

Town of Weymouth
Massachusetts

Robert L. Hedlund
Mayor

75 Middle Street
Weymouth, MA 02189



RECEIVED
TOWN OF WEYMOUTH
TOWN CLERK'S OFFICE
Office: 781.340.5012
Fax: 781.335.8184
2018 JUL 13 AM 10:18
TTY: 781.331.5124

MEMORANDUM

18 111

TO: TOWN COUNCIL
FROM: ROBERT L. HEDLUND, MAYOR
RE: CPC-STUDY FOR SMELT BROOK AT WEYMOUTH LANDING
DATE: JULY 11, 2018

I hereby submit the following measure for consideration by Town Council:

“That the Town of Weymouth appropriate \$65,500 for the Weymouth-Braintree Regional Recreation Conservation District Commission (WBRRCDC) to be the sponsor for the Army Corps of Engineers to perform a feasibility study to restore the Smelt Brook upstream of Weymouth Landing as follows: \$218.95 from the Community Preservation fund balance reserve for open space (4906-321004) and \$65,281.05 from the Community Preservation unreserved fund balance (4906-321001) contingent upon the WBRRCDC obtaining a written commitment from the Army Corps of Engineers to fund 75% of actual construction costs and the Town of Braintree’s CPC’s commitment to funding their share of the feasibility study.”

At the time this measure was submitted, the CPA fund balance reserve for open space (4906-321004) was \$218.95 and CPA unreserved fund balance (4906-321001) was \$534,140.85.

This notice requires a legal notice and public hearing.

Referral Dte. _____ PH Dte. _____
Comm. Referral _____ TC Vote _____
Comm. Vote _____ TC Vote Dte. _____
Comm. Vote Dte. _____

Weymouth
Town Council

2018 JUL 13 AM 10:30

RECEIVED

Department of Planning and
Community Development

Robert J. Luongo
Director of Planning and
Community Development
email: rluongo@weymouth.ma.us
(781) 340-5015

*Town of Weymouth
Massachusetts*



Robert L. Hedlund
Mayor

75 Middle Street
Weymouth, MA 02189

www.weymouth.ma.us


MEMORANDUM

TO: Robert Hedlund, Mayor

FROM: Robert Luongo Director of Planning & Community Development

DATE: June 8, 2018

SUBJECT: **Weymouth-Braintree Regional Recreation Conservation District Commission
Funding Request - CPC**



At the June 7, 2018, meeting of the Community Preservation Committee, the committee reviewed and discussed the application put forward by the Weymouth-Braintree Regional Recreation Conservation District Commission (WBRRCDC). The WBRRCDC is the sponsor of this request as the Commission oversees the land interests of Pond Meadow Park, located in Weymouth and Braintree. Sean Cleaves, Forest and Park Supervisor and Mike Richardi, Commissioner (WBRRCDC), presented the request in the amount of \$65,500.00. The District is requesting funding for the Army Corps of Engineers to provide the Towns of Weymouth and Braintree as well as the WBRRCDC with a feasibility study to restore the Smelt Brook located between a fish gate upstream of Weymouth Landing (proximity of Brookside Road) and the dam at Pond Meadow Park. The Army Corps of Engineers estimates the value of the feasibility study to be \$297,000.00. The District is requesting funds in the amount of \$65,500.00 from Weymouth's CPC and \$65,500.00 from Braintree's CPC in order to match the Army Corps share of \$166,000.00.

After review and discussion, the following motion was approved unanimously;

Motion to appropriate and fund \$65,500.00, for the WBRRCDC to be the sponsor for the Army Corps of Engineers to perform a feasibility study to restore the Smelt Brook upstream of Weymouth Landing as follows; \$218.95 from the fund balance reserved for open space 4906-321004 and \$65,281.05 from the unreserved fund balance 4906-321001.

Additionally, the motion included that this appropriation be contingent on the Weymouth-Braintree Regional Recreation Conservation District Commission obtaining a commitment in writing from the Army Corps of Engineers' promise to fund 75% of the actual construction costs with the Town's sharing the remaining 25% at 12.5% each. The appropriation is also contingent on Braintree's CPC's commitment to funding the feasibility study as well.

The Community Preservation Committee appreciates your review and action on this recommendation.

ATTACHED: Application

CC: Brian Connolly, CFO
Christopher Hannan, Chairman, CPC
Dan Condon, Vice Chairman, CPC
Braintree CPC – Christine Stickney

WEYMOUTH
Community Preservation Committee
Application for Funding

Name Mike Richardi for WBRRCD
Phone 781 331 7113 (WBRRCD 781 843 7663)
Email Michael.D.Richardi@GMAIL.com

Date May 23, 2018

(Address 1) 683 Summer St., Weymouth, MA 02188
(Address 2) Sean Cleaves, Supervising Ranger / Robert McConnell, Chairman
Weymouth-Braintree Regional Recreation-Conservation District, 470 Liberty St.,
Braintree, MA. 02184

Affiliation (if applicable) The Weymouth-Braintree Regional Recreation-Conservation District is also known as Pond Meadow Park. We are working with the town of Braintree and the Army Corps of engineers.

Project Name: Section 1135 grant match
Amount: \$65,500 from Weymouth, \$65,500 from Braintree

Purpose
(please select all that apply)

- Historic Preservation
 Open Space & Recreation
 Housing
 Although historic considerations may apply

Description

Please provide a written narrative with detailed data; including cost estimates, schedule, budget, maintenance plan, if any and implementation strategy. Include other funding sources and the amounts of funding. Attach separate sheets as needed.

Please see attached Project Management Plan (PMP) written by the Army Corps of Engineers.

On behalf of the Board of Commissioners of the Weymouth-Braintree Regional Recreation-Conservation District (WBRRCD), I would like to express the Board's interest in pursuing the planning phase of the Army Corps' Section 1135 project to restore Smelt Brook between the fish gate just upstream of the Weymouth Landing area to the dam at Pond Meadow Park.

The Corps' most recent scope of work for the Section 1135 project is attached. This Project Management Plan (PMP) estimates total project cost at \$297,000 which would be split 50/50 between the Corps and the District. If you recall, both towns would need to contribute equally, thus entailing a maximum cost of \$74,250 per town. The non-federal cost is now figured about \$131,000, which reduces each town's share to \$65,500, which includes funds for contingencies.

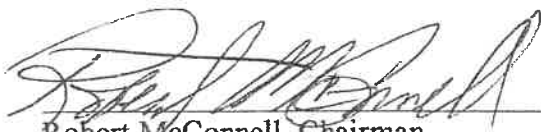
In terms of whittling down the expectations and refining the requirements for planning, this latest PMP seems justifiable, particularly in light of similar work being done in the area. This has been a long time

coming, and at this point \$65,500 from each town will complete the commitment and get us through the Feasibility Study.

The Feasibility Study produces detailed conceptual plans and cost estimates. In construction, there is a 75% federal contribution and 25% local. It can be in-kind. It's also possible there could be planning funds left over that will be rolled up to construction, if we all decide to construct. Some permitting will be required by the towns, but the Corps believes its prep work in the feasibility phase should provide most of the documentation/wording for the permits the towns need to apply for.

When construction is completed through the 1135 ecological restoration grant process we will quite possibly increase the water capacity of the stream. At the same time we will improve production in the aquatic habitat that will hopefully contribute to improvements in the Fore River. With these improvements, the daylighting project will also benefit with an aesthetically pleasing active stream that encourages fish in a healthy habitat. A park in this section of town provides a specific geographical location to tie 'today' to the colonial influx from Boston and to stories in Braintree's and Weymouth's originating tales.

Thank you for your consideration, for the Weymouth-Braintree Regional Recreation-Conservation District,



Robert McConnell, Chairman

Weymouth-Braintree Regional Recreation-Conservation District
470 Liberty Street
Braintree, MA 02184

Describe how this this project helps to preserve Weymouth's character. Please provide a written narrative including the goals of the project, who benefits, and how the project relates to planning documents such as the Town's Master Plan. Describe the nature of support and outreach for the project. Attach separate sheets as needed.

The vision is to restore the former picnic area beside the babbling brook. To restore the place where the youngest of us can learn to drop a line into a quiet stream to learn to fish – or about them. To provide a little public suburban tranquility – the character of the community's public space I was fortunate to experience, to our newest neighbors living in the latest urbanized housing.

The Section 1135 restoration grant will restore access to spawning habitat for fish (largely Smelt). For people it will enhance the connection of the stream from the daylighted portion of the Brook downstream in the Landing. It will also increase the capacity of Smelt Brook's channel before flooding. As a historical landmark, the stream represented the border between Braintree and Weymouth. In the earliest days of the two towns, there was reluctance on the part of the Braintree's council to 'walk the line' with Weymouth's council documented in town meeting notes. This is one of those places in town where the connection to those founding days can seem palpable.

Brookside Ave, the town's border in the Landing, connects to paths on the Braintree side of Weymouth Landing, and will connect to other potential walking trails off the F.L. Wright Connector through the area to be daylighted. Both mayors and conservation commissions have voiced support for pursuing the

concept of approaching the Army Corps of Engineers (ACOE) for a section 1135 environmental restoration grant. Now that various levels of the ACOE have approved the reasonability of the restoration project, the requested \$65,500 will leverage the \$100,000 (\$55,000 already spent) ACOE has put up for it.

Informal abutter notification and a social media campaign are being planned now.

The rangers from the District currently do maintenance there now. Completion of this project will eliminate some maintenance tasks that neither town has addressed and could alone account for a portion of \$65,500 we seek.

Applicants are encouraged to be creative and consider projects that will benefit the community; including, but not limited to; projects which may not receive typical funding from traditional sources.

Submit to:
Community Preservation Committee
c/o Dept. of Planning & Community Development
75 Middle Street, Weymouth, MA 02189

PROJECT MANAGEMENT PLAN

**SMELT BROOK FISH PASSAGE RESTORATION
PROJECT MODIFICATIONS TO IMPROVE THE ENVIRONMENT
WEYMOUTH, MASSACHUSETTS
SECTION 1135**

Feasibility Phase



Last Update August 28, 2017

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I. INTRODUCTION

The purpose of the Smelt Brook Section 1135 Feasibility Study is to investigate the impact that the Smelt Brook Local Protection Project (LPP) has had on anadromous fish passage within the Fore River watershed, as well as develop and evaluate alternatives for mitigating those impacts. The Smelt Brook LPP, which includes a small dam (Pond Meadow Park Dam), perched culvert and drop conduit within lower reaches of Smelt Brook created physical barriers to migratory fish; in particular, rainbow smelt (*Osmerus mordax*). Rainbow smelt are a Federally listed Species of Concern due to their declining population, and the Fore River Watershed is part of a Federal/State collaborative effort to restore rainbow smelt spawning habitat within New England region. Consequently, the Massachusetts Department of Marine Fisheries has expressed their support of the Corps improving fish passage within the project area.

The study will seek to identify a cost effective means of improving fish passage between the dam at Pond Meadow Park and the fish gate located just upstream of the Weymouth landing area. The study will focus on quantifying the existing impairments, identifying measures that would likely improve those conditions, and evaluating measures on the basis of functionality, constructability, impacts to environmental and cultural resources, real estate requirements and cost. The findings of the study and any recommendations for implementation will be documented in the form of a final Detailed Project Report/Environmental Assessment (DPR/EA).

The project is currently in the beginning stages of the feasibility assessment. The purpose of this Project Management Plan (PMP) is to define the scope, schedule and budget for the evaluation of alternatives based on the information we have to date. All continuing authority projects operate under Continuing Authorities Programmatic Project Management Plan available at <\\Nae-fs3im-46662\cenaeshared\Planning Project Information\Continuing Authorities Program>. This PMP presents information specific to this project (alternatives, data needs, etc) and will change with project progress and will be updated as needed. The Project Manager will hold project team meetings to ensure that project changes are communicated to each team member on a timely basis. It is the responsibility of each team member to read and understand this PMP and inform the project manager when changes to scope, schedule or budget are required.

II. PROJECT INFORMATION

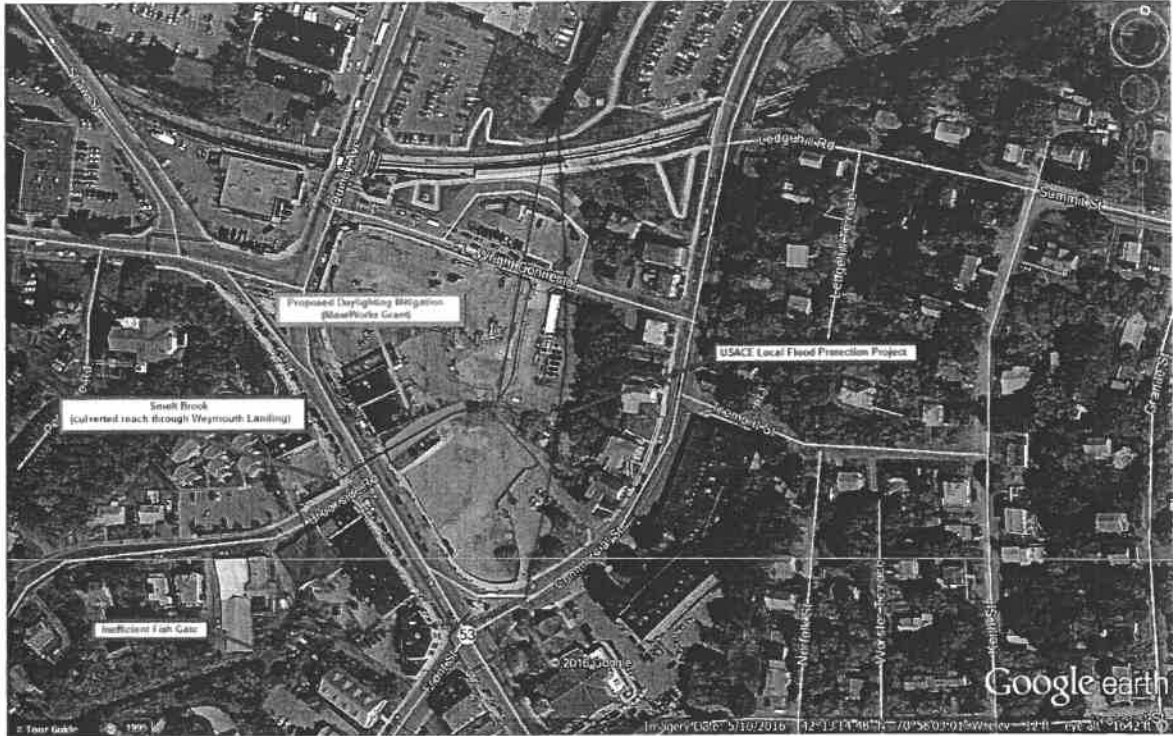
Project Manager: Michael Riccio
Project Authority: Continuing Authority Program (CAP) Section 1135;
Project Modifications to Improve the Environment
Project Phase: Feasibility

Project Description:

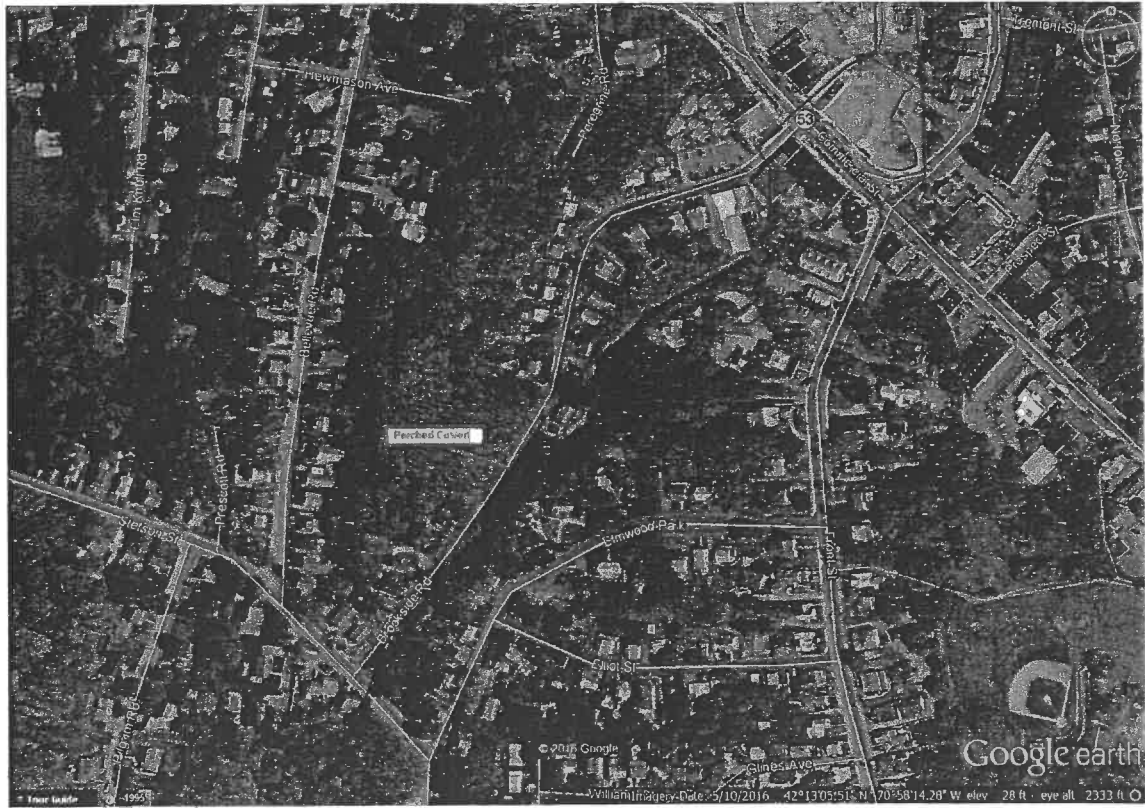
Section 1135 authorizes to modify existing Corps projects to restore the environment and construct new projects to restore areas impacted by Corps projects. A project is accepted for construction after a detailed investigation shows that it is technically feasible, environmentally acceptable, and provides cost effective environmental benefits. The target degree of improvement to the system is restoration of unobstructed fish passage within the Smelt Brook downstream of the dam at Pond Meadow Park.

In 1974 an LPP was constructed within Smelt Brook that included channel modifications, installation of culverts and a small dam at Pond Meadow Park. Those modifications created impasses for migratory fish such as rainbow smelt (*Osmerus mordax*), which historical used the stream intensively prior to human intervention. There appear to be opportunities to restore fish habitat while still allowing for the LPP to function as a 100 year flood protection project and the feasibility study will seek to identify which of those opportunities can ultimately be recommended for future implementation. Modifications to a small fish gate, improved maintenance of the stream channel and removal/modification of a perched culvert are some of the potential measures to be considered and evaluated in this study. Improvements to the dam at Pond Meadow Park were initially considered but those modifications are expected to be complex and expensive, and through discussions with the DMF they are not expected to significantly improve fish habitat.

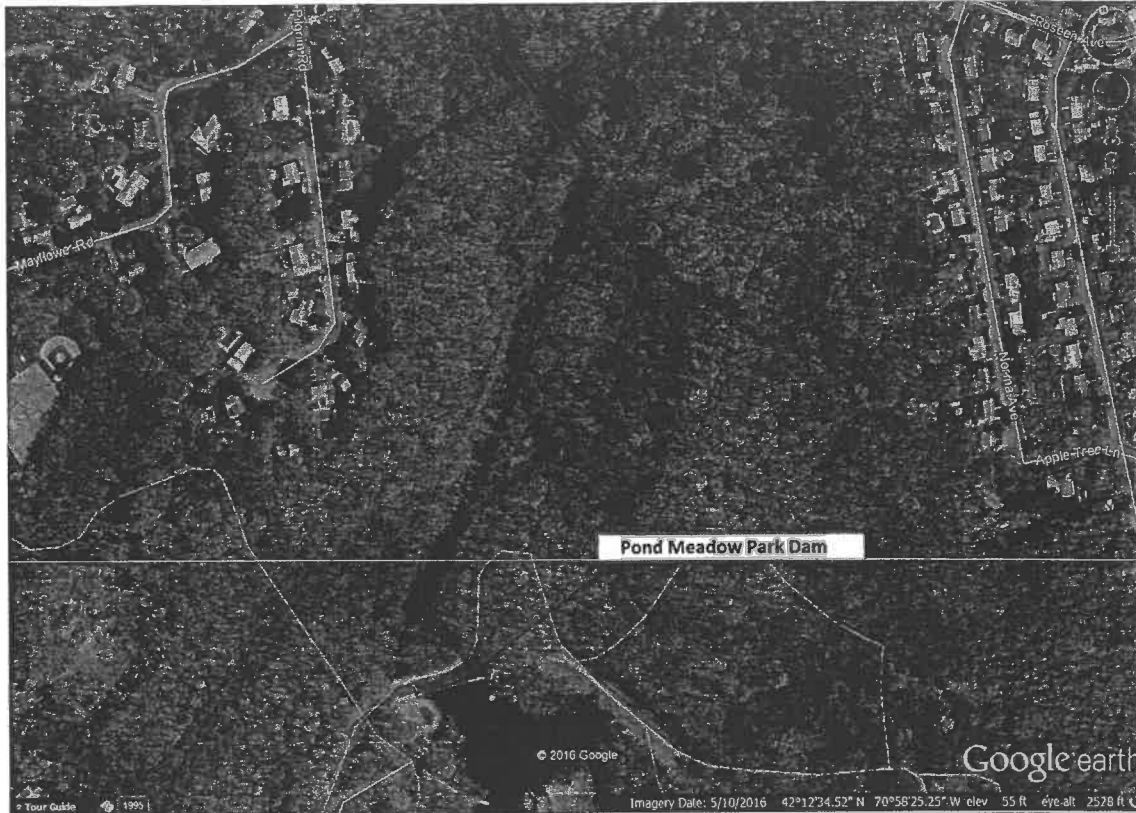
In addition to the physical barriers created by the LPP, development downstream of the project limit in the Weymouth Landing area have also likely contributed to the degradation of fish habitat within Smelt Brook. Commercial and residential development of the Weymouth Landing area resulted in the culverting of approximately 1,000 feet of previously natural stream, which in conjunction with the LPP, has likely resulted in a less desirable migratory route for smelt, as compared to the neighboring Monatiquot River. It should be noted that approximately 150' of the culverted reach through Weymouth Landing is expected to be daylighted by the Town of Weymouth as part of a mitigation requirement associated with the construction of the East Braintree/Weymouth Landing MBTA station. That project is currently in design and being funded through a MassWorks Grant. The Corps is not at all associated with that effort but that project is intended to restore some of the natural stream function downstream of the study area, and should be considered when defining the future without-project conditions.



Weymouth Landing/Downstream Limit of Study Area



Perched Culvert



Upstream Limit of Study Area/Pond Meadow Park Dam

Expectations of the Study Sponsor:

The sponsor for this project is the Weymouth Braintree Regional Recreation Conservation District (WBRRCD). The WBRRCD expects an evaluation of several alternative plans and is expecting an accurate assessment of existing and potential future conditions, cost estimates, feasibility level designs and a timely and cost effective completion of the feasibility phase.

Project Assumptions:

- The study assumes that the physical barriers created by the LPP have significantly impaired fish habitat within Smelt Brook. Accordingly, it is assumed that the Corps has the authority to improve upon those existing degraded conditions under Section 1135 of the Continuing Authorities Program.
- It is assumed that the mitigation being conducted downstream of the study limit will not be eligible as in-kind services for this feasibility study. However, any relevant information obtained through that project design could be applied to this study and reduce the overall cost of the feasibility study by virtue of reducing the need for new data collection.
- It is assumed that the WBRRCD is willing and able to financially support the study effort.
- It is assumed that there is a potential need to acquire land easements and/or rights of way in order to implement any recommend actions. Specific real estate requirements would be investigated during the feasibility study and discussed in the DPR/EA.
- It is assumed that the iterative nature of the Corps' planning process may result in the need to incorporate revisions and/or additional measures to the evaluation process. The study budget includes a contingency line item that is intended to account, in part, for the evaluation of iterations not yet considered.
- It is assumed that an Environmental Assessment, NOT and Environmental Impact Statement, will be sufficient for this study.

Required Output:

The DPR/EA resulting from the feasibility study team will recommend what the Corps believes to be the most appropriate alternative and it will document compliance with environmental requirements. This document will be subject to a Public Notice period and it will ultimately be submitted to the North Atlantic Division (NAD) of the Corps of Engineers for final approval.

Team Involvement: The principal members of the Project Delivery Team (PDT) will be the Project Manager, specialists from the Engineering/Planning Branch, Engineering/Design Branch, Real Estate Branch, Town representatives and members of the community. The PDT will be responsible for preparing the decision document that will be used for evaluation of restoration alternatives.

The Feasibility Study is cost shared with the non-Federal sponsor (WBRRCD) on a 50/50% basis. Once the study is completed and the report prepared, the report will undergo an Agency Technical Review (ATR). An ATR is undertaken to "ensure the quality and credibility of the government's scientific information" in accordance with policy and regulations. This level of review shall also cover any necessary National Environmental Policy Act (NEPA) documents and other environmental compliance products and any in-kind services provided by local sponsors. ATR is mandatory for all decision and implementation documents. The New England District, and sponsor if necessary, will respond to review comments and prepare the draft report.

The draft report is submitted to our North Atlantic Division, which will review and provide approval to release the report for public comment. Once all public comments are received and addressed, the team will prepare a DPR/EA and Finding of No Significant Impact to be signed by the District Engineer. The New England District will submit the DPR/EA to our Division office for approval to proceed with preparation of Plans & Specifications (P&S) and Construction. That process would conclude the Feasibility Phase.

If the DPR/EA recommends implementation of a plan, the Corps and the non-Federal sponsor may execute a Project Partnership Agreement, which outlines roles and responsibilities for the next phase of the project. The P&S and construction phase is cost shared with the sponsor (75% Federal and 25% non-Federal in this case). P&S are developed by the Corps in cooperation with the non-Federal sponsor. The Corps will obtain all applicable Federal environmental permits (e.g. Clean water Act, Section 401 water quality certification, Coastal Zone Management Consistency Concurrence) and the non-Federal sponsor must obtain all required non-Federal Permits (e.g. Wetlands Protection Act Order of Conditions, Chapter 91 Waterways License). The Corps will issue a contract solicitation and award a construction contract according to Federal contracting requirements and oversee the construction of the project. Corps regulations allow for cost-shared monitoring of the project for up to 10 years post construction.

III. PROJECT DELIVERY TEAM ROLES AND RESPONSIBILITIES

All Team Members and Elements: All Team Members (TMs) are accountable to ensure that all work is completed within established schedules and budgets. All TMs are responsible for the technical adequacy of their work and to ensure that the work is accomplished consistent with Corps and other applicable regulations and guidelines. All functional elements from which staff is assigned to the project are also responsible for assigning staff for District Quality Control (DQC) and shall certify that the work is accomplished consistent with the District's overall Quality Control Plan (QCP) and the specific QCP for the individual project. All TMs are responsible for responding to review comments on the project reports and analyses they prepare.

The success of the project is highly dependent on the team's communication and cooperation. Every TM provides information and support that is essential for the project. Each project has a unique set of goals, challenges and constraints that determine the importance of each TM's role.

Planning Division – Planning Branch

Project Manager/Plan Formulator: The Planning Branch is responsible for project management throughout the study, design and construction phases. The project manager (PM) in the Planning Branch also acts as the technical lead in Engineering/Planning and directs all technical investigations associated with the project. The PM is responsible for the overall scope, budget and schedule for the project and ensures that the work meets the expectations of the non-Federal sponsor and is consistent with ER 1105-2-100 and other applicable Corps regulations and guidelines. The PM guides the plan formulation process and is the principal author of the decision documents. The PM formulates and assembles the alternatives, benefits, and economic input from the team to determine the cost effectiveness. The PM prepares and keeps current project fact sheets, web information, budget submissions, Project Review Board (PRB) updates and state update reports. The PM coordinates activities of the Project Delivery Team (PDT), manages project schedules, budget and funding, and tracks team progress within those resources. The PM is the point of contact for the non-Federal sponsor and is responsible for ensuring appropriate sponsor and public involvement. The PM prepares and coordinates the cost sharing agreements: Feasibility Cost Share Agreement (FCSA) and Project Partnership Agreement (PPA) and regularly updates the sponsor on project progress and financial status and ensures that the sponsor completes its work (e.g. work in kind, non-Federal permits, lands, easements, rights of way and relocations (LERRDs) coordination) as planned. The PM assists the project sponsor with its self-certification of financial responsibility and gathering data necessary to evaluate project economic justification if required. During the design phase, the PM guides the team in ensuring that the following products are consistent: plans, specifications, permits and environmental requirements, cost estimate, LERRDs, contract documents, and project agreements (e.g. PPA). Planning Branch staff not assigned to the project may serve as reviewers for QC and are directly responsible for the policy and formulation aspects of the technical review.

PM – Mike Riccio

Planning Branch – Planning Oversight: As mentioned above, the Planning Branch is responsible for project management of the project throughout the study, design and construction phases. The Planning Branch Chief or designated individual is responsible for general program/project oversight and serves as a technical and policy resource throughout the project. The PM will provide the branch/section chiefs with project updates on scope, schedule and budget.

TM – John Kennelly

Planning Division – Evaluation Branch

Environmental Resources Section (ERS) Team Member: The environmental TM is responsible for environmental analysis of the project consistent with ER 1105-2-100 and other applicable Corps regulations and guidelines. The environmental TM is also responsible for scoping, contracting and evaluating ecological resource and other investigations as required for the project. The environmental TM is responsible for ensuring that the project is evaluated and constructed in accordance with National Environmental Policy Act (NEPA) and other Federal and state laws and statutes, and ensuring that any agreed upon environmental requirements are properly included in the project's plans and specifications. The environmental TM is the principal author of the NEPA document and any associated coordination documents, correspondence, and regulatory applications.

TM – Grace Moses

Cultural Resources Team Member: The cultural resource TM is responsible for all cultural resources coordination with the State Historic Preservation Office (SHPO), tribal officials, and other agencies as required. The cultural resource TM is also responsible for scoping, contracting and evaluating cultural resource investigations as required for the project. The TM prepares the cultural resources text for inclusion in the decision and NEPA document. This may require preparation of a separate cultural resources appendix. The cultural resources TM is responsible to ensure that the project is evaluated and constructed in accordance with National Historic Preservation Act (NHPA) and other Federal and state laws and statutes, and to ensure that any agreed upon cultural resource requirements are properly documented and included in the project's plans and specifications.

TM – Marc Paiva

Engineering Division – Geotechnical and Water Resources Branch

Hydraulic & Hydrologic (H&H) Engineering Team Member: The H&H engineering TM is responsible scoping, contracting, coordinating, and evaluating H&H investigations, including surveys, hydrologic/hydraulic calculations, data interpretation, and, if needed, model set up, calibration, sensitivity analysis, output prediction and certification for the project. The TM will review all existing data available to determine what new information is needed for the project. If there are enough data, modeling and data collection may not be required. The H&H engineering TM prepares the H&H engineering appendix for the report consistent with Corps regulations and guidelines. The H&H engineering TM also provides necessary input to the development of plans and specifications for the project, ensures that project documents fully and accurately reflect H&H engineering elements, and provides any required H&H engineering during construction services.

TM – Marilyn Mroz

Geotechnical Team Member: The geotechnical (geotech) TM is responsible for scoping, contracting, coordinating, and evaluating geotechnical investigations, including surveys, quantity estimates, quality evaluation, calculations, and associated documents for the project. The geotech TM will coordinate and provide support to other TM throughout the project. Some of the geotech tasks, such as surveys, need to be coordinated with other TMs to avoid duplication of efforts. The geotech TM will also need to coordinate with other TMs prior to any surveys to ensure all necessary data are collected for evaluation. The geotech TM prepares the geotechnical engineering appendix for the report consistent with Corps regulations and guidelines. The geotech TM also provides necessary input to the development of plans and specifications for the project, ensures that project documents fully and accurately reflect geotechnical design elements, and provides any required geotechnical engineering during construction services.

TM – Doug Fransioli

Engineering Division – Design Branch

Civil Team Member: The civil TM is responsible for scoping, coordinating, and evaluating civil engineering investigations, including surveys, quantity estimates and civil design drawings for the project and ensuring all appropriate civil engineering information produced by the team is accurately reflected in the civil drawings. The civil TM prepares (or ensures the preparation of) the civil engineering drawings and civil engineering design appendix (as necessary) for the report consistent with Corps regulations and guidelines. The civil TM also provides necessary input to the development of plans and specifications for the project, ensures that project documents fully and accurately reflect project design, and provides any required civil engineering during construction.

TM – Mark Godfrey

Cost Engineering Team Member: The cost engineering TM is responsible for conducting any industry surveys or investigations necessary to prepare the project cost estimates for evaluated alternatives and any recommended plan. The cost engineering TM will be prepare, evaluate, and update cost estimates, as necessary, consistent with applicable Corps regulations and guidance. Contingencies will be developed using the Abbreviated Risk Analysis (ARA) spreadsheet from the Cost-MCX at Walla Walla District. The ARA requires a risk assessment meeting be led by the cost engineer with appropriate members of the PDT to develop a risk register which will result in the calculation of a risk-based contingency. The cost engineer will develop the Total Project Cost Summary (TPCS) spreadsheet for the recommended plan using the current spreadsheet from the Cost-MCX. A cost engineering appendix will be prepared that includes the cost assumptions, cost summary sheet(s), the ARA, and the TPCS.

TM – Jere Masey

Real Estate Division – Appraisal Branch

Real Estate Division: The Real Estate TM prepares the Real Estate Plan required for the decision document. The Real Estate TM works with the PDT to identify all real estate interests required for the project, and to acquire real estate ownership and valuation data needed for project justification. The Real Estate TM works with the non-Federal sponsor's representatives to ensure that the real estate acquisition is performed consistent with Corps regulations and law. The Real Estate TM works with the PM to determine any real estate credit to be allocated against the sponsor's cost-share.

TM –Jeff Teller

IV. ALTERNATIVES:

The physical barriers to fish passage found in Smelt Brook are typical of anthropogenic impacts of developed stream systems ~~those found in New England stream systems~~. Consequently, there is a suite of measures that can reasonably be expected to restore natural ecosystem functionality within the system. For the purpose of this study, each individual measure will be combined into conceptual projects known as Alternatives. Those Alternatives will be compared against each other to identify an optimal plan for improving the existing conditions and would then be recommend for implementation. The measures to be included in this study are described below and are grouped by the two major problem areas.

Measures:

Fish Gate:

Currently there is a small fish gate that separates the main channel from the 96" LPP culvert. During low flow conditions the gate is intended to provide access for rainbow smelt and other fish to migrate up Smelt Brook. Based on the decline in observed fish at or upstream of the gate, there are concerns that the maintenance of the gate and/or the conditions of the stream channel at that location are inadequate for maintaining fish passage. Measures to be considered in this study include the following:

- Updating the LPP Operations and Maintenance Manual to better account for the needs of migratory fish and other aquatic biota
- Modifying the stream bed immediately upstream of the fish gate to better account for the needs of migratory fish and other aquatic biota
- Modifying the design of the fish gate and/or replace the fish gate to better account for the needs of migratory fish and other aquatic biota.

*It should be noted that maintenance of the channel is the responsibility of the WBRRC as the non-federal sponsor of the original LPP. Consequently, if the feasibility study recommends improvements to the fish gate/channel that would be considered maintenance, the Corps may not be able to participate in cost-sharing those elements of the recommended plan.

Perched Culvert:

Currently there is a 286-ft-long, 9'6" x 6'5" arch culvert that directs Smelt Brook along Brookside Road in Braintree. The culvert is functional from a flood protection standpoint, but it was installed with a 3 foot drop that fish cannot swim past. There may be opportunities to naturalize this reach of the stream in order to allow for fish passage while still maintaining the ability to convey flood flows as intended by the LPP. Measures for this reach include the following measures:

- Remove the entire culvert and reconstruct the reach with a natural stream bed
- Redesign the outfall and stream channel at the downstream end to establish a more natural gradient that fish are capable of swimming up.

V. PROJECT SPECIFIC TASK DESCRIPTIONS AND CHALLENGES

In preparation of this PMP, each TM submitted a scope and cost for the project.

1. Planning Branch:

a. Planning Resources:

Tasks: The PM will be responsible for plan formulation, and managing the schedule, scope and budget of the PDT throughout the study phase as well as the implementation of any recommended alternatives.

- Lead plan formulation, evaluation, and design efforts
- Prepare and manage project schedule, scope and budget
- Lead plan formulation, evaluation, and design efforts
- Serve as the primary point of contact for communication with the non-Federal Sponsor
- Prepare and ensure review of Detailed Project Report based on team input.
- Manage review processes and obtain project approval.

Budget: \$450,000

2. Evaluation Branch:

a. Environmental Resources:

Tasks: The Environmental Resources Section (ERS) will prepare the Environmental Assessment (EA) with existing information, information developed during the study, and data provided by the various branches. The EA will be integrated with the DPR, for which the environmental TM will evaluate alternative plans for their impacts to aquatic habitat. The TM will also need to conduct surveys sufficient to evaluate existing and future conditions and coordinate with the appropriate resource agencies. Specific tasks will include:

- Attend team meetings
- Attend public meetings
- Establish target elevations from the reference marsh
- Quantify environmental footprint of proposed alternatives and their impacts on the natural environment
- Conduct incremental cost analysis in order to determine costs/benefits of proposed alternatives
- Prepare public notice
- Coordinate with local, state and Federal agencies and attend coordinated site visit
- Review draft Decision Document and address ATR review comments.

Project Specific Challenges/Assumptions:

- This estimate assumes no more than 2-3 alternatives will be evaluated in detail
- The estimate assumes a normal level of exchange among NAE and environmental agencies and interaction among team members.
- This estimate assumes the project manager will hold a contingency for the entire project to cover unexpected occurrences that may affect this cost estimate.

Budget: \$33,000

b. Cultural Resources:

Tasks:

The Cultural Resources TM will evaluate alternative plans and their impacts on culturally and historically significant resources. The TM will coordinate with other appropriate agencies to identify any such resources present in the project area and determine the appropriate means for avoiding, minimizing and mitigating any impacts potentially caused by the proposed alternatives.

- Attend team meetings
- Background research
- Coordinate with MA SHPO, Tribal Historic Preservation Officers (THPO) and others as required
- Prepare appropriate sections within DPR
- Address any review comments
- Site visit, as required
- Prepare Statement of Work for archaeological and/or historic documentation, depending upon recommended alternative. This work would be contracted out at an additional cost.
- Review draft Decision Document and address ATR review comments

Project Specific Challenges/Assumptions:

The area has already been extensively developed and modified and the project is not expected to result in any significant impacts to cultural resources.

Budget: \$10,000

3. Geotechnical and Water Resources Branch:

a. H&H Section:

Tasks:

The H&H Section will be primarily responsible for developing the H&H Appendix and will be responsible for determining whether the project will have any detrimental impacts on the functional operation of and/or the flood protection afforded by the existing LFP as a flood protection project.

- Attend team meetings
- Attend client and public meetings
- Characterize and quantify existing flows/velocities in Smelt Brook
- Characterize and quantify flows/velocities required to ensure the LFP continues to function as intended
- Characterize and quantify flows/velocities of proposed alternatives
- Quantify projected future conditions under "without-project" scenario
- Develop potential "with-project" conditions;
- Address any review comments

Project Specific Challenges/Assumptions:

- It is assumed that all potential modifications will have to be reviewed and approved by the NAE Levee Safety Program to ensure that the project will continue to function as originally intended as a flood protection project.

- It is assumed that all new data will be obtained and modeled for the H&H modeling, calculations, and plans (the cost estimate for H&H could be reduced significantly depending on existing information, particularly updated information from the Weymouth Landing effort).
- Assumed in-house GIS work.
- Assumed that analysis of Pond Meadow Lake Dam per current rainfall and runoff values, and current methodologies, is not required.

Budget Total: \$ 39,000

a. **Geotechnical Section:**

Tasks:

Geotechnical Engineering Section will complete a review of currently available geotechnical information including soil boring logs, as built plans, and additional historical report documentation. This investigation may require additional time to locate construction specifications and design documentation information. Additionally, geotechnical engineer will assist H&H engineers should channel modifications alternatives require excavation, benching, or additional geotechnical input. Geotechnical engineer will provide earth pressure information to Structural Engineer for dam and conduit modifications. Civil engineer may require geotechnical input for construction considerations and equipment placement plans. Geotechnical engineer will provide excavation quantities, construction sloping, and feasibility determination of culvert removal alternative.

- Attend team meetings
- Coordinate with other TMs for field collection activities and site visits
- Review of available documentation including reports, test results, existing plans, geologic maps, charts, aerial photos, borings, construction records, etc.
- Coordinate with H&H, and structural engineering to design features that may be considered as part of the alternatives analysis
- Assist Civil Design with layout of protection and preparation of feasibility level design sketches
- Preparation of a Geotechnical Appendix for the Feasibility Report. The Geotechnical Appendix will identify any subsurface investigation and testing needs to support the plans and specification phase

Project Specific Challenges/Assumptions:

- O&M manual modification and fish gate modifications will likely not require geotechnical input.
- Soil boring and soil testing contracts are not planned as part of this effort.

Budget: \$14,000

2. **Design Branch:**

a. **Cost Engineering Section:**

Tasks:

The cost TM will provide rough order of magnitude (ROM) estimates on proposed alternatives throughout the alternative development. A detailed cost estimate (e.g., TPCS) will be required on alternatives as instructed by the PM.

- Attend team meetings

- Participate in site visit(s) and team meetings to provide parametric cost estimates for the measures described above (assume 6 alternatives).
- Prepare more detailed MII cost estimates for up to 3 alternatives that are likely to be considered as the recommended plan
- Prepare Cost Appendix. Respond to ATR, IEPR, ~~PUBLIC~~ Public and HQ comments. Obtain Cost Certification for Selected Plan from Cost MCX.
- Respond to ATR and HQ comments on Final Report.

Project Specific Challenges/Assumptions:

- It's assumed that parametric costs for individual measures will be sufficient to develop initial costs for alternative development.
- Alternatives that demonstrate initial promise as being implementable will warrant a more formal cost estimate, from which those alternatives can be compared against each other in a cost benefit analysis.

Budget: \$13,000

b. Civil Section:

Tasks:

The civil TM will be responsible for developing feasibility level plans for the recommended alternative, locating all utilities that affect those alternatives. The Civil TM will also be responsible for managing the survey activities for the study.

- Attend project meeting(s)
- Site Visit(s) as needed
- Prepare survey scope of work
- Coordination with Survey
- Coordination with Environmental
- Coordination with H&H
- Coordination with Cost
- Coordination with Real Estate
- Research, review, and compile existing conditions data
- Review record drawings of previous contracts at location of proposed work
- Perform utility research and check for conflicts
- Prepare existing conditions and topographic plans from survey data and survey notes
- Provide civil design and plans/sketches for each alternative
- Develop quantities
- Review and checks of quantities
- Provide input during evaluation of feasible alternatives to identify selected plan
- Prepare conceptual set of drawings (site plan, typical-sections, details) for the selected plan
- Prepare Environmental plans and develop quantities
- Prepare real estate plans for selected alternative
- Prepare appropriate sections for DPR/EA document and appendices
- Review and comment on DPR/EA
- Prepare Civil Engineering appendix and revise as needed
- Prepare Civil Basis of Design (BOD) document
- Respond to ATR, IEPR, Public, and HQ civil related review comments on draft civil engineering appendix
- Respond to ATR and HQ comments on Draft Final Report

Project Specific Challenges/Assumptions:

- None

Budget: \$66,000

3. Real Estate Branch Efforts:

a. Real Estate

Tasks:

The Real Estate TM will be responsible for producing a Real Estate Appendix that outlines the Baseline Cost Estimate for Real Estate (BCERE), to include establishment of the fair market value of the lands, easements, or rights-of-way (LER) required for the construction, operation and maintenance of the proposed project, including those required for potential relocations, borrow material, or excavated material disposal; the costs of relocating displaced persons from homes under P.L. 91-646 (as applicable); determination of the incidental acquisition costs for both the government and the non-federal sponsor; and estimation of the risk-based contingencies.

- Attend team meetings
- Participate in site visit(s)
- Responsible for obtaining rights of entry for general survey and exploration activities to include researching public records and existing maps to obtain site and ownership information, including coordination with non-federal sponsor(s).
- In coordination with Engineering and Planning Divisions, identify and ensure proposed project boundaries, features, and required lands (fee), easements (temporary and permanent), rights-of-way, facility/utility relocations and disposal areas are accurately depicted on conceptual project plans, prior to release to the NFS.
- Obtain rights of entry for general survey and exploration activities as required
- Research public records and existing maps to verify site and ownership information.
- Develop feasibility level real estate planning report
- Review/comment on draft decision document for District Quality Control (DQC) purposes

Project-Specific Challenges/Assumptions:

- If utility/facility relocations are required, request an attorney's opinion of compensability from Office of Counsel, subject to utility-facility relocation agreement. As referenced above, preliminary real estate cost estimates will be prepared in accordance with the proposed construction alternatives, followed by preparation of the real estate planning report (REP) in accordance with feasibility study requirements.

Budget: \$12,000

VI. PROJECT BUDGET

The project budget presented below is composed of estimates from individual submissions from each TM. It is the responsibility of the TM to ensure these values are accurate. Any changes to the budget must be justified and communicated to the PM as soon as possible with an explanation of the change in scope or effort that supports the budget change. The budget change request must be submitted to the PM in writing with copies to the TM's section and branch chief.

1. Planning Branch Efforts:

- Planning: \$40,000

2. Evaluation Branch Efforts:

- ERS: \$33,000
- Cultural: \$10,000

3. Geotechnical and Water Resources Branch Efforts:

- H&H: \$39,000
- Geotechnical Section: \$14,000

4. Design Branch Efforts:

- Cost Engineering Section: \$13,000
- Civil Section including Survey: \$66,000

5. Real Estate Branch Efforts:

- Real Estate Branch: \$12,000

6. Reviews (Internal and Agency Technical)

- Total All Branches: \$20,000

7. Contingency

- Total All Disciplines = \$50,000

TOTAL STUDY COST

- Total All Disciplines = \$297,000

VII. PROJECT MILESTONES AND SCHEDULE

Project Milestones for CAP projects are established by HQUSACE (1105-2-100) and NAD and are documented in the Draft Project Management Business Process (PMBP) Manual January 2009 Version 0.6. The PM will maintain project budgets, schedules and milestones for individual CAP projects in P2. Project information will be updated by the PM to reflect changes to individual project budgets and schedules. PDT members are responsible for informing the project manager as soon as possible regarding issues or changes in work priorities that could impact individual project schedules. The milestones for this project are indicated in the following table.

Each PDT member must meet their individual task deadlines to adhere to the milestone schedule. If an intermediate task completion date is not met, subsequent tasks will slip. It is imperative that each TM communicate all schedule changes ASAP to the PM and PDT. Each TM must review and understand how completion of their individual task has the potential to impact other TMs. Once all TMs complete their respected draft reports, cost estimates and economic analysis, the draft report is prepared. The draft report cannot be submitted until all previous tasks are complete. **Each TM has the potential to impact the entire project schedule.**

Smelt Brook Section 1135 Study Milestones

Number	Milestone	Baseline	Current
CW130	Execute FCSEA	October 2017	October 2017
E130	Complete Draft DPR/EA	April 2019	April 2019
CW250	Agency Technical Review (ATR)	May 2019	May 2019
CW150	Draft Report Submittal	June 2019	June 2019
CW110	Division Approval for Public Release	July 2019	July 2019
CW250	Public Review	August 2019	August 2019
CW110	Final DPR/EA & Project Approval	October 2019	October 2019



SIERRA CLUB
MASSACHUSETTS

June 6, 2018

Town of Weymouth
Community Preservation Committee
75 Middle Street
Weymouth, MA 02189

Re: Funding Smelt Brook Section 1135 Restoration Feasibility Study

Dear Community Preservation Committee,

On behalf of over 130,000 members and supporters across the Commonwealth, The Sierra Club Massachusetts Chapter writes to you in support of funding for the Smelt Brook Section 1135 Restoration Feasibility Study.

The Sierra Club recognizes the environmental and social benefits to improving fish passage for migratory fish species including Smelt and American Eel at the smelt brook fish gate and perched culvert.

The opportunity to remove the perched culvert, restore the natural streambed will increase the spawning habitat of Smelt and passage of American Eel. The potential creation of a passive recreation park at the location could benefit residents and visitors alike, providing passive space for people to view the restored stream and connect with nature.

CC: Mayor Hedlund

Sincerely yours,

Emily Norton,
Director, Massachusetts Chapter

Hachey, Diane

From: Swanson, Richard
Sent: Monday, September 10, 2018 11:17 AM
To: Luongo, Robert; Langill, Ted
Cc: Cook, Patrice; Connolly, Brian; Hachey, Diane
Subject: MEASURE 18 111

Measure 18 111, CPC Study for Smelt Brook at Weymouth Landing, indicates that the balance in the "CPA Unreserved Fund (4906 321001)" is \$534,141. However, MUNIS shows a balance of \$492,317 as of today. I will be reporting this balance to the Councilors. I send this to you so we all are on the same page.

Regards,

Rich Swanson
Town Auditor

This email and any files transmitted with it are privileged, confidential and intended solely for the use of the individual or entity to which they are addressed. If you have received this email in error please notify the sender immediately and delete this e-mail from your system. You should not disseminate, distribute or copy this e-mail. Please note that any views or opinions presented in this email are solely those of the author and do not necessarily represent those of the Town of Weymouth. Finally, the recipient should check this email and any attachments for the presence of viruses. The Town of Weymouth accepts no liability for any damage caused by any virus transmitted by this email.

Town of Weymouth, 75 Middle Street, Weymouth, MA, 02189
www.weymouth.ma.us