Municipal Vulnerability Preparedness Grant Program Application Form RFR ENV 20 MVP 02

Revised 01/14/20

1. Municipality: Boxford

2. **Project Title:** <u>Increasing regional flood resiliency through re-designing culverts in</u> <u>the Howlett Brook Watershed.</u>

3. **Type of Project (check all that apply):**

- Detailed Vulnerability and Risk Assessment and Further Planning
- □ Community Outreach and Education
- □ Local Bylaws, Ordinances, Plans, and Other Management Measures
- **X** Redesigns and Retrofits
- □ Energy Resilience Strategies
- □ Chemical Safety & Climate Vulnerabilities
- **X** Nature-Based Flood Protection, Drought Mitigation, Water Quality, and Water Infiltration Techniques
- Nature-Based, Infrastructure, and Technology Solutions to Reduce Vulnerability to Extreme Heat and Poor Air Quality
- X Nature-Based Solutions to Reduce Vulnerability to other Climate Change Impacts
- □ Acquisition of Land to Achieve a Resiliency Objective
- X Ecological Restoration and Habitat Management to Increase Resiliency
- □ Subsidized Low Income Housing Resilience Strategies
- □ Mosquito Control Districts
- 4. Local Project Manager and Point of Contact: <u>Ross Povenmire</u>

Job Title: <u>Land Use Director</u> Department/Agency: <u>Planning & Conservation Department</u> Address: <u>Boxford Town Hall, 7A Spofford Pond Road Boxford, MA 01921</u> Telephone <u>(978) 887-6000 x 181</u> Fax (<u>978</u>) <u>887-0758</u> Email: <u>dircons@town.boxford.ma.us</u>

5. Proposed Funding Summary

Total Project Cost: <u>\$61,215.00</u>

Grant Request: <u>\$45,855.00</u>

Municipal Match (at least 25% of total project cost): <u>\$15,360.00</u>

6. Project Summary

The Town of Boxford on behalf of the Towns of Ipswich and Topsfield, and with primary project partners the Ipswich River Watershed Association and Trout Unlimited will undertake a comprehensive regional culvert design project in the Howlett Brook Sub-basin of the Ipswich River Watershed. The project will provide twelve, 30% design plans based on the Massachusetts Stream Crossing Standards and future modeled climatic conditions. The project will position the towns to pursue implementation funding and when implemented will increase flood resiliency, reduce community risk and restore natural habitats.

7. Project Narrative

7.1 Project Description, Rationale, and Public Benefits

The Town of Boxford is a small semi-rural suburban community located in the low-lying coastal plain region of Northeast Massachusetts. It is located within 3 watersheds of the Ipswich, Parker and Merrimack Rivers and has a large number of ponds, streams and wetland areas. As exemplified by the Mother's Day Flood of 2006, which is the flood of record, the town's roadway infrastructure is exceedingly vulnerable to flooding largely as a result of undersized and aging culverts. This vulnerability was further identified and assessed in the town's <u>Hazard Mitigation Plan</u>, recently completed <u>Municipal Vulnerability</u> Plan as well as the town's most recent 5-year Capital Improvement Plan (CIP). Careful and appropriate modelling, site assessment and design as proposed in this project is a critical precursor to successful culvert upgrade projects. Once designed and successfully implemented, this project will lead to a dramatic reduction in flood risk to vulnerable populations and municipal infrastructure, restore habitats, and provide many other cobenefits that will increase community and ecological resiliency.

The Town of Boxford recently became a certified MVP community. The plan identified four highest priority actions and several additional high priority actions. Culvert replacement and upgrade was a component of two of the four highest priority actions (2. Identify/fix roads, culverts, bridges and 3. Support robust infrastructure) and was a primary component of three of the items in the "high" priority category (4. Assess culverts/dams..., 5. Evaluate culverts and dams..., 6. Replace culverts to increase water flow). As similarly situated communities, both Ipswich and Topsfield have also identified culvert replacement

and upgrade as a critical need in their communities in both of their Hazard Mitigation Plans, and in the case of Ipswich, their MVP plan. In addition to meeting the Massachusetts Stream Crossing Standards, culverts will be designed to pass at least the future 100-year storm flow to the extent practicable utilizing the projected downscaled regional precipitation data available from The Northeast Regional <u>Climate Center</u> at Cornell University and Massachusetts climate projection data in the <u>Massachusetts Climate Change</u> <u>Clearinghouse</u>, as detailed below.

The municipalities and project partners are ideally positioned and qualified to implement this project. Since 2006, the Town of Boxford has prioritized culvert replacements and has worked with partners to successfully install 6 culverts that meet the Massachusetts Stream Crossing standards that are designed to withstand more than a 100-year flood. Both Topsfield and Ipswich have also been actively assessing their culverts and several projects have been implemented or are in the planning stage in each town. In 2015, Boxford and the other towns in the watershed (including Ipswich and Topsfield) partnered with the Ipswich River Watershed Association and Trout Unlimited to undertake the Great Marsh Barriers Assessment which inventoried, assessed and prioritized the more than 1000 dams, bridges and culverts in the Ipswich, Parker and Essex Rivers Watersheds. As part of this study, culverts were assessed for both their ecological impact and vulnerability to flooding and given scores for each criterion. This study remains the only watershed-scale assessment of its kind done in Massachusetts and is being used as a model elsewhere. More recently, the Towns of Boxford, Topsfield and Ipswich, along with the Ipswich River Watershed Association and Trout Unlimited (and many other partners) built off of the Barriers Assessment to launch a National Fish and Wildlife Foundation grant-funded project to conduct a comprehensive habitat restoration project in the Howlett Brook Watershed. As part of this project, all of the culverts were prioritized in terms of flood resiliency and ecological impact and conceptual designs will be provided for the top 12 highest priority structures. This proposed MVP project will build upon that work and provide the incremental funding needed to produce actual engineered design plans for those 12 structures in order to better positon them for implementation funding.

Tasks

Task 1: Provide Twelve (12) 30% culvert replacement design plans for priority sites Plans will be designed by TU. 30% plans will include the following components:

- Complete topographic survey of project site including: longitudinal and cross section profiles, bankfull analysis, and substrate analysis (e.g. pebble counts). Data collected will reflect current MA DER protocols for culvert assessments.
- Collect USFS Stream Simulation protocol measurements and evaluate and select a "reference reach" to be included in the sites hydraulic modeling.
- Perform a preliminary hydraulic modeling analysis of stormwater flows using HY8, analyze stormwater flows using 2, 10, 25, 50 & 100-year return interval storms. Modeling for stream flows will utilize the current downscaled regional precipitation

data available from The Northeast Regional Climate Center at Cornell University.

- Identify site constraints inclusive of upstream and downstream conveyance factors.
- Select an appropriate replacement structure based on instream flow requirements, evaluate and determine the most appropriate structure for each restoration site that will meet or exceed the 100-year stream flow requirements to the extent practicable based on future precipitation model projections.
- Prepare a conceptual design report that includes: preliminary structural and instream conceptual designs and a preliminary cost analysis.
- TU's engineer will directly engage with the owner, state agencies, and local/regional suppliers on specific structural requirements and real time material costs, as well as reviewing a variety of design options to select the final structure to be installed.
- Conduct an iterative process requiring multiple meeting/communications with a variety of project partners, manufacturer's design engineers, and on-site reviews to confirm the final restoration materials and strategy.
- With coordination from IRWA, Municipal DPW Directors will work with TU to inform culvert replacement plan development including local specifications, site constraints and overall project feasibility. Town Conservation Agents will work with TU to identify permitting issues and sensitive resource considerations and assess overall feasibility. Town staff will also help to inform community engagement conducted by IRWA.

All design plans will be prepared in consultation with the owner, MA DER's Stream Continuity Program and MassDOT (where applicable) to ensure they meet with local and state requirements and cost realities. The designs will be used to inform local capital planning efforts, seek DER priority status and pursue implementation funding via MVP, DER's CRMA, MassDOT small bridge and other funding programs. [Note, plans will include all phases of MA DER's culvert replacement <u>Scope of Work</u> except for formal wetlands delineation and substrate borings which will be conducted during the permitting phase. Also MassDOT Chapter 85 review is beyond the scope of this project should any of the structures exceed that threshold of review, however MassDOT meetings will occur to ensure streamlined conversion in the event review is required.] The following is a table and map of the proposed design project sites:

| # | IRWA Site | NAACC ID | Crossing Type | Town | Road | Infra- structure Risk | Eco Impact | Crossing Priority | Lat | Long |
|----|--------------|-------------|---------------------|-----------|-----------------------------|-----------------------------|---------------|----------------------|---------|----------|
| 1 | 661 | 10332 | Single Culvert | Topsfield | Off Haverhill Road | 3.6 | 1.75 | 5.35 | 42.6688 | -70.9613 |
| 2 | 665 | 6982 | Single Culvert | Topsfield | Haverhill Road | 0 | 1.00 | 1.00 | 42.6692 | -70.9615 |
| 3 | 629 | 6141 | Single Culvert | Topsfield | Wildes Road | 5 | 1.73 | 6.73 | 42.6625 | -70.9227 |
| 4 | 680 | 9462 | Single Culvert | lpswich | Newburyp ort Turnpike | 4 | 1.29 | 5.29 | 42.6706 | -70.9257 |
| 5 | 683 | 6984 | Single Culvert | lpswich | Old Right Road | 0 | 2.31 | 2.31 | 42.6719 | -70.9276 |
| 6 | 695 | 6985 | Single Culvert | lpswich | Plains Road | 0 | 1.00 | 1.00 | 42.6741 | -70.9279 |
| 7 | 682 | 11334 | Single Culvert | lpswich | Boxford Road | 5 | 1.75 | 6.75 | 42.6720 | -70.9456 |
| 8 | 694 | 10333 | Single Culvert | Boxford | Depot Road | 0.6 | 1.41 | 2.01 | 42.6742 | -70.9804 |
| 9 | 721 | 23521 | Bridge | Boxford | Georgeto wn Road | 0 | 1.07 | 1.07 | 42.6787 | -70.9982 |
| 10 | 769 | 6986 | Single Culvert | lpswich | Linebrook Road | 4 | 1.65 | 5.65 | 42.6855 | -70.9210 |
| 11 | N/A | 2457 | Multiple Culvert | Boxford | Bare Hill Rd | NA | NA | NA | 42.6740 | -70.9781 |
| 12 | 633 | 6978 | Single Culvert | Topsfield | North Street | 5 | 1.97 | 6.97 | 42.6634 | -70.9351 |

Table 1: Culverts to be Designed With Prior Assessment Results

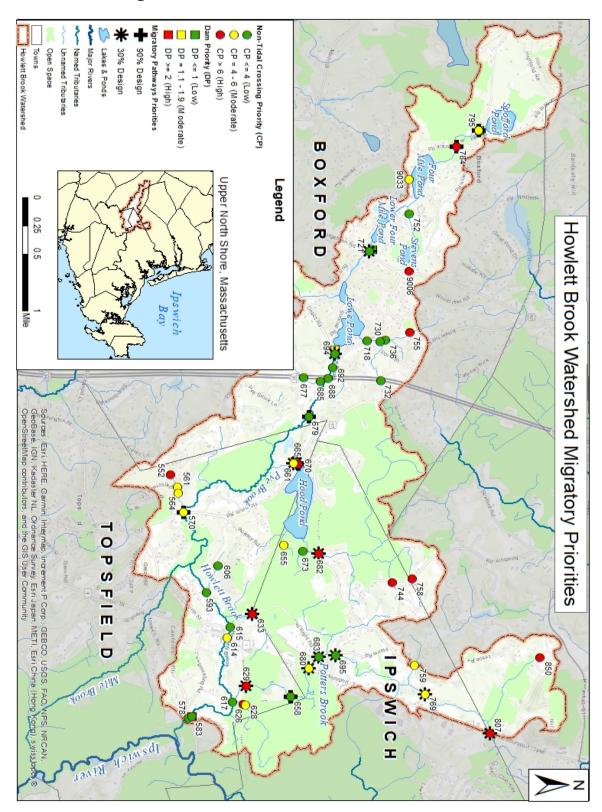


Figure 1: Barriers in the Howlett Brook Watershed

Figure 2: Example High Priority Culverts in The Town of Boxford Proposed to be Re-Designed to Increase Climate Resilincy As Part of This Project



Site # 721 Georgetown Road



Site # 694 Depot Road



Bare Hill Rd (just downstream of Depot Rd.)

Task 2: Project Management

The IRWA will serve as project manager on behalf of the Town of Boxford and project partners as described above.

The project will reduce the risk to vulnerable populations in two primary ways. First, the project will address high risk culverts located on roadways that have been designated as major arterial connector routes in the community and have a history of flooding due to the undersized culverts: Georgetown Road, Depot Road and Ipswich Road. According to the common vulnerabilities across local jurisdictions table in the State Hazard Mitigation and Climate Adaptation Plan, populations over the age of 65 are more vulnerable to inland flooding due to the impact on access to medical attention and evacuation services in the event of flooding. Based on the EPA's Environmental Justice Screening Tool for the Howlett

Brook Watershed in the towns of Boxford, Ipswich and Topsfield ranks in the top 80th-90th percentiles for populations over the age of 64 and thus are vulnerable to roadway closures due to culvert failures or over-topping. Second, the project will reduce flood risk to dozens of properties and septic systems upstream of the culverts based on the FEMA floodplain maps by eliminating the back up of floodwater which typically occurs at each site during large storms.

Undersized and aging culverts have been identified as one of the most significant risks to both human and natural communities because of climate driven threats across the Commonwealth. Unfortunately, culvert replacement projects are notoriously difficult and costly for many municipalities to implement due to the need to comply with the new Stream Crossing Standards, need to consider future climatic conditions, challenging site constraints and the complex hydrologic inter-relationships with structures up and downstream of the selected site. As a result, culvert replacement projects are not being implemented at the rate they need to be to significantly reduce these risks. This project seeks to implement a systematic and affordable approach that will address each of these challenges in ways that will have several broader public and regional benefits that can serve as a model elsewhere.

IRWA will undertake the following engagement associated with this project:

- Communicate with direct future culvert abutters to inform and identify any constraints to inform design and the future implementation phase;
- Conduct a public informational & feedback meeting on the project.
- Assist with subsequent project implementation funding requests.

7.2 Need for Assistance

Boxford needs MVP funds to engage in long-term culvert assessment, design and replacement projects. We are a residential community north of Boston that retains rural agricultural characteristics while also serving as a "bedroom" community for professionals commuting into Boston. Practically the entire town is zoned for residential/agricultural use with a two acre minimum lot size, with the exception of areas zoned for open space/official use, and a few highly circumscribed areas zoned for commercial use to accommodate a country store, veterinary office, ice cream stand, and the like. Consequently, the local tax base to support town government consists overwhelmingly of property taxes on individual residential homes. Appropriations proposed at annual town meeting are aggressively scrutinized by town residents for any impact on the property tax rate and property values. It is difficult to obtain funding for forward thinking culvert assessment, design and replacement projects in this environment. The possibility of accessing MVP funds, as an alternative to relying upon local tax revenue, is a significant reason why Boxford undertook the process of qualifying as an MVP Community.

Boxford has numerous old culverts that need replacement. The town is located at the headwaters of the Pye Brook, Fish Brook, Parker River, Penn Brook, Mill River, Alder Brook, and small, unnamed tributary streams in the Merrimack River Watershed. There are abundant wetlands and streams throughout the town, necessitating frequent road crossings utilizing culverts and bridges. Many of these crossings utilize archaic stone culverts or, more recently, corrugated metal culverts that are in desperate need of replacement. The attached photos show the principal dams and culverts within the Pye Brook watershed, including those that will be the subject of this grant proposal. Archaic stone culverts are found at the culverts under Georgetown Road and east of Pye Brook. Corrugated metal culverts are found at culverts under Herrick Road, Bare Hill Road, and Pye Brook Road.

Modern stream crossing standards and associated regulations have added enormous costs to the process of replacing culverts. Boxford must carefully allocate its limited resources in choosing which culvert replacement projects take priority. As a practical matter, those culverts in most imminent danger of failing entirely are prioritized, to the disadvantage of those with potentially greater adverse impacts on flooding and wildlife. The proposed grant funding would bypass this short-sighted but unavoidable reality by funding a systematic assessment and design of the primary culverts within the entire Pye Brook watershed (a primary tributary to Howlett Brook).

7.3 Project Feasibility and Management

The Ipswich River Watershed Association (IRWA) will serve as project Manager on behalf of Boxford and other project partners. As the project leader of the above described precursor projects, IRWA is ideally positioned to serve this role. Moreover, as a statewide leader in culvert assessments, IRWA is extremely well qualified to manage this project. IRWA is an active partner in the Massachusetts Stream Continuity Partnership, participated in the development of the North Atlantic Connectivity Collaboratives (NACC) culvert assessment protocol and was a lead partner in developing the NAACC's newly created tidal barrier assessment protocol. To date, IRWA has conducted more culvert assessments in the NACC database than any other entity.

Trout Unlimited's (TU) Coldwater Habitat Restoration Program is a national leader in culvert assessment and design. TU developed the only watershed-scale rapid assessment model to identify culvert flooding risk used in the Northeast and has evaluated more culverts than any other entity in the region. TU has built a highly skilled in-house engineering and design team and has successfully designed dozens of culverts designed to meet the Massachusetts Stream Crossing Standards and minimize their risk of failure to future climatic conditions. As a mission-driven non-profit, TU can provide these design services at a fraction of the cost of the private sector since the work is subsidized as it directly advances their core mission.

Each of the three towns has been actively involved in climate-smart culvert upgrades involving the new Stream Crossing Standards including the lead applicant which is a recognized regional leader in implementing these types of projects. To exemplify this point,

the Massachusetts Division of Ecological Restoration recently selected the Town of Boxford to hold one of its regional municipal culvert upgrade workshops because of this work. The project has a large amount as demonstrated by the proposed collaboration, regional nature of this project, letters of support and prior activity cited above, the project has a large amount of support. As a design project, all activity will take place on public rights of way and will not have any regulatory hurdles to overcome since no permits will be needed to undertake this project. Because partial site assessments have already been completed for each of the 12 sites by the project partners, completing the scope of work proposed in this project can reasonably be completed within the proposed budget and timeframe.

Project Team:

Ipswich River Watershed Association

Wayne Castonguay, Executive Director. Mr. Castonguay has over 30 years' experience managing a variety of complex projects including well over a hundred grant-funded projects. Mr. Castonguay co-led the <u>Great Marsh Resiliency Project</u> which was one of the largest regional nature-based adaptation planning efforts in the Commonwealth and is an original member of the <u>Massachusetts Climate Change Adaptation Coalition</u>. Mr. Castonguay will provide overall project oversight.

Kaitlyn Shaw, Science and Restoration Manager. Ms. Shaw is the Coordinator of the <u>Parker-Ipswich-Essex Rivers Restoration Partnership</u>, the largest and oldest regional habitat restoration partnership in the Commonwealth. Ms. Shaw is IRWA's representative to the NAACC, co-developed its new Tidal Culvert Assessment protocol and is project leader for the Howlett Brook Restoration Project, a watershed scale habitat restoration effort. Ms. Shaw will serve as day to day Project Manager.

Town of Boxford

Ross Povenmire, Director of Land Use. Mr. Povenmire has 20 years experience administering the Wetlands Protection Act and the Boxford Zoning By-law. Mr. Povenmire has participated in the replacement of multiple culverts according to stream crossing standards and will serve as project manager for the Town of Boxford. Mr. Povenmire will also participate in the evaluation of the culverts to be designed in Boxford, as well as advise on the community engagement deliverables.

Chris Olbrot PE, Town Engineer and Superintendent of Public Works. Mr. Olbrot has 20 years' experience as an engineer and participated in many culvert and bridge design projects. Mr. Olbrot will actively participate in the culvert design process proposed in this project.

Trout Unlimited

Colin Lawson, New England Project Manager for TU's Northeast Coldwater Restoration Program. Mr. Lawson oversees the largest culvert replacement program in New England with an in-house culvert design team consisting of licensed surveyors, engineers and technicians that have designed hundreds of climate-ready culverts across the Northeast. Mr. Lawson and his team will be responsible for producing the 12 culvert designs called for in this project.

Town of Ipswich

Rick Clark, Director of Public works will provide design review for the culvert designs proposed in the Town of Ipswich, as well as guidance on the public engagement. Brendan Lynch, Conservation Agent will provide environmental and permitting input into the design process for the culverts proposed in Ipswich.

Town of Topsfield

David Bond, Director of Public Works will provide design review for culvert designs proposed in Topsfield. [Note Mr. Bond is in the process of retiring so his successor will likely perform this role.] Heidi Gaffney, Conservation Agent will provide environmental and permitting input into the design process for the culverts proposed in Topsfield, as well as guidance on public engagement.

7.4 Project Transferability, Measurement of Success, and Maintenance

This project is being proposed in part to be a model to increase the pace of implementation of climate-resilient culvert upgrades across the PIE-watersheds and throughout the Commonwealth. Project methods and results will be publicly available on both the IRWA and PIE-Rivers websites and will be actively shared with all 28 communities that are already part of the PIE-Rivers partnership via its <u>Municipal Services Program</u> and municipal representative network, including at its annual meeting. A synopsis of the project and its deliverables will be developed into a case study and will be shared with DER, presented at the local network meetings held by each of the two local planning agencies (Metropolitan Area and Merrimack Valley), posted in the <u>NAACC</u> database and proposed for presentation at the MA Association of Conservation Commissions Conference, the largest environmental conference in New England, as well as other regional conferences following the project period.

As a planning & design project, measuring and monitoring success can be achieved via the successful implementation of project deliverables. The degree to which projects are lined up for future implementation funding will be used as a primary metric of success. As part of the case study development above, project partners will be interviewed before the end of the project to assist in evaluating project success and to inform future efforts.

7.5 Community Outreach, Education, and Engagement

Each of the direct abutters and vulnerable property owners potentially influenced by the future implementation of each of the 12 projects will be individually contacted and engaged. The project will be posted on the IRWA, PIE-Rivers and municipal websites. One regional public meeting will be held near the project end to share project results and inform implementation. Abutter and public feedback will be solicited during each of these efforts and incorporated into the project, its case study and subsequent implementation phases.

7.6 Incorporation of Nature-Based Solutions and Strategies

Healthy, resilient natural communities along streams and wetlands can be one of nature's best defenses to climate change and provide multiple co-benefits including flood control and prevention, habitat restoration (including aquatic organism passage), improved recreational opportunities, increased public safety, increase protection of municipal infrastructure and reduce long-term costs. Although the project will facilitate culvert replacements, these will be designed to the extent feasible to *eliminate* the impact of the structures on natural processes thereby allowing natural communities and resources to function without human interference maximizing their resiliency. As such, upgrading culverts to meet the Stream Crossing Standards and for future climatic conditions is in fact a nature-based solution.

7.7 Timeline, Scope, and Budget

As a design project with an exceptional amount of foundational work at these sites conducted by the same project partners, completing the project during the last 5-6 months of FY 20 is achievable based on the following timeline:

| Project Timeline 2020 | January | February | March | April | May | June |
|---|---------|----------|-------|-------|-----|------|
| | | | | | | |
| Task 0: Kickoff Meeting | | | | | | |
| | | | | | | |
| Task 1: Provide 30% designs on 12 culverts | | | | | | |
| | | | | | | |
| Task 5: Project management, oversight and reporting | | | | | | |

Budget Narrative

TU will develop & provide the design plans based on a flat fee per site basis as part of Task 1. This will be matched by TU in-kind funds and the approved NFWF grant on a flat per site basis. Costs for these tasks are to cover the incremental costs to bring the conceptual design plans in the NFWF project up to the 30% design level. IRWA staff will conduct project management and community engagement/outreach tasks at their all-in hourly rate. Town DPW and Conservation staff will provide design review, feasibility assessments and inform community engagement as match based upon their hourly all-in rates. See Attachment B for complete project budget.

8. Attach Yearly Progress Report (use EEA-provided template in Attachment F)

9. Attach Statement of Match (described in Section 1H)

<u>11/14/19</u> Date <u>See attached commitment letter</u> Signature of Chief Municipal Officer

> <u>Alan Benson, Town Administrator</u> Name and Title (Typed)

2020

Duration of Term

Mailing Address: Town Hall, 7A Spofford Pond Road

Boxford, MA 01921

Telephone: (978) <u>887-6000</u>

Attachment B: Budget

Please use the template on COMMBUYS and attach to the application in both Excel and PDF formats.

| | FY20 MVP Action Grant Scope Template | | | | |
|---|---|-----------|--------------|-------------|--------------|
| Project Task Description | Deliverables | Due Date | Grant | Match | Total |
| Tasks to be Completed by June 20, 2020 | | | | | |
| Task 0: Kick-off meeting with Town, EEA, and Consultant | Meeting notes, sign-in sheet | 2/15/2020 | N/A | N/A | N/A |
| Task 1: | | | | | |
| Provide 30% designs on 12 culverts | twelve, 30% design plans, DPW and Concom review of 12 plans | 6/15/2020 | \$ 42,000.00 | \$ 9,360.00 | \$ 51,360.00 |
| Total Task 1 Cost | | | \$ 42,000.00 | \$ 9,360.00 | \$ 51,360.00 |
| Task 2: | | | | | |
| Project Management, case study & funding plan | Successful project, case study and project reports | 6/30/2020 | | \$ 6,000.00 | |
| Total Task 2 Cost | | | \$ 3,855.00 | \$6,000.00 | \$ 9,855.00 |
| TOTAL PROJECT COST FY20 | | | \$ 45,855.00 | \$15,360.00 | \$ 61,215.00 |
| | | | | | |
| TOTAL PROJECT COST OVERALL | | | \$ 45,855.00 | \$15,360.00 | \$ 61,215.00 |

| | GRANT | | | | | | | | | | | | | |
|---|-------|------------|----------------------|------------|----------------|--------|----------------|--------|------|-----------------------|-------------|----------|-------------|--|
| | | | | Project Te | eam Ho | urs | | | | Total Task (Grant) | | | | |
| | IRW. | A Director | irector IRWA Manager | | Position/Title | | Position/Title | | Unit | Quanity | Unit Cost | Total | (2.2) | |
| Hourly Rate | | 60.00 | | \$45.00 | | \$0.00 | | \$0.00 | Х | Х | Х | Х | | |
| Tasks to be Completed by June 20, 2020 | | | | | | | | | | | | | | |
| Task 1: | Hours | Total | Hours | Total | Hours | Total | Hours | Total | | | | | | |
| provide twelve 30% design plans | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | | 12 | \$ 3,500.00 | \$42,000 | \$42,000.00 | |
| Total Task 1 Cost | | | | | | | | | | | | | \$42,000.00 | |
| Task 2: | | | | | | | | | | | | | | |
| Project Management & Meeting attendance | 23 | \$1,380.00 | 55 | \$2,475.00 | 0 | \$0.00 | 0 | \$0.00 | | 0 | \$- | \$0 | \$3,855.00 | |
| Total Task 2 Cost | | | | | | | | | | | | | \$3,855.00 | |
| rotal PROJECT COST FY20 | | | | | | | | | | \$45,855.00 | | | | |

| IN-KIND / CASH MATCH | | | | | | | | | | | | | |
|----------------------|---------------------------------|---------|-------------|--------|-------------|----------------|--------|------|---------|-------------------------|-------------|---------|-------------|
| | Project Team Hours Direct Costs | | | | | | | | | | | | Total Task |
| DPW Directors x 3 | | Conco | m Agent x 3 | Pos | ition/Title | Position/Title | | Unit | Quanity | Quanity Unit Cost Total | | (Match) | |
| | \$90.00 | \$60.00 | | \$0.00 | | \$0.00 | | Х | Х | | Х | Х | |
| | | | | | | | | | | | | | |
| Hours | Total | Hours | Total | Hours | Total | Hours | Total | | | | | | |
| 24 | \$2,160.00 | 20 | \$1,200.00 | 0 | \$0.00 | 0 | \$0.00 | | 12 | \$ | 500.00 | \$6,000 | \$9,360.00 |
| | | | | | | | | | | | | | \$9,360.00 |
| | | | | | | | | | | | | | |
| 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | 0 | \$0.00 | | 12 | \$ | 500.00 | \$6,000 | \$6,000.00 |
| | | | | | | | | | | | | | \$6,000.00 |
| | | | | | | | | | | | \$15,360.00 | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | \$15,360.00 |

Attachment F: MVP Yearly Progress Report Template

MUNICIPAL VULNERABILITY PREPAREDNESS PROGRAM FY 20

MVP ACTION GRANT RFR ENV 20 MVP 02

Executive Office of Energy and Environmental Affairs

Municipal Vulnerability Preparedness Program Yearly Progress Report

July 1, 2018-June 30, 2019 Reporting Period



N.B. THE TOWN OF BOXFORD WAS DESIGNATED AN MVP COMMUNITY ON SEPTEMBER 9, 2019. THE FIRST YEARLY PROGRESS REPORT FROM BOXFORD WILL BE DUE JUNE 30, 2020. THIS IS AN INTERIM REPORT TO ACCOMPANY AN ACTION GRANT APPLICATION.

Date: **11-7-2019 Interim Report** Municipality: **Boxford** Local MVP Contact Name: **Ross Povenmire**

- 1. Please list your municipalities' top priority actions, in order of priority, identified through the MVP planning process.
- Establish a tree/vegetation maintenance program (1/3/5 year cycle); increase coordination between the Town and National Grid; bury power lines, where feasible.
- Identify and fix roads/culverts/bridges that prevent access in emergencies.
- Support/create robust municipal infrastructure: power supply and people.
- Educate the community by identifying impacts to the environment, vulnerabilities, and volunteers.
- 2. Has your Core Team reconvened since your Listening Session? If so, describe the process and any revisions or updates your team made to the original MVP Report? Please list your MVP Core Team members and note any new members.

Core Team members are Ross Povenmire (Boxford Director of Land Use and Local MVP Contact), Alan Benson (Boxford Town Administrator), Chris Olbrot (DPW Superintendent replacing former Super. John Dold on MVP Core Team), Robert Hazelwood (Boxford Emergency Management Director), Patrick Canonica (Planning Board Liaison), and Susan Inman (Assistant Town Administrator. We met after the listening session to edit the draft report and approve the final report. We also met on 11-13-2019 to approve the regional

MVP Action Grant application for the Howlett Brook Watershed.

3. Discuss any other work related to the MVP process or climate change resiliency in the municipality. In what ways has your municipality used the outcomes of your workshop in other planning efforts (e.g., updating existing local plans)?

The attached application for a regional MVP Action Grant is the first effort undertaken by the Town directly related to the MVP process.

4. Please list any grants that your municipality has applied for, or received, to implement actions from your MVP report. Please note grant awards or applications that advanced priority actions.

See attached grant application.

5. Please list any other steps that your municipality has taken towards implementing your priority actions.

None others to date.

6. Please list any potential next steps to advance priority actions during FY2020 (July 1, 2019 to June 30, 2020)?

A full response to this item will be provided in the Yearly Progress Report due June 30, 2020.

7. Please note any difficulties or challenges the community has identified through the MVP planning process or while seeking to implement priority actions and any steps the community has identified to address these challenges.

A full response to this item will be provided in the Yearly Progress Report due June 30, 2020.

8. Please identify any data needs or information gaps that the state could help fill.

A full response to this item will be provided in the Yearly Progress Report due June 30, 2020.