawyer, review Horsley Witten's model for the estimated force of the stream flow. The projected flow (as much as 3.06 feet per second) seems high - at least, given some of the photography showing, after the culvert gave way, only a trickle of a stream. Bear in mind, however, that impediments upstream may be slated for future removal, Study. P. 1, 43, and that Red Brook may be deepened either by scouring, Sudy, p. 34, or, possibly, by dredging. Study, p. 41.

Before the Horsley Witten report was drafted, the Mashpee Town Manager had submitted "the proposal entitled 'Red Brook Restoration Project' to the Division of Ecological Restoration (DER) for consideration as a Priority Project" to achieve "the improvement to water quality, wetland health, and fish and wildlife habitat for the entire Red Brook ecosystem." The "priority project" application was supported by letters from the Falmouth Assistant town Manager, the Director of the Mashpee Department of Public Works, the Falmouth Town Engineer, the Mashpee Conservation Agent, the Falmouth Conservation Administrator, the Director of the Massachusetts Division of Fisheries and Wildlife, the Director of the Waquoit Bay National Estuarine Research Reserve, a Department of Conservation and Recreation Service Forester familiar with the project, the Executive Director of the Orenda Wildlife Land Trust, the Executive Director of the Association to Preserve Cape Cod, the Deputy Project Leader of the United States Fish and Wildlife Service, and several residents of the area. The list is impressive.

Sometimes when a project has only just been conceived, it is possible in those early stages for local parties to influence decisions and to shape the contours of the project. If, for instance, the Association had hired naturalists and others to assemble an inventory of plants and animals that would be adversely affected, to photograph and possibly film swans on the pond and muskrats in the reeds, and if, before attitudes gelled, opinions crystallized, and plans hardened, a presentation had been made to demonstrate the ecological benefits of Red Brook Pond, then, possibly, the current proposal would have been different or the project would have been modified or indefinite future plans would have been scheduled and incorporated into it. The Study cites, for example, the "Restoration of upstream and downstream bog areas to create a more robust wetlands habitat with topographic and hydrologic variability." Study, p. 43.

As matters stand now, however, the proposed culvert project represents the product of more than a decade of evaluating, planning, and budgeting and the collaboration of town, state, and federal agencies with ample support from private groups. When a project has such widespread bureaucratic approbation and momentum, it is almost impossible to halt it or to revise it substantially or even to delay it (especially, given the safety concerns and worsening condition of the dam).

Should the Association, nonetheless, decide to oppose the project, I would strongly suggest starting locally with town officials, for they would have some influence

with the various state authorities. Moreover, to avoid Nimby (not in my back yard) accusations, the Association should strive to enlist other parties. Perhaps, Orenda Wildlife and the Wampanoags, presented with more information and the pond alternative, would join the Association's cause. At this late date, however, I cannot be optimistic. In my opinion, the Association's effort would be better expended in an endeavor to ensure and accelerate the state's "[r]estoration of upstream and downstream bog areas to create a more robust wetlands habitat."

The Association voiced some concern about its members' liability if, for example, a more forceful flow through a new culvert scoured Red Brook and washed polluting sediment downstream. The Association, however, did not install the dam or culvert and does not own either one. So far as I know, none of the Association members caused or contributed to any sediment buildup that may exist in Red Brook Pond. In the absence of any wrongdoing, in the absence of any maintenance obligation that would accompany ownership, and, indeed, in the absence of any conduct that caused harm, there is no basis for holding the Association or its members liable.

Similarly, if the culvert replacement project proceeds without the participation of the Association or its members - indeed, perhaps, in spite of their opposition - the Association and its members will not have caused the change or any resulting harm. Again, there is no discernable basis for holding the Association or its members liable. Despite the inevitable exceptions, a causal connection between one person's conduct and another person's harm is ordinarily a prerequisite for visiting liability upon the first person. See, e.g., Kennedy v. Abramson, 100 Mass. App. Ct. 775, 777,186 N.E.3d 208, 211 (2022); Franchi v. Stella, 42 Mass. App. Ct. 251, 255, 676 N.E.2d 56, 59 (1997), review denied, 424 Mass. 1109, 679 N.E.2d 558 (1997); Comcast Corporation v. National Association of African American-Owned Media, 140 S.Ct. 1009, 1014 (2020).

Judicial proceedings could enter in a different way. When a political solution is unavailing or unavailable, court action can occasionally substitute. In this situation, however, public agencies are pursuing a "public purpose," see Opinion of the Justices, 356 Mass. 775, 795, 250 N.E.2d 547, 558 (1969), and I am unaware of any proceedings that were undertaken illegally. When there is no wrongdoing or prejudicial illegality, a public project will not be halted. See Benevolent & Protective Order of Elks, Lodge 65 v. Planning Board of Lawrence, 403 Mass. 531, 550, 531 N.E.2d 1233, 1245 (1988).

Individually, Association members may have claims but the only harm of which I am aware is the potential loss of property values arising from the pond's transformation into a brook. If, as a contrast, a state worker accidentally ran a bulldozer through your home, you would have a claim, but indirect harms from a public works project are rarely compensable. Boston Edison Company v. Boston Redevelopment Authority 374 Mass, 37, 371 N.E.2d 728 (1977). Public works projects are not deemed to be inherently wrongful and "municipalities are liable only for their own illegal acts." Boston Taxi Owners Association, Inc. v. City of Boston, 223 F.Supp.3d 119, 123 (D.Mass. 2016). A

town's decision, for example, to construct affordable housing on the vacant lot next to you may lower your property's value, but it is not the type of harm that creates liability for a town. See generally *Pishev v. City of Somerville*, 95 Mass. App. Ct. 678, 686 n.17, 131 N.E.3d 852, 861 n.17 (2019), review denied, 483 Mass. 1106, 137 N.E.3d 1062 (2019); cf. *Standerwick v. Zoning Board of Appeals of Andover*, 447 Mass. 20, 849 N.E.2d 197 (2006).

Furthermore, such claims collide with the sovereign immunity principles enshrined in the Massachusetts Tort Claim Act (Sections 2 and 10 are enclosed). That legislation precludes the imposition of liability when a claim is "based upon the exercise or performance or the failure to exercise or perform a discretionary function." Mass. Gen. Laws ch. 258, § 10(b), amended by St.1993, c. 495, § 57. About the "discretionary function" exception to liability, the Appeals Court wrote the following:

The type of discretionary decisions which may not form the basis for liability under § 10(b) are those "with respect to public policy and planning." *Devlin v. Commonwealth*, 83 Mass. App. Ct. 530, 533, 986 N.E.2d 882, 885 (2013), citing and quoting *Whitney v. City of Worcester*, 373 Mass. 208, 218, 366 N.E.2d 1210, 1216 (1977).

In an effort to dodge these obstacles, some claimants have attempted to characterize their loss of value as tantamount to an eminent domain taking. The Supreme Court has held, however, that administrative action must be virtually the equivalent of an outright taking. Any residual value in the property defeats the claim. *Palazzolo v. Rhode Island*, 533 U.S. 606, 630-631 (2001).

Accordingly, it is my opinion that any diminishment of real estate values as a consequence of the governmental restoration of Red Brook would not generate a viable claim.

To conclude, let me summarize by reaffirming that it is my opinion that the culvert project is unlikely to expose the Association or its members to liability, but on the other hand, it is probably too late to defeat the project or to modify it sufficiently to preserve Red Brook Pond. It may, however, be possible to hasten the state's "[r]estoration of upstream and downstream bog areas to create a more robust wetlands habitat."

I hope I have now addressed all of the subjects the Association wanted addressed. If that is not the case, please let me know.

Yours Truly, Paul V. Benatti

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DECLARATION OF PROTECTING USE

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TO facilitate the Automatic Homes Association plan of

To facilitate the Automatic Homes Association plan of Commercial and Appendix Republic horoin established, to set forth standards for the ownership and saferof Lots in SEABROOK VILLAGE, and Africater Cofline I. Set forth, and to preserveyand enhance the character Cofline I. community and the enjoyment of life therein, REDBROOK CORPORATION a corporation duly organized under the laws of the Commonwealth of Massachusetts and having an usual place of business in Mashpee, Massachusetts, its successors and assigns (hereinafter referred to as "the Corporation"), and all future owners of Lots in SEABROOK VILLAGE, as hereinafter set forth, by their acquisition of title thereto, Covenant and Agree as follows:

- 1. The Corporation owns certain real estate in Mashpee, Barnstable County, Massachusetts which is set forth and shown on a plan of land entitled "'Seabrook Village'-Redbrook Corporation-Petitioner, Plan of Land in South Mashpee, Mass., being a subdivision of Lot 7 as shown on L.C. Plan No. 35350A, Scale: l in. = 60 ft., Date: May 23, 1973, Charles N. Savery, Inc. Registered Engineers Surveyors, Hyannis, Mass." , said plan being numbered 35350C (Sheets 1 through 3) and filed in the Land Court at Boston with Land Court Case Number 35350; said real estate is also shown on a plan of land filed in Plan Book 277, Pages 54 & 55 in the Barnstable County Registry of Deeds and entitled "'Seabrook Village' - Plan of Land in South Mashree, Mass. for Redbrook Corporation, Scale 1 in. = 60 ft., Date May 14, 1973, Charles N. Savery Inc., Registered Engineers Surveyors, Hyannis, Mass.". These plans subdivide said real estate into building lots and areas reserved for common use.
- 2. This property shall henceforth be subject to the agreements, covenants, reservations, easements, charges and restrictions hereinafter set forth, all for the benefit and protection of every owner of any Lot in SEABROOK VILLAGE and to run with and legally encumber each and every Lot and common area therein.
  - B. AUTOMATIC HOMES ASSOCIATION.
- 1. The Corporation has caused to be created under Massachusetts law a non-profit corporation known as SEABROOK VILLAGE ASSOCIATION, INC. (hereinafter referred to as "the Association") for the purposes of providing for the management, improvement and safekeuping of common areas of SEABROOK VILLAGE, for the administration and enforcement of the land use restrictions hereinafter set forth and generally for the enhancement

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of enjoyment of the members in the common areas of chelcommunity and in their respective Lots. Membership in the Association will be an automatic incident of ownership of any Lot and will, with the exception of the special membership of the Correction, its successors of Essegis, Coolmanch with the geotremp of a deed of conveyance of any Lot In Beabrook Village and Cooling It only when said Lot is conveyed to a new owner by duly recorded deed of conveyance or by the death of the current owner. Further provisions and benefits of membership in the Association are set forth in the by-laws thereof as filed in the Barnstable Registry District of Land Court and noted on Certificate of Title No. 57260, also as filed and recorded in the Barnstable County Registry of Deeds.

2. The Association may take any action authorized by this Declaration upon the approval of a majority of its Board of Directors, such action to be effective only when reduced to writing and filed with the Clerk of the Association. A statement signed by the Clerk of the Association regarding the compliance with any of the obligations set forth or referred to herein shall be conclusive evidence against all persons of the truth of the facts attested.

### C. MAINTENANCE ASSESSMENTS.

- 1. Each Lot shall, from the date of its conveyance by the Corporation, be subject to 1) annual assessments or charges and 2) special assessments for capital improvements, which assessments are to be fixed, established and collected from time to time as hereinafter provided. The annual and special assessments, together with such interest thereon and costs of collection thereof as hereinafter provided, shall be a charge on the land and shall be a continuing lien upon the property against which each such assessment is made. Each such assessment, with interest and costs of collection, shall also be the personal obligation of the person who was the owner of the Lot at the time when the assessment fell due.
- 2. The annual assessments levied by the Association shall be used to furnish the following benefits to its members:
- a. Lighting, maintaining and repairing the private ways of Seabrook Village.
- b. Landscaping and beautification of shoulders of the private ways and of common areas adjacent thereto.
- c. Installing and maintaining a series of walkways through the common areas, namely through Lots 168, 169, 170, 171, 172 and 173 on the plan referred to above as plan 35350C, together with the unregistered portions of such Lots as adjacent

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- NOT d. Payment of 弥漫nses incident to the enfoactment of the land use restroctions dreated hedein and to Othe EministrationL of the Association, Gneluding expenses, if any, facured in the collection of the annual or special assessments.
- e. Payment of taxes and assessments, if any, levied by public authorities on any private ways, walkways, common areas or other improvements of the Association.
- f. Constructing and maintaining recreational facilities including structures in any of the common areas.
- g. Payment of expenses contributing, in the opinion of the Board of Directors of the Association, to the welfare, enjoyment or other advantage of Scabrook Village.
- 3. The initial annual assessment per Lot will be \$100, based on the cost of living index as published by the Office of Economic Development of the United States as of August, 1974, said assessment to fluctuate based upon increases or decreases in said index as published by said agency or successor. The annual assessment shall be payable on August 1st of each year; the balance due on the current annual period shall be paid to the Association at the time of conveyance of any Lot by the Corporation and shall be an item of adjustment on subsequent sales of such Lot. At every third annual meeting of the Association, the annual assessment may be increased by vote of the members, by simple majority, for the ensuing three year period. Notwithstanding, the Association may, after consideration of current expenses and future needs of the Association, fix the actual assessment for any year at a lesser amount. In any event until such time as the common areas and other improvements administered by the Association are legally transferred to said Association by the Corporation, the Corporation shall be responsible for any maintenance expenses in excess of the budget of the Association.
- 4. The Association may levy in any assessment year a special assessment for that year for the purpose of defraying, in part or whole, the capital expense of any construction, reconstruction, unexpected repair or replacement of any specified improvement on the common areas provided that such assessment shall have the assent of two-thirds of the votes of members, whether case in person or by proxy, at a meeting duly called for the purpose, written notice of which shall have been sent to all members at least thirty days prior to the date of meeting.

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- 5. The Clerk of the Association shall prepare a roster of the Lote and their where with the assessments applicable thereto, which roster shall be kept in the office of the Association and shall be openpterinspection by any owner. Puritten notice of the assessment thereupon shall be sent to every owner subject thereto not less than two weeks prior to the due date. The Association shall upon demand at any time furnish to any owner liable for said assessment a certificate of liens in writing signed by the Clerk of the Association, which certificate shall be conclusive evidence of the payment of any assessment therein stated to have been paid.
- 6. If the assessments of the Association are not paid within thirty (30) days of the date when due, then such assessments shall become delinquent and shall, together with interest at the rate of 12% per annum thereon and cost of collection, including reasonable attorney's fees, thereupon become a continuing lien on the property in the hands of the owner, his heirs and assigns. In addition to the non-exclusive personal obligation of the owner to pay such assessment, which shall continue for the statutory period, such owner shall be deemed not in good standing for the purpose of voting on business of the Association while the delinquency continues. If the assessment is not paid within thirty (30) days of the duc date, the Association may bring an action at law against the owner, or proceed to foreclose its lien against the Lot, adding to the amount of the assessment interest and attorney's fees as above stated.
- 7. The lien of the assessments provided for in this section shall be subject and subordinate to the lien of any mortgage or mortgages now or hereafter placed upon any Lot; however, this subordination shall only extend to assessments due prior to a sale or transfer of such Lot pursuant to a decree of foreclosure, or by other proceeding in lieu thereof. Such sale shall not relieve such Lot from liability for any assessments due thereafter
  - D. ARCHITECTURAL CONTROL COMMITTEE.

No building, fence, wall or other structure shall be commenced, erected or maintained upon any Lot, nor shall any exterior addition to or change or alteration therein be made until the plans and specifications showing the nature, kind, shape height, materials and location of the same, together with land-scaping, shall have been submitted in writing by registered mail to the Association and approved in writing as to harmony of external design and location in relation to surrounding structures and topography by the Board of Directors of the Association or

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### E. LAND USE RESTRICTIONS.

- No building except a single-family dwelling and a private garage for not more than two cars shall be constructed or used on any Lot. This provision shall not apply to common areas.
- All buildings so constructed shall comply with all State and Federal statutes and all municipal by-laws, restrictions and ordinances.
- 3. The first floor living area for any one-story house shall be at least 1,000 square feet and for any cape, colonial, split, etc. (more than one story) shall be at least 900 square feet of living area on the first floor. An attached garage is required on every house but may be omitted by the addition of 300 square feet to the first floor living area.
- 4. The exterior of every dwelling house must be completed including landscaping within six months from the date that construction commenced on such house. An extension not to exceed six months may be obtained for the landscaping to avoid planting during the winter months.
- 5. Lots are to be used for residential purposes only. This shall not prohibit the use of any Lot(s) by the Corporation as an office or model home.
- 6. The locations of wells and septic systems on each Lot are to be as designated by the Architectural Control Committee.
- 7. No permanent exterior tanks or other containers for the storage of fuel or flammable materials above ground are permitted.
- 8. No trailers or tents are to be placed or kept on any Lot. No commercial vehicles are to be kept unless garaged on any Lot with the approval of the Architectural Control Committee. No boats exceeding twenty-four (24) feet in length may be stored outdoors.
- 9. Exterior clotheslines are prohibited on any Lot. Rubbish or waste cans must be enclosed and screened from view from the street or from abutting property.

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- "For Sale" signs of any type including "For Rent" or "For Sale" signs are prohibited except for a sign designating the model home(s) of the corporation; this provision designating the signs identifying the development at either entrance from Redbrook Road. Temporary signs showing the name, address, and telephone number of any builder may be exhibited on the Lot said builder is working on subject to the approval of the Architectural Control Committee.
- 11. In the area from the front of the house to the street line, no screen fences may be used nor may any fence exceed three feet in height.
- 12. The entire area of each Lot from the front of the house to the street line must be kept in sod except for reasonable areas for foundation plantings and around trees and for path ways to the house as approved by the Architectural Control Committee.
- . 13. No animals or fowls other than a reasonable number of household pets may be kept on the premises nor may any such pets be bred for the purposes of resale.
- 14. The Association is to have the right to construe these restrictions and to prevent variations and modifications thereof and any action taken by the Association in connection with such restrictions shall be conclusive and binding upon all Lot owners.
  - F. PROPERTY FIGHTS IN COMMON AREAS.
- 1. The common areas of SEABROOK VILLAGE are set forth and shown as Lots 166, 167, 168, 169, 170, 171, 172, 173, 174, 184 and adjacent unregistered land as shown on the plans hereinabove referred to.
- Every Lot owner shall have a right and easement of enjoyment in and to the common areas and such easement shall be appurtenant to and shall pass with the title to every Lot.
- 3. The Corporation may retain the legal title to the common areas until it has completed improvements thereon and until such time as, in the opinion of the Corporation, the Association is able to maintain the common areas as improved. However, the Corporation, its successors and assigns, hereby covenants that title to the common areas shall be conveyed to the Association, free and clear of all incumbrances, not later than thirty (30) days from the date when the votes of all Lots owned by other than the Corporation shall be equal to the votes of the Corporation. From that date forward, the Corporation shall no longer be responsible for any expenses of the Association exceeding its budget.

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- 4. The property rights bet forth in Paragraph for this section are nonetheless subject to the following? O P Y
- a. the right of the Corporation and of the Nasociation to borrow money for the Nurpose of improving community and a sum in aid thereof the mortgage last lineas. In the Fernt con more gage becomes in default, the lender's rights her surder shall be limited to a right, after possession is taken of the mortgaged property, to charge admission and other fues as a condition to continued enjoyment by the members and to open the enjoyment of such property to a wider public until the mortgage debt is satisfied whereupon the possession of such property shall be returned to the Association and all rights of the members shall be fully restored.
- b. the right of the Association to take reasonably necessary steps to protect the common areas against foreclosure.
- c. the right of the Association, as provided by its Articles and by-laws, to suspend the enjoyment rights of any member for the period during which any assessment remains unpaid, and, for periods up to thirty days, for infractions of its published ruler and regulations.
- d. the right of the Association to charge reasonable admission and other fees for the use of the common areas.
- e. the right of the Corporation or the Association to dedicate or transfer all or part of the common area to any public agency or authority for such purposes and subject to such conditions as may be agreed to by the members, effective only upon a two-thirds vote of the members; and
- f. the right of the Corporation or Association to lease portions of the common areas for use as a working cranberry bog or bogs, the earnings from such lease to be paid directly to the Association and to be used for the general purposes of said Association.

## G. AMENDMEN'TS.

The Corporation shall have the right at any time to amend this Declaration during the term thereof by filing such amendment in the Barnstable Registry District and the Barnstable County Registry of Deeds and shall have the further right to file a supplemental plan enlarging the area subject to the terms and provisions of this Declaration and amendments thereto. Each additional building lot so established shall have the same rights and be subject to the same obligations as are the present Lots. If the new area contains common areas, such common areas shall be subject to the same rights of enjoyment and easements as are the

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present commod aleas. Incorpolation shall have the right to grant exements in the ways as shown on the prans hereinabove referred to to to the inthe new area, and vice versa. Finally, nothing herein shall be deemed or interpreted to reserve to the Corporation the right to amend in any way the restrictions created by this instrument insofar as they affect lots individually owned at the time of such emendment.

### H. TERM.

The provisions created by this instrument shall run with the land and inure to the benefit of and be enforceable by the Corporation, the Association, and the owner of any Lot subject thereto, their legal representatives, heirs, successors and assigns, as respectively appropriate, for a period of thirty (30) years from the date this Declaration is recorded, after which time such provisions may be extended for two periods not exceeding twenty (20) years each by agreements executed and recorded prior to the expiration of the initial period or of the extension period, said agreements to be executed by not less than two-thirds of the Lots subject to such provisions. Notwithstanding, all easements shall continue in perpetuity.

## I. SEVERABILITY.

If any provision contained herein should be held invalid by any court, such invalidity shall in no way affect the continued validity of any other provisions, which shall continue and remain in full force and effect.

### J. GOVERNING LAW.

This Declaration shall be construed, interpreted and applied in accord with the laws of the Commonwealth of Massachusetts.

IN WITNESS WHEREOF, REDBROOK CORPORATION, has caused this instrument to be signed and its corporate seal to be hereunto affixed by JOHN R. UMINA, its President, duly authorized, this

Revi! A.D., 1974.

REDBROOK CORPORATION

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COMPONMENTH OF MASSACHUSETTS NOT BARNSTABLE, S.S. A N O F F I C I A L

ABLE, S.S. A N April / A N.A.D., 1974.

OFFICIAL OFFICIAL

Then personally Pappeared the above-named JOHAP RY UMINA as President of REDBROOK CORPORATION and acknowledged the foregoing instrument to be the free act and deed of said corporation, before me,

Notary Public
My commission expires: Folianay7, 1960

STAFF AND WELSH 212 MAIN STREET MYANNIS, MASS. 02001

## Massachusetts General Laws Annotated

Part III. Courts, Judicial Officers and Proceedings in Civil Cases (Ch. 211-262)
Title IV. Certain Writs and Proceedings in Special Cases (Ch. 246-258e)
Chapter 253. Mills, Dams and Reservoirs (Refs & Annos)

### M.G.L.A. 253 § 39

## § 39. Dam to flow cranberry land; erection; license

### Currentness

An owner or lessee of land appropriated or which he desires to appropriate to the cultivation and growth of cranberries may erect and maintain a dam upon and across a stream to flow and irrigate said land, subject to this chapter so far as applicable; but he shall not erect and maintain a dam across a navigable stream or across the outlet of a great pond, without a license therefor from the department of environmental management.

### Credits

Amended by St. 1991, c. 552, § 131.

Notes of Decisions (3)

M.G.L.A. 253 § 39, MA ST 253 § 39

Current through Chapter 125 of the 2022 2nd Annual Session. Some sections may be more current, see credits for details.

End of Document

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KeyCite Yellow Flag - Negative Treatment Proposed Legislation

Massachusetts General Laws Annotated

Part 1. Administration of the Government (Ch. 1-182)

Title XIX. Agriculture and Conservation (Ch. 128-132b)

Chapter 131. Inland Fisheries and Game and Other Natural Resources (Refs & Annos)

M.G.L.A. 131 § 40

§ 40. Removal, fill, dredging or altering of land bordering waters

Effective: August 7, 2012
Currentness

No person shall remove, fill, dredge or alter any bank, riverfront area, fresh water wetland, coastal wetland, beach, dune, flat, marsh, meadow or swamp bordering on the ocean or on any estuary, creek, river, stream, pond, or lake, or any land under said waters or any land subject to tidal action, coastal storm flowage, or flooding, other than in the course of maintaining, repairing or replacing, but not substantially changing or enlarging, an existing and lawfully located structure or facility used in the service of the public and used to provide electric, gas, sewer, water, telephone, telegraph and other telecommunication services, without filing written notice of his intention to so remove, fill, dredge or alter, including such plans as may be necessary to describe such proposed activity and its effect on the environment and without receiving and complying with an order of conditions and provided all appeal periods have elapsed. Said notice shall be filed by delivery in hand to the conservation commission or its authorized representative or by certified mail, return receipt requested, to said commission, or, if none, to the board of selectmen in a town or the mayor of a city in which the proposed activity is to be located. Upon such filing, the receipt of such notice shall be acknowledged in writing on the face thereof and shall include the time and date so received. A person delivering said notice by hand shall be given a receipt in writing acknowledging the time and date of such filing. Copies of such notice shall be sent at the same time by certified mail to the department of environmental protection. To defray state and local administrative costs each person filing such a notice shall pay a filing fee, determined on a sliding scale basis by the commissioner of administration after consultation with the secretary of environmental affairs. Fifty percent of any filing fee in excess of twenty-five dollars shall be made payable to the department of environmental protection, in a manner to be determined by the commissioner of environmental protection, at the same time as the copies of the notice are sent to the department of environmental protection. The remainder of said fee shall be made payable to the city or town; provided, that said remainder shall be expended solely by the local conservation commission for the performance of its duties under this chapter and shall accompany the copy of the notice sent to the city or town. No such notice shall be sent before all permits, variances, and approvals required by local bylaw with respect to the proposed activity, which are obtainable at the time of such notice, have been obtained, except that such notice may be sent, at the option of the applicant, after the filing of an application or applications for said permits, variances, and approvals; provided, that such notice shall include any information submitted in connection with such permits, variances, and approvals which is necessary to describe the effect of the proposed activity on the environment. Upon receipt of any notice hereunder the department of environmental protection, hereinafter called the department, shall designate a file number for such notice and shall send a notification of such number to the person giving notice to the conservation commission, selectmen or mayor to whom the notice was given. Said notification shall state the name of the owner of the land upon which the proposed work is to be done and the location of said land.

Any person filing a notice of intention with a conservation commission shall at the same time give written notification thereof, by delivery in hand or certified mail, return receipt requested, to all abutters within one-hundred feet of the property line of the land where the activity is proposed, at the mailing addresses shown on the most recent applicable tax list of the assessors, including, but not limited to, owners of land directly opposite said proposed activity on any public or private street or way, and

in another municipality or across a body of water. When a notice of intent proposes activities on land under water bodies and waterways or on a tract of land greater than 50 acres, written notification shall be given to all abutters within 100 feet of the proposed project site. For the purposes of this section, "project site" shall mean lands where the following activities are proposed to take place: dredging, excavating, filling, grading, the erection, reconstruction or expansion of a building or structure, the driving of pilings, the construction or improvement of roads or other ways and the installation of drainage, sewerage and water systems, and "land under water bodies and waterways" shall mean the bottom of, or land under, the surface of the ocean or an estuary, creek, river stream, pond or lake. When a notice of intent proposes activity on a linear shaped project site longer than 1,000 feet in length, notification shall be given to all abutters within 1,000 feet of the proposed project site. If the linear project site takes place wholly within an easement through another person's land, notice shall also be given to the landowner. Said notification shall be at the applicant's expense, and shall state where copies of the notice of intention may be examined and obtained and where information regarding the date, time and place of the public hearing may be obtained. Proof of such notification, with a copy of the notice mailed or delivered, shall be filed with the conservation commission.

Within twenty-one days of the receipt by a conservation commission of a written request made by any person and sent by certified mail, said commission shall make a written determination as to whether this section is applicable to any land or work thereon. When such person is other than the owner, notice of any such determination shall also be sent to the owner.

The term "applicant" as used in this section shall mean the person giving notice of intention to remove, fill, dredge or alter.

The term "person" as used in this section shall include any individual, group of individuals, association, partnership, corporation, company, business organization, trust, estate, the commonwealth or political subdivision thereof, administrative agency, public or quasipublic corporation or body, or any other legal entity or its legal representative, agents or assigns.

The term "bogs" as used in this section shall mean areas where standing or slowly running water is near or at the surface during a normal growing season and where a vegetational community has a significant portion of the ground or water surface covered with sphagnum moss (Sphagnum) and where the vegetational community is made up of a significant portion of one or more of, but not limited to nor necessarily including all, of the following plants or groups of plants: aster (Aster nemoralis), azaleas (Rhododendron canadense and R. viscosum), black spruce (Picea mariana), bog cotton (Eriophorum), cranberry (Vaccinium macrocarpon), high-bush blueberry (Vaccinium corymbosum), larch (Larix laricina), laurels (Kalmia angustifolia and K. polifolia), leatherleaf (Chamaedaphne calyculata), orchids (Arethusa, Calopogon, Pogonia), pitcher plants (Sarracenia purpurea), sedges (Cyperaceae), sundews (Droseraccae), sweet gale (Myrica gale), white cedar (Chamaecyparis thyoides).

The term "coastal wetlands", as used in this section, shall mean any bank, marsh, swamp, meadow, flat or other lowland subject to tidal action or coastal storm flowage.

The term "freshwater wetlands", as used in this section, shall mean wet meadows, marshes, swamps, bogs, areas where groundwater, flowing or standing surface water or ice provide a significant part of the supporting substrate for a plant community for at least five months of the year; emergent and submergent plant communities in inland waters; that portion of any bank which touches any inland waters.

The term "swamps", as used in this section, shall mean areas where ground water is at or near the surface of the ground for a significant part of the growing season or where runoff water from surface drainage frequently collects above the soil surface, and where a significant part of the vegetational community is made up of, but not limited to nor necessarily include all of the following plants or groups of plants: alders (Alnus), ashes (Fraxinus), azaleas (Rhododendron canadense and R viscosum), black alder (Ilex verticillata), black spruce (Picea mariana), button bush (Cephalanthus occidentalis), American or white elm (Ulmus americana), white Hellebore (Veratrum viride), hemlock (Tsuga canadensis), highbush blueberry (Vaccinium corymbosum), larch (Larix laricina), cowslip (Caltha palustris), poison sumac (Toxicodendron vernix), red maple (Acer rubrum), skunk cabbage (Symplocarpus foetidus), sphagnum mosses (Sphagnum), spicebush (Lindera benzoin), black gum tupelo (Nyssa sylvatica), sweet pepper bush (Clethra alnifolia), white cedar (Chamaecyparis thyoides), willow (Salicaceae).

The term "wet meadows", as used in this section where ground water is at the surface for a significant part of the growing season and near the surface throughout the year and where a significant part of the vegetational community is composed of various grasses, sedges and rushes; made up of, but not limited to nor necessarily including all, of the following plants or groups of plants: blue flag (Iris), vervain (Verbena), thoroughwort (Eupatorium), dock (Rumex), false loosestrife (Ludwigia), hydrophilic grasses (Gramincae), loosestrife (Lythrum), marsh fem (Dryopteris thelypteris), rushes (Juncaceae), sedges (Cyperaceae), sensitive fem (Onoclea sensibilis), smartweed (Polygonum).

The term "marshes", as used in this section, shall mean areas where a vegetational community exists in standing or running water during the growing season and where a significant part of the vegetational community is composed of, but not limited to nor necessarily including all, of the following plants or groups of plants: arums (Araceae), bladder worts (Utricularia), bur reeds (Sparganiaceae), button bush (Cephalanthus occidentalis), cattails (Typha), duck weeds (Lemnaceae), eelgrass (Vallisneria), frog bits (Hydrocharitaceae), horsetails (Equisetaceae), hydrophilic grasses (Gramineae), leatherleaf (Chamaedaphne calyculata), pickerel weeds (Pontederiaceae), pipeworts (Eriocaulon), pond weeds (Potamogeton), rushes (Juncaceae), sedges (Cyperaceae), smartweeds (Polygonum), sweet gale (Myrica gale) water milfoil (Halcragaceae), water lilies (Nymphaeaceae), water starworts (Callitrichaceae), water willow (Decodon verticillatus).

The term "Densely developed areas", as used in this section shall mean, any area of ten acres or more that is being utilized, or includes existing vacant structures or vacant lots formerly utilized as of January first, nineteen hundred and forty-four or sooner for, intensive industrial, commercial, institutional, or residential activities or combinations of such activities, including, but not limited to the following: manufacturing, fabricating, wholesaling, warehousing, or other commercial or industrial activities; retail trade and service activities; medical and educational institutions; residential dwelling structures at a density of three or more per two acres; and mixed or combined patterns of the above. Designation of a densely developed area is subject to the secretary of the executive office of environmental affair's approval of a city or town's request for such designation. Land which is zoned for intensive use but is not being utilized for such use as of January first, nineteen hundred and ninety-seven or which has been subdivided no later than May first, nineteen hundred and ninety-six shall not be considered a densely developed area for the purposes of this chapter.

The term "Mean annual high-water line", as used in this section, shall mean with respect to a river, the line that is apparent from visible markings or changes in the character of soils or vegetation due to the prolonged presence of water and which distinguishes between predominantly aquatic and predominantly terrestrial land. The mean high tide line shall serve as the mean annual high water line for tidal rivers.

The term "River", as used in this section, shall mean a natural flowing body of water that empties to any ocean, lake, or other river and which flows throughout the year.

The term "Riverfront area", as used in this section, shall mean that area of land situated between a river's mean annual high-water line and a parallel line located two hundred feet away, measured outward horizontally from the river's mean annual high-water line. This definition shall not create a buffer zone, so-called, beyond such riverfront area. Riverfront areas within municipalities with (i) a population of ninety thousand or more persons or (ii) a population density greater than nine thousand persons per square mile, as determined by the nineteen hundred and ninety federal census; (iii) that are within densely developed areas as defined herein; (iv) land in Waltham between the Charles river on the north, and the Crescent street and Pine street on the south, and the intersection of the Charles river and a line extended from the center line of Walnut street on the west, and the railroad right-of-way now or formerly of the Boston and Maine Railroad on the east; or (v) property located in the town of Milton shown on Milton assessors Map G, Block 56, Lot 13, located on 2 Granite Avenue shall be defined as that area of land situated between a river's mean annual high-water line and a parallel line located twenty-five feet away, measured outward horizontally, from the river's mean annual high-water line. The riverfront area shall not include land now or formerly associated with historic mill complexes including, but not limited to, the mill complexes in the Cities of Holyoke, Taunton, Fitchburg, Haverhill, Methuen and Medford in existence prior to nineteen hundred and forty-six and situated landward of the waterside

facade of a retaining wall, building, sluiceway, or other structure existing on the effective date of this act. The riverfront area shall not apply to any mosquito control work done under the provisions of clause (36) of section five of chapter forty, of chapter two hundred and fifty-two or of any special act or to forest harvesting conducted in accordance with a cutting plan approved by the department of environmental management, under the provisions of sections forty to forty-six, inclusive, of chapter one hundred and thirty-two; and shall not include any area beyond one hundred feet of river's mean annual high water mark: in which maintenance of drainage and flooding systems of cranberry bogs occurs; in which agricultural land use or aquacultural use occur; to construction, expansion, repair, maintenance or other work on piers, docks, wharves, boat houses, coastal engineering structures, landings, and all other structures and activities subject to licensing or permitting under chapter ninety-one and its regulations; provided that such structures and activities shall remain subject to statutory and regulatory requirements under chapter ninety-one and section forty of chapter one hundred and thirty-one or is the site of any project authorized by special act prior to January first, nineteen hundred and seventy-three.

The term "Riverfront area boundary line", as used in this section, shall mean the line located at the outside edge of the riverfront area.

The conservation commission, selectmen or mayor receiving notice under this section shall hold a public hearing on the proposed activity within twenty-one days of the receipt of said notice. Notice of the time and place of said hearing shall be given by the hearing authority at the expense of the applicant, not less than five days prior to such hearing, by publication in a newspaper of general circulation in the city or town where the activity is proposed and by mailing a notice to the applicant and to the board of health and the planning board of said city or town. The conservation commission and its agents, officers and employees and the commissioner of environmental protection and his agents and employees, may enter upon privately owned land for the purpose of performing their duties under this section. No conditions shall be imposed, nor shall any determination be rendered by a conservation commission, in reference to this section, unless the conservation commission meets with a quorum present.

If after said hearing the conservation commission, selectmen or mayor, as the case may be, determine that the area on which the proposed work is to be done is significant to public or private water supply, to the groundwater supply, to flood control, to storm damage prevention, to prevention of pollution, to protection of land containing shellfish, to the protection of wildlife habitat or to the protection of fisheries or to the protection of the riverfront area consistent with the following purposes: to protect the private or public water supply; to protect the ground water; to provide flood control; to prevent storm damage; to prevent pollution; to protect land containing shellfish; to protect wildlife habitat; and to protect the fisheries, such conservation commission, board of selectmen or mayor shall by written order within twenty-one days of such hearing impose such conditions as will contribute to the protection of the interests described herein, and all work shall be done in accordance therewith. If the conservation commission, selectmen or mayor, as the case may be, make a determination that the proposed activity does not require the imposition of such conditions, the applicant shall be notified of such determination within twenty-one days after said hearing. Such order or notification shall be signed by the mayor or a majority of the conservation commission or board of selectmen, as the case may be, and a copy thereof shall be sent forthwith to the applicant and to the department.

If a conservation commission has failed to hold a hearing within the twenty-one day period as required, or if a commission, after holding such a hearing has failed within twenty-one days therefrom to issue an order, or if a commission, upon a written request by any person to determine whether this section is applicable to any work, fails within twenty-one days to make said determination, or where an order does issue from said commission, the applicant, any person aggrieved by said commission's order or failure to act, or any owner of land abutting the land upon which the proposed work is to be done, or any ten residents of the city or town in which said land is located, may, by certified mail and within ten days from said commission's order or failure to act, request the department of environmental protection to determine whether the area on which the proposed work is to be done is significant to public or private water supply, to the groundwater supply, to flood control, to storm damage prevention, to prevention of pollution, to protection of land containing shellfish, to the protection of wildlife habitat or to the protection of fisheries or to the protection of the riverfront area consistent with the following purposes: to protect the private or public water supply; to protect the ground water; to provide flood control; to prevent storm damage; to prevent pollution; to protect land containing shellfish; to protect wildlife habitat; and to protect the fisheries. The commissioner of environmental protection

or his designee also may request such a determination within said ten days. The party making any such request shall at the same time send a copy thereof by certified mail to the conservation commission, board of selectmen or mayor which conducted the hearing hereunder. If such party is other than the applicant, a copy of such request shall also be sent at the same time by certified mail to the applicant. Upon receipt of such request the department shall make the determination requested and shall by written order issued within seventy days of receipt of such request and signed by the commissioner or his designee, impose such conditions as will contribute to the protection of the interests described herein; provided, however, that said department shall notify the applicant within thirty days of the receipt of such request if his application or request is not in proper form or is lacking information or documentation necessary to make the determination. Such order shall supersede the prior order of the conservation commission, board of selectmen or mayor, and all work shall be done in accordance therewith, but in no event shall any work commence until ten days have elapsed following the issuance of said order. In the case of riverfront areas, no order issued by a conservation commission, board of selectmen, mayor, or the department shall permit any work unless the applicant, in addition to meeting the otherwise applicable requirements of this section, has proved by a preponderance of the evidence that (1) such work, including proposed mitigation measures, will have no significant adverse impact on the riverfront area for the following purposes: to protect the private or public water supply; to protect the ground water; to provide flood control; to prevent storm damage; to prevent pollution; to protect land containing shellfish; to protect wildlife habitat; and to protect the fisheries, and (2) there is no practicable and substantially equivalent economic alternative to the proposed project with less adverse effects on such purposes. An alternative is practicable and substantially economically equivalent if it is available and capable of being done after taking into consideration: costs, and whether such costs are reasonable or prohibitive to the owner; existing technology; the proposed use; and logistics in light of overall project purposes. For activities associated with access for one dwelling unit, the area under consideration for practicable alternatives will be limited to the lot; provided, that said lot shall be on file with the registry of deeds as of the 1 August first, nineteen hundred and ninety-six. For other activities including, but not limited to, the creation of a real estate subdivision, the area under consideration shall be the subdivided lots, any parcel out of which the lots were created, and any other parcels that are adjacent to such parcel or adjacent through other parcels formerly or presently owned by the same owner at any time on or after August first, nineteen hundred and ninety-six or any land which can reasonably be obtained; provided, that an ownership interest can reasonably be obtained after taking into consideration: cost, and whether such cost is reasonable or prohibitive to the owner; existing technology; the proposed use; and logistics in light of overall project purposes. At any time prior to a final order of determination by the department, any party requesting a determination may in writing withdraw the request, and such withdrawal shall be effective upon receipt by the department. Notwithstanding the withdrawal, the commissioner or his designee may continue the determination if he notifies all parties within ten days of receipt of the withdrawal. A copy of such order shall be sent to the applicant, to the conservation commission. board of selectmen or mayor which conducted the hearing hereunder. As used in this section the words "wildlife habitat" shall mean those areas subject to this section which, due to their plant community composition and structure, hydrologic regime or other characteristics, provide important food, shelter, migratory or overwintering areas, or breeding areas for wildlife.

No work proposed in any notice of intention shall be undertaken until the final order, determination or notification with respect to such work has been recorded in the registry of deeds, or if the land affected thereby be registered land, in the registry section of the land court for the district wherein the land lies. If the final order, determination or notification requires the recording of a plan which (1) shows the location of the work, (2) is prepared by a registered professional engineer or land surveyor and (3) is in recordable form, no work proposed in the notice of intention shall be undertaken until such plan has been recorded in the registry of deeds or, if the land affected thereby is registered land, in the registry section of the land court for the district wherein such land lies.

Within twenty-one days of the receipt of a written request, by the applicant or the owner of the property, for a certificate of compliance, the issuer of the final order shall grant such request if the activity, or portions thereof, complies with such final order. The certificate of compliance shall state that the activity, or portions thereof, has been completed in accordance with such order.

Any site where work is being done which is subject to this section shall display a sign of not less than two square feet or more than three square feet bearing the words, "Massachusetts Department of Environmental Protection File Number ...." and the sign shall display the file number assigned to the project.

If the department of environmental protection finds that any proposed work would violate the provisions of chapter ninety-one, it shall proceed immediately to enforce the provisions of said chapter.

The provisions of this section shall not apply to any mosquito control work done under the provisions of clause (36) of section five of chapter forty, of chapter two hundred and fifty-two or of any special act; to maintenance of drainage and flooding systems of cranberry bogs, to work performed for normal maintenance or improvement of land in agricultural use or in aquacultural use; or to any project authorized by special act prior to January first, nineteen hundred and seventy-three.

Within one hundred and twenty days of the effective date of this act, the department, upon the advice and consent of the Commissioner of the Department of Food and Agriculture, shall promulgate rules and regulations pursuant to this section which shall establish definitions for the term "normal maintenance or improvement of land in agricultural, or in aquacultural use", for each agricultural commodity, or where appropriate because of similarities in cultural practices, groups or commodities in the Commonwealth. The department shall create a farmland advisory board to be appointed by the commissioner consisting of five persons one a member of the cooperative extension service, one a member of the USDA soil conservation service, one a member of a municipal conservation commission who has demonstrated expertise in agricultural issues, and two commercial farmers with expertise in different agricultural commodities to assist the department in the drafting of rules and regulations pursuant to this paragraph.

The notice of intention required in the first paragraph of this section shall not apply to emergency projects necessary for the protection of the health or safety of the commonwealth which are to be performed or which are ordered to be performed by an agency of the commonwealth or a political subdivision thereof. An emergency project shall mean any project certified to be an emergency by the conservation commission of the city or town in which the project would be undertaken, or if none, by the mayor of said city or the selectmen of said town. If the conservation commission, mayor, or selectmen, as the case may be, fail to act favorably within twenty-four hours of receipt of a request for certification of an emergency project, said project may be so certified by the commissioner or his designee. In no case shall any removal, filling, dredging, or alteration authorized by such certification extend beyond the time necessary to abate the emergency. The permitting and emergency provisions in this paragraph shall not apply to severe weather emergencies as declared by the commissioner of environmental protection following a destructive weather event requiring widespread recovery efforts, debris cleanup or roadway or utility repair. A severe weather emergency declaration shall allow for emergency related work to occur as necessary for the protection of the health or safety of the residents of the commonwealth. A severe weather emergency declaration by the commissioner shall describe the types of work allowed without filing a notice of intent, any general mitigating measures to condition the work that may be required in performing such work, any notification or reporting requirements, the geographic area of the declaration's effect and the period of time the declaration shall be in effect which, in no event, shall be longer than 3 months unless extended by the commissioner. A severe weather emergency declared by the commissioner shall be sent electronically to all conservation commissions in the geographic area of the severe weather emergency and shall be made widely available to the general public through appropriate channels for emergency communications. A declaration of a severe weather emergency by the commissioner shall not impact the department's ability to enforce any general or special law or rule or regulation that is not altered by the commissioner's declaration.

Notwithstanding the provisions of section fourteen of chapter twenty-one A or any other provision of law to the contrary, the notice of intention required in the first paragraph of this section shall not apply to a maintenance dredging project for which a license has been previously issued within ten years by the division of waterways of the department of environmental protection. A person intending to fill or dredge under such previously issued license shall file a written notice by certified mail to the conservation commission or if none, to the board of selectmen in a town or mayor of a city in which the land upon which such dredging project is located. Such notice shall contain the name and address of the applicant.

If the conservation commission, the board of selectmen or mayor fails to notify the applicant at the applicant's address within twenty days of the receipt of such notice of the specific objections to the commencement of such dredging fill or maintenance

dredging contemplated under said license, the applicant may commence such work without any further notice to other agencies of the commonwealth. Notwithstanding failure to notify an applicant, as hereinbefore provided, the conservation commission, the board of selectmen or mayor may at any time designate an area at which spoilage from the dredging may be placed and may require the relocation of shellfish before such maintenance dredging takes place.

If the conservation commission, the board of selectmen or mayor cites specific objections to the notice of intention, such conservation commission, board of selectmen or mayor may order a hearing as provided in this section and all other pertinent provisions of this section shall apply.

Any person who purchases, inherits or otherwise acquires real estate upon which work has been done in violation of the provisions of this section or in violation of any order issued under this section shall forthwith comply with any such order or restore such real estate to its condition prior to any such violation; provided, however, that no action, civil or criminal, shall be brought against such person unless such action is commenced within three years following the recording of the deed or the date of the death by which such real estate was acquired by such person. Any court having equity jurisdiction may restrain a violation of this section and enter such orders as it deems necessary to remedy such violation, upon the petition of the attorney general, the commissioner, a city or town, an owner or occupant of property which may be affected by said removal, filling, dredging or altering, or ten residents of the commonwealth under the provisions of section seven A of chapter two hundred and fourteen.

Rules and regulations shall be promulgated by the commissioner to effectuate the purposes of this section. However, failure by the commissioner to promulgate rules and regulations shall not act to suspend or invalidate the effect of this section. In addition to the other duties provided for in this section, a conservation commission and its agents, officers, and employees; the commissioner, his agents and employees; environmental officers, and any officer with police powers may issue enforcement orders directing compliance with this section and may undertake any other enforcement action authorized by law. Any person who violates the provisions of this section may be ordered to restore property to its original condition and take other actions deemed necessary to remedy such violations.

No person shall remove, fill, dredge or alter any area subject to protection under this section without the required authorization, or cause, suffer or allow such activity, or leave in place unauthorized fill, or otherwise fail to restore illegally altered land to its original condition, or fail to comply with an enforcement order issued pursuant to this section. Each day such violation continues shall constitute a separate offense except that any person who fails to remove unauthorized fill or otherwise fails to restore illegally altered land to its original condition after giving written notification of said violation to the conservation commission and the department shall not be subject to additional penalties unless said person thereafter fails to comply with an enforcement order or order of conditions.

Whoever violates any provision of this section, (a) shall be punished by a fine of not more than twenty-five thousand dollars or by imprisonment for not more than two years, or both such fine and imprisonment; or (b), shall be subject to a civil penalty not to exceed twenty-five thousand dollars for each violation.

### Credits

Added by St.1967, c. 802, § 1. Amended by St.1968, c. 444, § 2; St.1971, c. 1020; St.1972, c. 784, § 1; St.1973, c. 163; St.1973, c. 769; St.1974, c. 818, § 1; St.1975, c. 334; St.1975, c. 363, §§ 1 to 3; St.1975, c. 706, §§ 237 to 243; St.1976, c. 53; St.1977, c. 131; St.1977, c. 601, § 1; St.1977, c. 625, § 2; St.1978, c. 95, §§ 1, 2; St.1978, c. 119, § 7; St.1978, c. 248; St.1979, c. 122, §§ 1, 2; St.1979, c. 200; St.1979, c. 598; St.1979, c. 693; St.1983, c. 255; St.1985, c. 231, § 44; St.1986, c. 262, § 1; St.1987, c. 174, § 19; St.1987, c. 465, § 30; St.1988, c. 202, § 26; St.1989, c. 218; St.1989, c. 287, § 54; St.1990, c. 177, §§ 232 to 237; St.1990, c. 388, §§ 1 to 3; St.1991, c. 141, § 2; St.1993, c. 472, § 1; St.1996, c. 258, §§ 17 to 20; St.2012, c. 238, §§ 48 to 50, eff. Aug. 7, 2012.

Notes of Decisions (159)

Footnotes

So in enrolled bill.

M.G.L.A. 131 § 40, MA ST 131 § 40

Current through Chapter 125 of the 2022 2nd Annual Session. Some sections may be more current, see credits for details.

End of Document

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# Massachusetts River and Stream Crossing Standards: Technical Guidelines

## August 6, 2004

## INTRODUCTION

As long and linear ecosystems, rivers and streams are very important for fish and other wildlife movements, but are also particularly vulnerable to fragmentation. In addition to natural barriers, a number of human activities can, to varying degrees, disrupt the continuity of river and stream ecosystems. The most familiar human-caused barriers are dams. However, there is growing concern about the role of river and stream crossings, and especially culverts, in disrupting river and stream continuity (see Appendix A.).

With funding from the Sweetwater Trust, the Massachusetts Watershed Initiative, and the Massachusetts Riverways Program, the University of Massachusetts—Amherst coordinated an effort to create river and stream crossing standards and a volunteer inventory program for culverts and other crossing structures to more effectively identify and address barriers to fish movement and river and stream continuity. Information was compiled about fish and wildlife passage requirements, culvert design standards, and methodologies for evaluating barriers to fish and wildlife passage. This information was used to develop design standards for culverts and other stream crossing structures.

The following standards were developed by the River and Stream Continuity Steering Committee including representatives from UMass-Amherst, MA Riverways Program, Massachusetts Watershed Initiative, Trout Unlimited, The Nature Conservancy, Mass Highway, and the Massachusetts Department of Environmental Protection In developing the standards, the steering committee received advice from a Technical Advisory Committee that included representatives of the US Fish and Wildlife Service, USGS BRD, US EPA, US Army Corps of Engineers, MA Division of Fisheries and Wildlife, American Rivers, Connecticut River Watershed Council, Connecticut DEP, and a hydraulic engineering consultant. The standards are intended to serve as recommended standards for permanent crossings (highways, railways, roads, driveways, bike paths, etc) on fish-bearing streams and rivers, and as guidelines for upgrading existing crossings when possible. These standards seek to achieve, to varying degrees, three goals:

- 1. Fish and other Aquatic Organism Passage: Facilitate movement for most fish and other aquatic organism species, including relatively small, resident fish, aquatic amphibians & reptiles, and large invertebrates (e.g. crayfish, mussels).
- River/stream continuity: Maintain continuity of the aquatic and benthic elements of river and stream ecosystems, generally through maintenance of appropriate substrates, water depths and flows. Maintenance of river and stream continuity is the most practical

strategy for facilitating movement of small, benthic organisms as well as some large, but weak-swimming species such as salamanders and crayfish.

3. Wildlife Passage: Facilitate movement of wildlife species including those primarily associated with river and stream ecosystems and others that may utilize riparian areas as movement corridors. Some species of wildlife such as muskrats and stream salamanders may benefit from river and stream continuity. Other species may require more open structures as well as dry passage along the banks or within the streambed at low flow.

This technical guidance adopts a "Stream Simulation" approach for crossing design in order to better protect river and stream ecosystems. Stream Simulation is a design approach that avoids flow constriction during normal conditions and creates a stream channel that maintains the diversity and complexity of the streambed through the crossing. Crossing structures that avoid channel constriction and maintain appropriate channel conditions within the structure should be able to accommodate most of the normal movements of aquatic organisms, and preserve (or restore) many ecosystem processes that maintain habitats and aquatic animal populations. The goal is to create crossings that present no more of an obstacle to movement than the natural channel and that are essentially "invisible" to aquatic organisms.

These guidelines are for general use to address issues of river and stream continuity, fish passage and wildlife movement. In some cases, site constraints may make strict adherence to the standards impractical or undesirable. For example, in some situations shallow bedrock may make it impractical to embed culverts. In other situations the road layout and surrounding landscape may make it impossible or impractical to achieve the recommended standards for height and openness. Site-specific information and good professional judgment should always be used to develop crossing designs that are both practical and effective.

Here are some important considerations to keep in mind when using these guidelines.

- 1. They are intended for permanent river and stream crossings. They were not intended for temporary crossings such as skid roads and temporary logging roads.
- 2. They are generally intended for fish-bearing streams. These guidelines are not recommended for those portions of intermittent streams that are not used by fish. However, these standards may be useful in areas where fish are not present but where protection of salamanders or other local wildlife species is desired. Further, the standards are not intended for drainage systems designed primarily for the conveyance of storm water or wastewater.
- 3. These technical guidelines have no regulatory standing. They are intended as technical guidelines that can be used to facilitate the preservation or restoration of river continuity and fish and wildlife movement. These guidelines may not be sufficient to address drainage or flood control issues that must also be considered during the permitting of permanent stream crossings.

## STANDARDS FOR NEW CROSSINGS

There are two levels of standards (General and Optimum) to balance the cost and logistics of crossing design with the degree of river/stream continuity warranted in areas of different environmental significance.

### General Standards:

Goal: Fish passage, river/stream continuity, some wildlife passage

## Application

Where permanent stream crossings are planned on fish bearing streams or rivers, they should at least meet general standards to pass most fish species, maintain river/stream continuity, and facilitate passage for some wildlife.

Fish bearing streams or rivers include rivers and streams that support one or more species of fish, including those portions of intermittent streams that are used seasonally by fish. These standards are also warranted where fish are not present, but where protection of salamanders or other local wildlife species is desired.

General standards call for open bottom structures or culverts that span the river/stream channel with natural bottom substrates that generally match upstream and downstream substrates. Stream depth and velocities in the crossing structure during low-flow conditions should approximate those in the natural river/stream channel. An openness ratio of 0.25 will pass some wildlife species but is unlikely to pass all the wildlife that would be accommodated by the optimum standards.

### Standards

· Open bottom arch or bridge span preferred

Site constraints may make the use of these structures impractical and in some cases well-designed culverts may actually perform better than bridges or open bottom arches. However, in areas where site constraints don't limit the usefulness of these structures, bridges and open-bottom arches are preferred over culverts.

• If a culvert, then it should be embedded ≥ 1 foot for box culverts and pipe arches, and at least 25 % for pipe culverts.

In some cases site constraints may limit the degree to which a culvert can be embedded. In these cases pipe culverts should not be used and box culverts, pipe arches, open-bottom arches, or bridges should be considered instead.

Natural bottom substrate within culvert (matching upstream and downstream substrates)

Careful attention must be paid to the composition of the substrate within the culvert. The substrate within the structure should match the composition of the substrate in the natural stream channel at the time of construction and over time as

the structure has had the opportunity to pass significant flood events. This substrate should either resist displacement during flood events or the structure should be designed to maintain an appropriate bottom through natural bed load transport.

• Spans channel width (a minimum of 1.2 times the bankfull width)

A critical feature of stream simulation design is to avoid channel constriction during normal bankfull flows. Spanning an area 1.2 times the bankfull width will help prevent scouring within the structure or at the outlet during less frequent floods.

 Designed to provide water depths and velocities at low flow that are comparable to those found in upstream and downstream natural stream segments

In order to provide water depths and velocities at low flow it is usually necessary to construct a low flow channel within the structure. Otherwise, the width of the structure needed to accommodate higher flows will create conditions that are too shallow at low flows. When constructing the channel special attention should be paid to the sizing and arrangement of materials within the structure. If only large material is used, without smaller material filling the voids, there is a risk that flows could go subsurface within the structure.

Openness ratio ≥ 0.25

Openness ratio is the cross-sectional area of a structure divided by its crossing length when measured in meters. For a box culvert, openness =  $\frac{\text{height } x \text{ width}}{\text{length}}$ 

## **Optimum Standards**

Goal: Fish passage, river/stream continuity, wildlife passage

### Application

Where permanent stream crossings occur or are planned in areas of particular statewide or regional significance for their contribution to land scape level connectedness or river/stream ecosystems that provide important aquatic habitat for rare or endangered species, optimum standards should be applied in order to maintain river/stream continuity and facilitate passage for fish and wildlife.

Areas of particular statewide or regional significant for their contribution to landscape level connectedness include, but are not limited to, rivers/streams and associated riparian areas that serve as corridors or connecting habitat linking areas of significant habitat (>250 acres) in three or more towns. Optimum standards also should be applied to crossings that would adversely impact Biomap and Living Waters "core habitat" or areas providing linkages between "core habitats."

Important aquatic habitat for rare or endangered species includes, but is not limited to, those areas identified by the Natural Heritage and Endangered Species

Program (via the Living Waters project or regulatory review) that are considered important for protecting rare or endangered species.

Where permanent stream crossings occur or are planned in areas of high connectivity value – areas of particular statewide or regional significance for their contribution to landscape level connectedness – crossings should be designed to maintain river/stream continuity and facilitate passage for most fish and wildlife. The best designs for accomplishing this involve open bottom structures or bridges that not only span the river/stream channel, but also span one or both of the banks allowing dry passage for wildlife that move along the watercourse. Where the crossing involves high traffic volumes or physical barriers to wildlife movement, the crossing structure should be sized to pass most wildlife species (minimum height and openness requirements).

### Standards

· Open bottom arch or bridge span

Unless there are compelling reasons why a culvert would provide greater environmental benefits, only bridges or open-bottom arches should be used.

- Span the streambed and banks (allowing dry passage for wildlife ≥ 80% of the year)
  The structure span should be at least 1.2 times the bankfull width and provide banks on one or both sides with sufficient headroom to provide dry passage for semi-aquatic and terrestrial wildlife.
- Maintain a minimum height of 6 ft and openness ratio of 0.75 if conditions are present that significantly inhibit wildlife passage (high traffic volumes, steep embankments, fencing, Jersey barriers or other physical obstructions)

Openness ratio is the cross-sectional area of a structure divided by its crossing length when measured in meters. For a box culvert, openness = (height x width)/length.

Otherwise, maintain a minimum height of 4 ft. and openness ratio of 0.5

# STANDARDS FOR CULVERT REPLACEMENT

Given the number of culverts and other crossing structures that have been installed without consideration for ecosystem protection, it is important to assess what impact these crossings are having and what opportunities exist for mitigating those and future impacts. Culvert replacement or remediation are critical elements for the long-term protection of river and stream ecosystems.

Methods have been developed, and are continuing to be refined and adapted, for evaluating culverts and other crossing structures for their impacts on animal passage and other ecosystem

processes. Along with these assessments there needs to be a process for prioritizing problem crossings for remediation. The process should take into account habitat quality in the river or stream and surrounding areas, upstream and downstream conditions, as well as the number of other crossings, discontinuities (channelized or piped sections), and barriers affecting the system. It is important to use a watershed-based approach to river and stream restoration in order to maximize positive outcomes and avoid unintended consequences.

Culvert upgrading requires careful planning and is not simply the replacement of a culvert with a larger structure. Even as undersized culverts block the movement of organisms and material, over time, rivers and streams adjust to the hydraulic and hydrological changes caused by these structures. Increasing the size of a crossing structure can cause head cutting – the progressive down-cutting of the stream channel – upstream of the crossing. Crossing replacement can result in the loss or degradation of wetlands that formed above the culvert as a consequence of constricted flow. In more developed watersheds, undersized culverts may play an important role in regulating storm flows and preventing flooding.

Before replacing a culvert or other crossing structure with a larger structure it is essential that replacement be evaluated for its impacts on:

- downstream flooding,
- upstream and downstream habitat (instream habitat, wetlands),
- · potential for erosion and headcutting, and
- stream stability.

In most cases it will be necessary to conduct engineering analyses including longitudinal profiles of sufficient length to understand potential changes in channel characteristics. The replacement crossing will need to be carefully designed in order to maximize the benefits and minimize the potential for negative consequences resulting from the upgrade. In most cases these replacements will need to be reviewed and permitted by the local conservation commission.

### Standards

- Whenever possible replacement culverts should meet the design guidelines for either general standards or optimal standards (see Standards for New Crossings above).
- If it is not possible or practical to meet all of the general or optimal standards, replacement crossings should be designed to at least meet general standards to the extent practical and to avoid or mitigate the following problems.
  - → Orifice flows
  - → Inlet drops
  - → Outlet drops
  - → Flow contraction that produces significant turbulence
  - → Tailwater armoring
  - → Tailwater scour pools
  - -> Physical barriers to fish passage

## CONCLUSION

Given the large number of species that make up river and stream communities and the almost complete lack of information about swimming abilities and passage requirements for most organisms, it is impractical to use a species-based approach for designing road crossings to address the movement needs of aquatic organisms. A Stream Simulation approach is the most practical way to maintain viable populations of organisms that make up aquatic communities and maintain the fundamental integrity of river and stream ecosystems. Stream Simulation is an ecosystem-based approach that focuses on maintaining the variety and quality of habitats, the connectivity of river and stream ecosystems, and the essential ecological processes that shape and maintain these ecosystems over time.

Road networks and river systems share several things in common. Both are long, linear features of the landscape. Transporting materials (and organisms) is fundamental to how they function. Connectivity is key to the continued functioning of both systems. Ultimately, our goal should be to create a transportation infrastructure that does not fragment or undermine the essential ecological infrastructure of the land and its waterways.

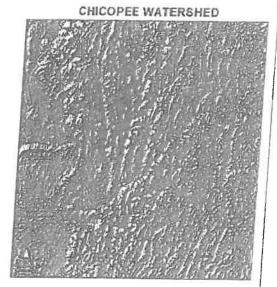
## GLOSSARY

- → Bankfull Width Bankfull is amount of water that just fills the stream channel and where additional water would result in a rapid widening of the stream or overflow into the floodplain. Indicators of Bankfull width include:
  - Abrupt transition from bank to floodplain. The change from a vertical bank to a horizontal surface is the best identifier of the floodplain and Bankfull stage, especially in low-gradient meandering streams.
  - Top of pointbars. The pointbar consists of channel material deposited on the inside of meander bends. Set the top elevation of pointbars as the lowest possible Bankfull stage.
  - Bank undercuts. Maximum heights of bank undercuts are useful indicators in steep channels lacking floodplains.
  - Changes in bank material Changes in soil particle size may indicate the operation of different processes. Changes in slope may also be associated with a change in particle size.
- Change in vegetation Look for the low limit of perennial vegetation on the bank, or a sharp break in the density or type of vegetation.
- → Culvert Round, elliptical or rectangular structures that are fully enclosed (contain a bottom) designed primarily for channeling water beneath a road, railroad or highway.
- → Embedded Culvert A culvert that is installed in such a way that the bottom of the structure is below the stream bed and there is substrate in the culvert.

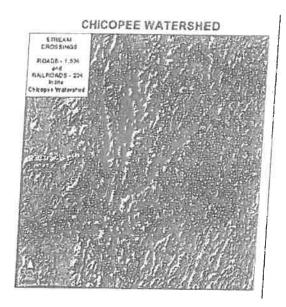
- → Flow contraction When culvert is significantly smaller then stream width the converging flows creates a condition called "flow contraction." The increased velocities and turbulence associated with flow contraction can block fish and wildlife passage.
- → Inlet drop Where water level drops suddenly at an inlet, causing changes in water speed and turbulence. In addition to the higher velocities and turbulence, these jumps can be physical barriers to fish and other aquatic animals when they are swimming upstream and are unable to swim out of the culvert.
- → Open Bottom Arch Arched crossing structures that span all or part of the stream bed, typically constructed on buried footings and without a bottom.
- → Openness ratio Equals cross-sectional area of the structure divided by crossing length when measured in meters. For a box culvert, openness = (height x width)/ length.
- → Orifice flows Flows that fill or nearly fill the entire culvert. These become problematic because there is no space within the culvert for wildlife passage and flows are typically too fast for the passage of fish and other aquatic animals.
- → Outlet drop An outlet drop occurs when water drops off or cascades down from the outlet, usually into a receiving pool. This may be due to the original culvert placement or erosion of material at the downstream end of culvert. Outlet drops are barriers to fish and other aquatic animals that can't jump to get up into the culvert.
- → Physical barriers to fish and wildlife passage Any structure that physically blocks fish or wildlife movement as well as structures that would cause a culvert to become blocked. Beaver dams, debris jams, fences, sediment filling culvert, weirs, baffles, aprons, and gabions are examples of structures that might be or cause physical barriers. Weirs are short dams or fences in the stream that constrict water flow or fish movements. Baffles are structures within culverts that direct, constrict, or slow down water flow. Gabions are rectangular wire mesh baskets filled with rock that are used as retaining walls and erosion control structures.
- → Pipe Arch A pipe that has been factory deformed from a circular shape such that the width (or span) is larger that the vertical dimension (or rise), and forms a continuous circumference pipe that is not bottomless.
- → Tailwater armoring Concrete aprons, plastic aprons, riprap or other structures added to culvert outlets to facilitate flow and prevent erosion.
- → Tailwater scour pool A pool created downstream from high flows exiting the culvert. The pool is wider than the stream channel and banks are eroded.

## Appendix A.

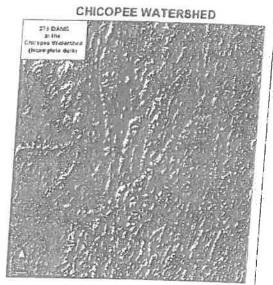
# The Geographic Scope of River & Stream Fragmentation in Massachusetts (Courtesy of the Massachusetts Riverways Program)



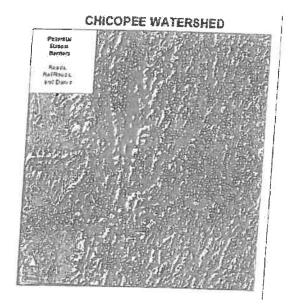
The 721 sq. mi. Chicopee River Watershed is a relatively rural watershed in Central Massachusetts.



The intersection of the stream network with roads and railroads results in an estimated 2,160 crossings.



A legacy of early American small-scale industrialization, there are at least 279 dams on the tributaries and mainstem of the Chicopee River.



The combination of crossings and dams raises serious concerns about the fragmentation of river and stream ecosystems in the Chicopee River watershed.

## **Town Owned Roads**

Updated 12/10/19

### Α

Albatross Circle Alden Circle Alden Lane Alewife Road Algonquin Avenue (north of Rte 151) Amanda Way Anthony's Way Aries Lane Asa Meigs Road (aka Wakeby Rd) Asher's Path (East) Ashumet Avenue Ashumet Road (off Rte130) Attaquin Street Autumn Drive

### B

**Back Road** Barnacle Lane Bass Cove Circle **Bayberry Drive** Bayshore Drive Bayview Road Bearberry Circle Beechwood Lane Birch Way Blair Circle Bog River Bend Bowdoin Road **Brewster Road** Briar Patch Lane Brookside Circle Burning Bush Road Butler Lane

C

Cape Drive
Carleton Drive
Cayuga Avenue
Chatham Lane
Chicory Circle
Claulise Lane
Clipper Street
Collins Lane
Compass Drive

Commercial Street (Mercantile Rd to South Cape Village) Cotuit Road Cranberry Avenue Cranberry Lane Cranberry Ridge Road Cransbourne Circle Crestview Circle

D

Davit Road
Deer Ridge Road
Deerfield Road
Deerfoot Circle
Degrass Road
Dennis Road
Donna's Lane
Dove Lane
Dover Road
Drew Lane
Driftwood Way

E

Echo Road
Edgewater Road
Elm Lane
Emma Oakley Mills Road
Equestrian Ave.
Essex Road

F

Falmouth Sandwich Rd.
Fawn Road
Fern Gully Pass
Fir Court
Florence Avenue
Forest Drive
Forestdale Road (aka Rte
130)
Fox Hill Road (from Sandy
Fox Rd to #29)

G

Gemini Rd Grant Breen Drive Grassy Knoll Circle Great Hay Road (between Degrass & Red Brook Rd.) Great Neck Road North Great Neck Road South Great Oak Road Great Pines Drive Green Meadow Circle Gunters Lane

Н

Half Hitch Lane Hanson Drive Harbor Ridge Drive Harwich Road Hemlock Drive Heron Circle High Sachem Road Highland Street Highview Ave. Hillside Ave. Hilltop Road Hogan Drive Holly Way Hooppole Road Hornbeam Lane Horseshoe Bend Way

.

Jackbon Road James Circle Jeanne Ave, Jonas Drive Jones Road Juniper Drive

K

Katian Way Kings Court

L

Lake Ave.
Lakewood Drive
Lantern Lane
Leather Leaf Lane
Leeshore Drive
Leeward Lane
Libra Lane
Lighthouse Lane

Linden Road Lovell's Lane Lowell Road Lyn Court

M

Magnolia Lane
Maple Street
Mashpee Neck Road
Matchewuttah Road
Mayflower Road
Meadowbrook Road
Meetinghouse Road
Melissa Avenue (to Ned
Besse Rd)
Michelle Lane
Miller Circle
Miller Farm Road
Monomoscoy Road

### N

Nancy Lane
Nelson Circle
Ninigret Ave.
Nobska Road
Noisy Hole Road (between
Burning Bush Rd Wilann Rd)

### 0

Ockway Bay Road
Old Barnstable Road
Old Brickyard Road
Old Colony Drive
Old Mill Road (aka
Sampson's Mill Road)
Orchard Road
Oregon Road
Owl Lane
Oxfordshire Place

P

Palmer Road
Papnomet Road
Park Place Way
Pequot Court
Pequot Road
Pickerel Cove Circle
Pickerel Cove Road

Pierre Vernier Drive Pimlico Pond Road Pinecrest Avenue Player Circle Pleasant Park Drive Pocknomet Street Polaris Drive Pond Circle Poplar Drive Porthole Drive Preakness Lane

### O

Quail Hollow Road Quaker Run Road Quashnet Road Quashnet Woods Drive Quinaquisset Avenue

### R

Rachelle Court
Radcliffe Road
Red Brook Road
Redwood Circle
Regatta Drive
River Road
Riverside Road
Robin Lane
Route 130 (Main Street)
Route 151 (Nathan Ellis
Highway)

## S

Saddleback Road Sampson's Mill Road Sandy Fox Way Sandy Way Santuit Pond Road Saxony Drive Scenic Drive Scituate Road Seconsett Island Road Sewall Drive Sextant Circle Shadbush Circle Sheffield Place Shields Road Ship's Anchor Drive Ship's Lantern Drive

Ship's Rudder Drive
Ship's Wheel Drive
Shipwreck Drive
Shorewood Drive
Simon's Narrows Road
Snead Drive
South Sandwich Road
Spinnaker Drive
Starboard Drive
Strawberry Avenue
Strawberry Avenue
Sturgis Lane
Sunset Circle
Sunset Strip
Surf Drive
Swain Circle

### Т

Taurus Drive
Tern Circle
Terry Avenue
Timberlane Drive
Tobisset Street
Topsail Road
Tracy Lane
Tradewind Drive
Tricia Lane
Trout Brook Drive
Truro Road
Tudor Terrace

### V

Valerie Circle Valley Road Victoria Circle Vista Circle

### W

Wakeby Road (aka Asa Meigs Rd) Wheeler Road (paved portion only) Wilann Road Windermere Way Windsor Way Wintergreen Road Wood Haul Road Woodland Avenue Y
Yachtsman Circle
Yardarm Drive
Yellow Perch Circle

Massachusetts General Laws Annotated

Part I. Administration of the Government (Ch. 1-182)

Title XIV. Public Ways and Works (Ch. 81-92b)

Chapter 82. The Laying Out, Alteration, Relocation and Discontinuance of Public Ways, and Specific Repairs Thereon (Refs & Annos)

### M.G.L.A. 82 § 21

## § 21. Authority to lay out ways

### Currentness

The selectmen or road commissioners of a town or city council of a city may lay out, relocate or alter town ways, for the use of the town or city, and private ways for the use of one or more of the inhabitants thereof; or they may order specific repairs to be made upon such ways; and a town, at a meeting, or the city council of a city, may discontinue a town way or a private way.

Notes of Decisions (96)

M.G.L.A. 82 § 21, MA ST 82 § 21

Current through Chapter 125 of the 2022 2nd Annual Session. Some sections may be more current, see credits for details.

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Massachusetts General Laws Annotated

Part III. Courts, Judicial Officers and Proceedings in Civil Cases (Ch. 211-262)

Title IV. Certain Writs and Proceedings in Special Cases (Ch. 246-258e)

Chapter 258. Claims and Indemnity Procedure for the Commonwealth, Its Municipalities, Counties and Districts and the Officers and Employees Thereof (Refs & Annos)

### M.G.L.A. 258 § 2

§ 2. Liability; exclusiveness of remedy; cooperation of public employee; subsequent actions; representation by public attorney

Effective: June 30, 2009

Public employers shall be liable for injury or loss of property or personal injury or death caused by the negligent or wrongful act or omission of any public employee while acting within the scope of his office or employment, in the same manner and to the same extent as a private individual under like circumstances, except that public employers shall not be liable to levy of execution on any real and personal property to satisfy judgment, and shall not be liable for interest prior to judgment or for punitive damages or for any amount in excess of \$100,000; provided, however, that all claims for serious bodily injury against the Massachusetts Bay Transportation Authority shall not be subject to a \$100,000 limitation on compensatory damages. The remedies provided by this chapter shall be exclusive of any other civil action or proceeding by reason of the same subject matter against the public employer or, the public employee or his estate whose negligent or wrongful act or omission gave rise to such claim, and no such public employee or the estate of such public employee shall be liable for any injury or loss of property or personal injury or death caused by his negligent or wrongful act or omission while acting within the scope of his office or employment; provided, however, that a public employee shall provide reasonable cooperation to the public employer in the defense of any action brought under this chapter. Failure to provide such reasonable cooperation on the part of a public employee shall cause the public employee to be jointly liable with the public employer, to the extent that the failure to provide reasonable cooperation prejudiced the defense of the action. Information obtained from the public employee in providing such reasonable cooperation may not be used as evidence in any disciplinary action against the employee. Final judgment in an action brought against a public employer under this chapter shall constitute a complete bar to any action by a party to such judgment against such public employer or public employee by reason of the same subject matter.

Notwithstanding that a public employee shall not be liable for negligent or wrongful acts as described in the preceding paragraph, if a cause of action is improperly commenced against a public employee of the commonwealth alleging injury or loss of property or personal injury or death as the result of the negligent or wrongful act or omission of such employee, said employee may request representation by the public attorney of the commonwealth. The public attorney shall defend the public employee with respect to the cause of action at no cost to the public employee; provided, however, that the public attorney determines that the public employee was acting within the scope of his office or employment at the time of the alleged loss, injury, or death, and, further, that said public employee provides reasonable cooperation to the public employer and public attorney in the defense of any action arising out of the same subject matter. If, in the opinion of the public attorney, representation of the public employee, under this paragraph would result in a conflict of interest, the public attorney shall not be required to represent the public employee. Under said circumstances, the commonwealth shall reimburse the public employee for reasonable attorney fees incurred by the public employee in his defense of the cause of action; provided, however, that the same conditions exist which are required for representation of said employee by the public attorney under this paragraph.

### Credits

Added by St.1978, c. 512, § 15. Amended by St.1984, c. 279, § 1; St.2009, c. 120, § 23, eff. June 30, 2009.

Notes of Decisions (256)

M.G.L.A. 258 § 2, MA ST 258 § 2

Current through Chapter 125 of the 2022 2nd Annual Session. Some sections may be more current, see credits for details.

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KeyCite Yellow Flag - Negative Treatment

Unconstitutional or PreemptedPrior Version Limited on Constitutional Grounds by Campbell v. Boston Housing Authority, Mass., Mar. 04, 2005

KcyCite Yellow Flag - Negative TreatmentProposed Legislation

### Massachusetts General Laws Annotated

Part III. Courts, Judicial Officers and Proceedings in Civil Cases (Ch. 211-262)

Title IV. Certain Writs and Proceedings in Special Cases (Ch. 246-258e)

Chapter 258. Claims and Indemnity Procedure for the Commonwealth, Its Municipalities, Counties and Districts and the Officers and Employees Thereof (Refs & Annos)

### M.G.L.A. 258 § 10

## § 10. Application of Secs. I to 8

#### Currentness

The provisions of sections one to eight, inclusive, shall not apply to:-

- (a) any claim based upon an act or omission of a public employee when such employee is exercising due care in the execution of any statute or any regulation of a public employer, or any municipal ordinance or by-law, whether or not such statute, regulation, ordinance or by-law is valid;
- (b) any claim based upon the exercise or performance or the failure to exercise or perform a discretionary function or duty on the part of a public employer or public employee, acting within the scope of his office or employment, whether or not the discretion involved is abused;
- (c) any claim arising out of an intentional tort, including assault, battery, false imprisonment, false arrest, intentional mental distress, malicious prosecution, malicious abuse of process, libel, slander, misrepresentation, deceit, invasion of privacy, interference with advantageous relations or interference with contractual relations;
- (d) any claim arising in respect of the assessment or collection of any tax, or the lawful detention of any goods or merchandise by any law enforcement officer;
- (e) any claim based upon the issuance, denial, suspension or revocation or failure or refusal to issue, deny, suspend or revoke any permit, license, certificate, approval, order or similar authorization;
- (f) any claim based upon the failure to inspect, or an inadequate or negligent inspection, of any property, real or personal, to determine whether the property complies with or violates any law, regulation, ordinance or code, or contains a hazard to health or safety, except as otherwise provided in clause (1) of subparagraph (j).
- (g) any claim based upon the failure to establish a fire department or a particular fire protection service, or if fire protection service is provided, for failure to prevent, suppress or contain a fire, or for any acts or omissions in the suppression or containment

of a fire, but not including claims based upon the negligent operation of motor vehicles or as otherwise provided in clause (1) of subparagraph (j).

- (h) any claim based upon the failure to establish a police department or a particular police protection service, or if police protection is provided, for failure to provide adequate police protection, prevent the commission of crimes, investigate, detect or solve crimes, identify or apprehend criminals or suspects, arrest or detain suspects, or enforce any law, but not including claims based upon the negligent operation of motor vehicles, negligent protection, supervision or care of persons in custody, or as otherwise provided in clause (1) of subparagraph (j).
- (i) an claim based upon the release, parole, furlough or escape of any person, including but not limited to a prisoner, inmate, detainee, juvenile, patient or client, from the custody of a public employee or employer or their agents, unless gross negligence is shown in allowing such release, parole, furlough or escape.
- (j) any claim based on an act or failure to act to prevent or diminish the harmful consequences of a condition or situation, including the violent or tortious conduct of a third person, which is not originally caused by the public employer or any other person acting on behalf of the public employer. This exclusion shall not apply to:
- (1) any claim based upon explicit and specific assurances of safety or assistance, beyond general representations that investigation or assistance will be or has been undertaken, made to the direct victim or a member of his family or household by a public employee, provided that the injury resulted in part from reliance on those assurances. A permit, certificate or report of findings of an investigation or inspection shall not constitute such assurances of safety or assistance; and
- (2) any claim based upon the intervention of a public employee which causes injury to the victim or places the victim in a worse position than he was in before the intervention; and
- (3) any claim based on negligent maintenance of public property; (4) any claim by or on behalf of a patient for negligent medical or other therapeutic treatment received by the patient from a public employee.

Nothing in this section shall be construed to modify or repeal the applicability of any existing statute that limits, controls or affects the liability of public employers or entities.

### Credits

Added by St.1978, c. 512, § 15. Amended by St.1993, c. 495, § 57.

Notes of Decisions (415)

### Footnotes

I So in enrolled bill; probably should read "any claim".

## M.G.L.A. 258 § 10, MA ST 258 § 10

Current through Chapter 125 of the 2022 2nd Annual Session. Some sections may be more current, see credits for details.