



FY20 Completed Action Grant Summaries



Municipal Vulnerability Preparedness Program
MA Executive Office of Energy and Environmental Affairs

MVP
Municipal Vulnerability
Preparedness

PROJECT TYPE Design and Permitting

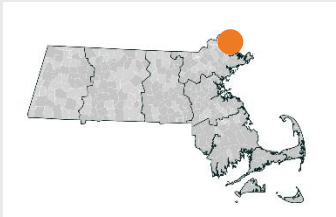
Nature Based Solutions

The Town sought designs and obtained permits to remove the dam and associated structures at 53 River Street to increase flood resiliency

Amesbury Open Space and Recreation Plan Update



Amsbury FY20



AWARD

\$37,500

MATCH

\$12,538

PROJECT TYPE

Planning and Design

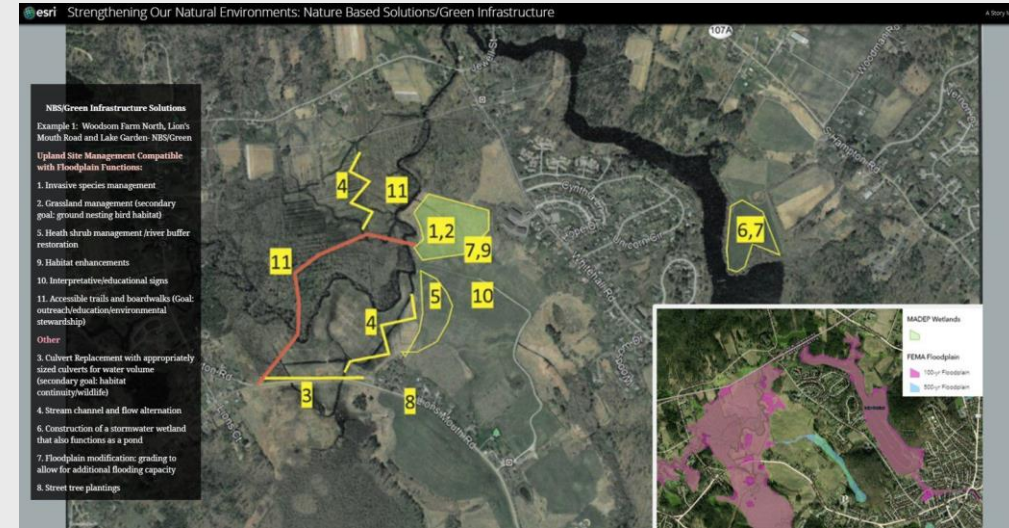
CORE PRINCIPLES
DEMONSTRATED

Furthering a community identified priority action to address climate change impacts:

DESCRIPTION

Project Priorities:

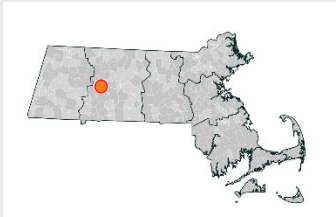
- Prepare a 2020-2027 Open Space and Recreation Plan.
- Integrate planning to increase the resiliency of vulnerable populations into the OSRP planning process.
- Integrate downscaled climate data for the Merrimack River Watershed.
- Integrate the information and mapping generated during the MVP expanded scope NRIA project into the OSRP planning process and the final OSRP.
- Provide community outreach and education as part of the OSRP planning process to educate the Amesbury community on opportunities to increase climate resilience, particularly nature-based solutions, and to educate the Amesbury community about the OSRP and associated opportunities.



Climate Action, Adaptation and Resilience Plan



Amherst FY 20



Learn more:

[Climate Action, Adaptation and Resilience Plan](#)

AWARD

\$100,000

PROJECT TYPE

Detailed Planning Document; Community Outreach and Education; Energy Resilience Strategies

CORE PRINCIPLES DEMONSTRATED

Utilizing climate change data for a proactive solution; Increasing equitable outcomes for and supporting strong partnerships with EJ and climate vulnerable pops.; Conducting robust community engagement

DESCRIPTION

Development of a Climate Action, Adaptation and Resiliency Plan that proposes ambitious goals for decarbonization, movement towards 100% renewable energy and resiliency strategies developed through a process of widespread and equitable community engagement



Aerial view of Amherst
Photo credit: Lion Hirth

1. Amherst's Climate Goals

- 25% below 2016 levels by 2025
- 50% below 2016 levels by 2030
- Carbon neutrality compared to 2016 levels by 2050

2. Plan Principles

- Equity, Accessibility, and Belonging
- Racial and Climate Justice
- Local Wealth Creation and Fair Distribution
- Community Involvement and Connections

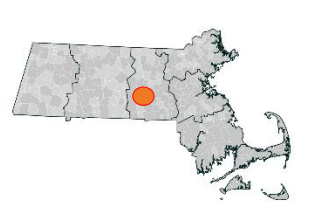
Evaluating Strategies for Action

- Emissions and Costs
- Equity and Resilience
- Leaders, Partners, Existing Resources
- Metrics, Milestones, Readiness

Protection Measures for Vulnerable Drinking Water Supply Areas and Green Bridge Design



Auburn FY20



Learn More:

[BMPs to Protect Drinking Water Supply Areas](#)
[Project video filmed by Auburn Cable TV](#)



AWARD

\$145,452

PROJECT TYPE

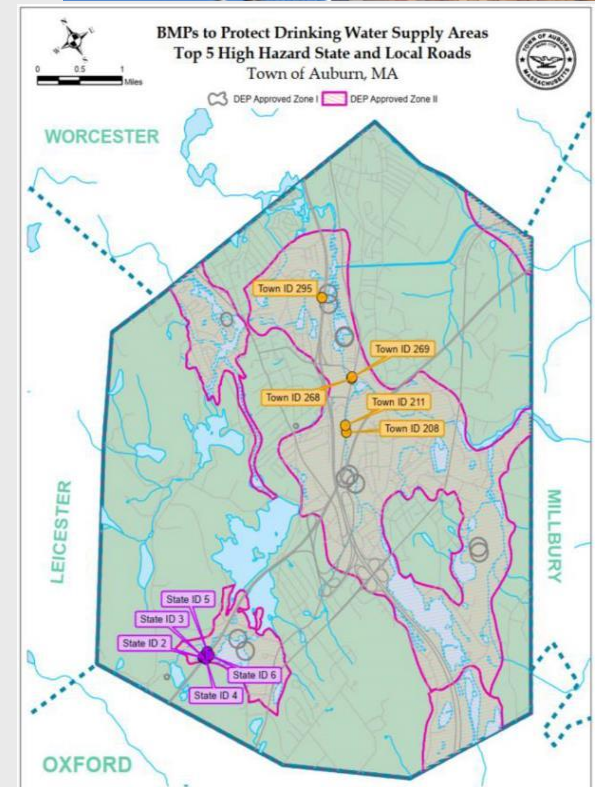
Planning, Assessment, Design

CORE PRINCIPLES
DEMONSTRATED

Furthering a community identified priority action to address climate change impacts

DESCRIPTION

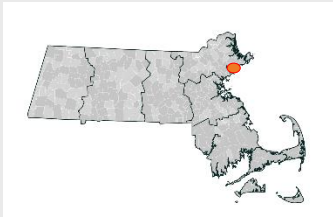
- This project allowed the Town to develop protection measures for their water supply by documenting areas along town and state roadways that are at high risk of stormwater contamination and prioritizing improvements with best management practices.
- Developing conceptual designs for a “green” bridge to replace failing culverts that convey the Kettle Brook under Sword Street advances the town’s goal to replace the existing infrastructure and maintain the roadway as a local evacuation route.



Resilient Together: Beverly and Salem's Climate Action and Resilience Plan



Beverly/Salem FY 20



Learn more:

[Resilient Together Dashboard](#)

AWARD

\$187,500

PROJECT TYPE

Detailed Planning Document; Community Outreach and Education; Local Plan

CORE PRINCIPLES DEMONSTRATED

Utilizing climate change data for a proactive solution; Conducting robust community engagement; Achieving broad and multiple community benefits; Utilizing regional solutions toward regional benefit

DESCRIPTION

- Developed regional climate action plan as roadmap to accomplish carbon neutrality by 2050.
- Utilized extensive community outreach methods to solicit and receive feedback from a significant and diverse range of community members.
- Included GHG emissions for both cities and separate toolkits for both residents and businesses, as well as online dashboard to continue outreach.



Shared Vision

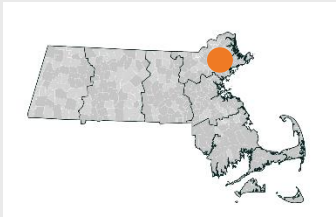
The Cities of Beverly and Salem, through the collective action of Resilient Together, will embrace both short-term and long-term solutions that reduce greenhouse gas emissions to achieve carbon neutrality by mid-century while ensuring that our communities are resilient to the impacts of climate change.

In doing so, Beverly and Salem will remain inclusive and thriving communities, attractive and accessible to diverse families and businesses, for generations to come.

Increasing regional flood resiliency through re-designing culverts in the Howlett Brook Watershed



Boxford FY20



AWARD

\$45,855

MATCH

\$45,855

PROJECT TYPE

Achieving broad and multiple community benefits

CORE PRINCIPLES
DEMONSTRATED

DESCRIPTION

Project Priorities:

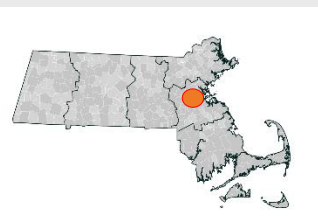
- Complete comprehensive regional culvert design project
- Provide 12 30% design plans based on the MA Stream Crossing Standards and future modeled climatic conditions
- Position the towns to pursue implementation funding, and when implemented, increase flood resiliency, reduce community risk, and restore natural habitats.



Urban Forest Climate Resiliency Master Plan



Brookline FY20



Learn More:

[Urban Forest Climate Resiliency Master Plan Project Webpage](#)

AWARD

\$112,500

PROJECT TYPE

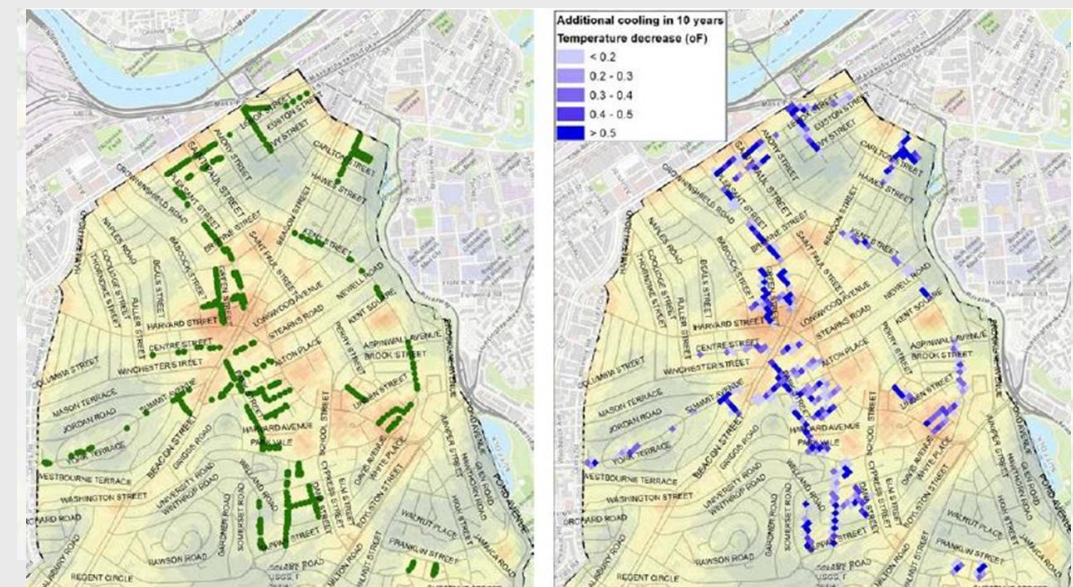
Local Bylaws, Ordinances, Plans and Other Management Measures

CORE PRINCIPLES
DEMONSTRATED

Employing Nature-Based Solutions; Furthering a Community Identified Priority Action to Address Climate Change Impacts; Increasing Equitable Outcomes for & Supporting Strong Partnerships with EJ Populations and Climate Vulnerable Populations

DESCRIPTION

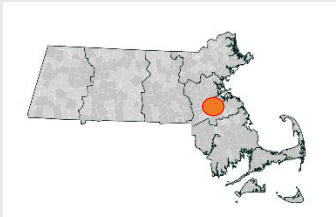
- Conducted a 3-part inventory of Brookline's urban forest (LiDAR, Stem-by-Stem, Soils)
- Evaluated needs across Brookline and identified areas/communities that are under-served in terms of tree planting and/or are more vulnerable to the impacts of climate change
- Developed actionable goals and recommendations to enhance the resiliency of Brookline's urban canopy to the impacts of climate change and to ensure equitable distribution of canopy.



Canton Climate Change Vulnerability and Resiliency Assessment Study



Canton FY20



Learn More:

[Canton Vulnerability and Resiliency Project Website](#)

AWARD

\$337,500

PROJECT TYPE

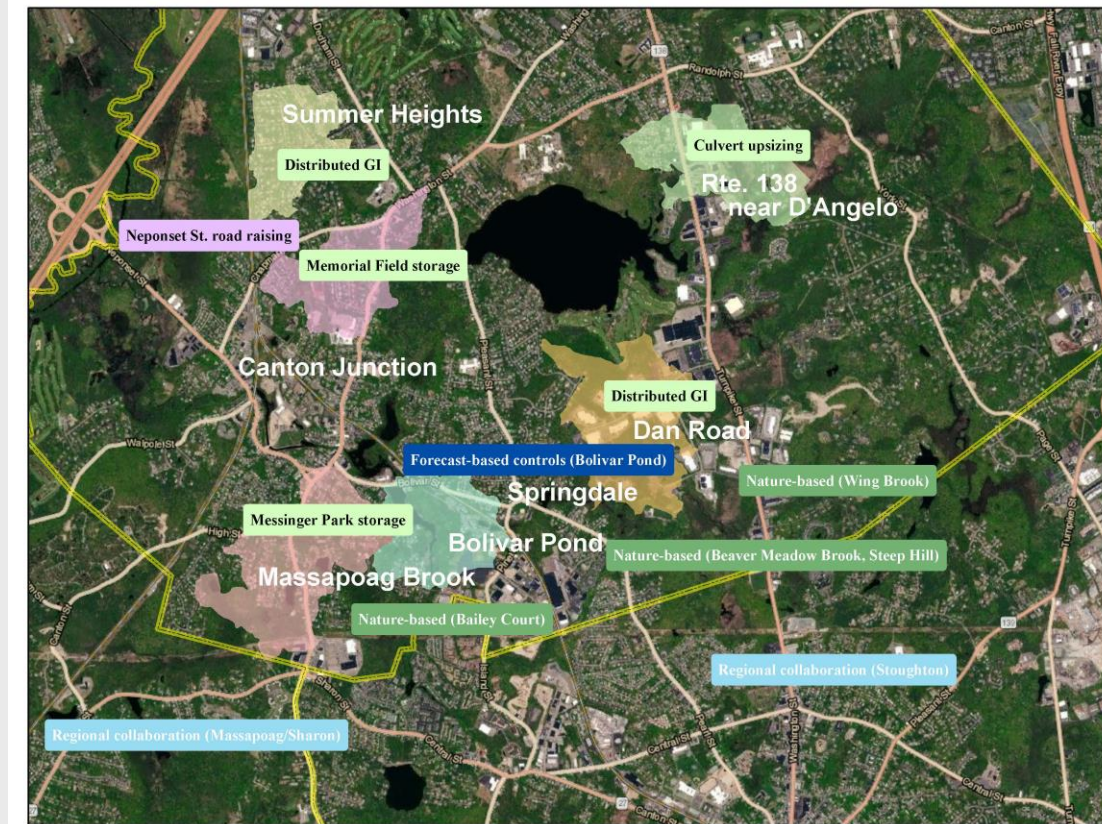
Climate Risk and Resiliency Study

CORE PRINCIPLES
DEMONSTRATED

Opportunity to use nature-based solutions to mitigate inland flooding caused by climate change

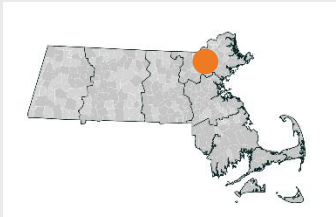
DESCRIPTION

- Used hydraulic and hydrologic modeling coupled with a community risk assessment to identify areas of high risk due to future inland flooding
- Identified a mix of nature-based storage and green infrastructure opportunities, active dam management, and gray infrastructure upgrades to mitigate future flooding Town-wide
- Community engagement included interactive workshops (virtual) to hear from residents their areas of flooding concern, developing public education tools for flood awareness



Dunshire Drive Phase 1

Chelmsford FY20



AWARD

\$83,545

PROJECT TYPE

Culvert Replacement and Deep Brook Stream Restoration

CORE PRINCIPLES
DEMONSTRATED

Furthering a community identified priority action
to address climate change impacts

DESCRIPTION

Project Priorities:

- Redesign undersized infrastructure
- Develop ecological and stream restoration plan
- Increase resiliency of neighborhood and its roadways, and reduce flooding

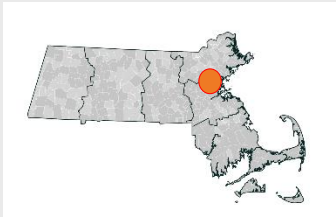


Island End River Flood Resilience Project

City of Chelsea & City of Everett



Chelsea & Everett FY20-FY21



Learn More:

- [Island End Park Resilient Design](#)
- [Island End River Flood Resilience Project](#)

AWARD

\$454,555.00

PROJECT TYPE

Design, Permitting, Analysis, Financing

CORE PRINCIPLES
DEMONSTRATED

Employing Nature-Based Solutions; Increasing equitable outcomes for and supporting strong partnerships with EJ Populations, Utilizing regional solutions towards regional benefit; Furthering community identified priority action to address climate change impacts

DESCRIPTION

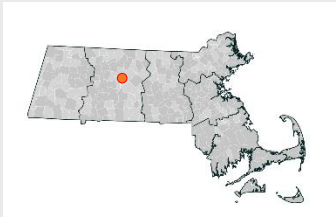
- Conducted deep community engagement within the context of flood resilience and broader climate impacts with residents, schools, stakeholders
- Completed environmental analysis, permitting, land acquisition, engineering, and design of coastal barrier solution in Chelsea and a portion of Everett
- Engaged state level and federal level entities to assess feasibility of permitting, financing, and implementation of a flood barrier at the Island End River flood pathway



Reducing Flooding Vulnerability in Deerfield



Deerfield FY20



Learn More:

[Project Website](#)

AWARD

\$572,250 (FY20)

MATCH

\$192,888

PROJECT TYPE

Action

**CORE PRINCIPLES
DEMONSTRATED**

Community Outreach and Education, Local Bylaws, Ordinances, Plans, and Other Management Measures, Redesigns and Retrofits, Nature-Based Flood Protection

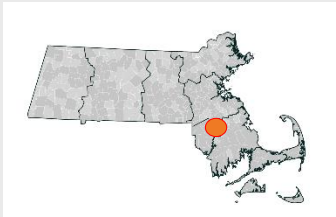
DESCRIPTION

- Replacement of the top priority Kelleher Drive failed culvert with more resilient culvert with improved wildlife passage
- Installation green streets infrastructure in the town center and rain gardens at the Deerfield Elementary School.
- Design of green parking lots at Frontier Regional High School and in the town center
- Design of a new green entranceway at Deerfield Elementary School and the design of green streets and rain gardens
- Revisions to Deerfield zoning and other bylaws to promote climate resiliency and low impact development
- Engaging Deerfield youth at Frontier High School in working on climate resiliency.



Wetland Restoration – Removal of Abandoned Structures (Sam Wright Field)

Easton FY19-22



Learn More:

[Sam Wright Field Project](#)

[Canoe River Resiliency Project](#)

AWARD

\$177,620.00 actual is \$70,832.49

MATCH

\$ 77, 590.52 actual is
\$35,189.42

PROJECT TYPE

Construction and On-the-Ground Implementation

**CORE PRINCIPLES
DEMONSTRATED**

Furthering Community Priorities, Employing Nature Based Solutions, Achieving Multiple Community Benefits, Pursuing Innovative/Transferable Approaches

DESCRIPTION

Restore historic wetland/floodplain at former agricultural site

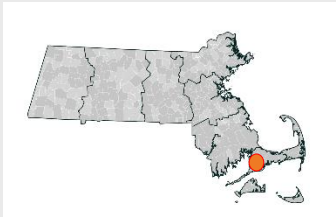
- Remove derelict buildings/ impervious cover
- Remove 23,000 sf of fill to restore wetland/floodplain
- Volunteer invasive species monitoring program



Coonamessett River Restoration Project: Phase 2



Falmouth FY19



Learn More:

- [Coonamessett River Trust](#)
- [Coonamessett Greenway Heritage Trail](#)

AWARD \$760,000 **MATCH** \$1.17 million

PROJECT TYPE Construction and On-the-Ground Implementation

CORE PRINCIPLES DEMONSTRATED Employing Nature-Based Solutions; Achieving Broad and Multiple Community Benefits

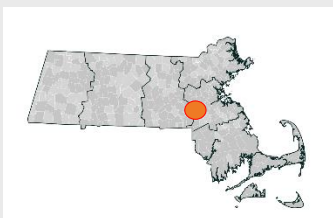
- DESCRIPTION**
- Leveraged a multitude of partners and funding sources to make a broad impact in the community.
 - Included restoring a cranberry bog to its natural self-sustaining wetland, re-establishing floodplain connectivity, and improving a historic herring run.
 - Community engagement included an “adopt-a-herring” program and outdoor classrooms.



City Stormwater Utility Study



City of Framingham, FY20



Learn more:

- [City of Framingham MVP Report](#)
- [Stormwater Management in Framingham](#)

AWARD

\$207,000 (grant total); \$55,000 for utility study

PROJECT TYPE

Stormwater & Flood Mitigation Planning

CORE PRINCIPLES DEMONSTRATED

Furthering a Community Identified Priority Action;
Conducting Robust Community Engagement

DESCRIPTION

- Expanded on existing efforts to develop a ready-to-implement stormwater utility
- Created a public engagement plan and developed public education materials in English & Spanish
- Developed a credit policy that encourages on-site stormwater management using nature-based solutions and creates a more equitable fee structure for Climate Vulnerable Populations



UPCOMING EVENTS

about the
FRAMINGHAM STORMWATER ENTERPRISE FUND

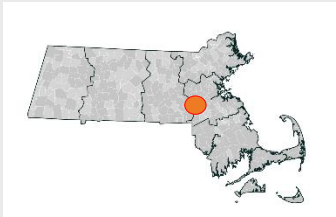


Please come to share **your questions and concerns!**

We will present the information on the **stormwater management budget** and how a **stormwater enterprise fund** would function in Framingham

Walnut Street Flood Mitigation Study

City of Framingham, FY20



Learn more:

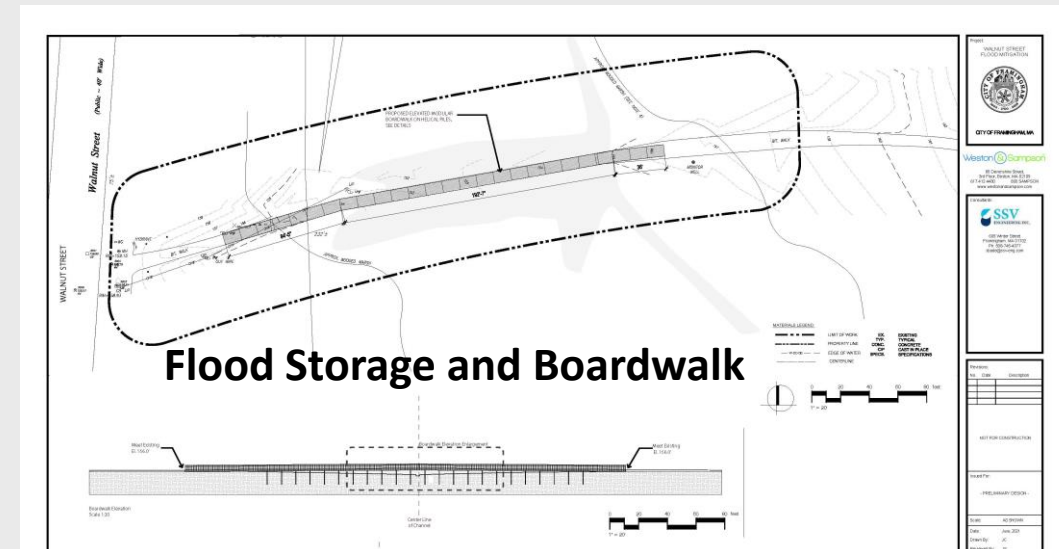
- [City of Framingham MVP Report](#)
- [Stormwater Management in Framingham](#)

AWARD \$207,000 (grant total); \$152,000 for flood study

PROJECT TYPE Flood Mitigation Designs

CORE PRINCIPLES DEMONSTRATED Nature based flood protection, reduce vulnerability to climate change impacts, ecological restoration/habitat management

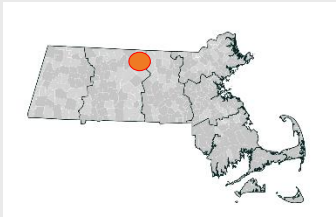
- DESCRIPTION**
- Developed and evaluated flood mitigation design alternatives
 - Enhanced flood storage capacity
 - Restoration and ecological enhancement to return natural habitat and function to floodplains



Wheelock Street Culvert Replacement Design



Erving FY20



AWARD \$40,000

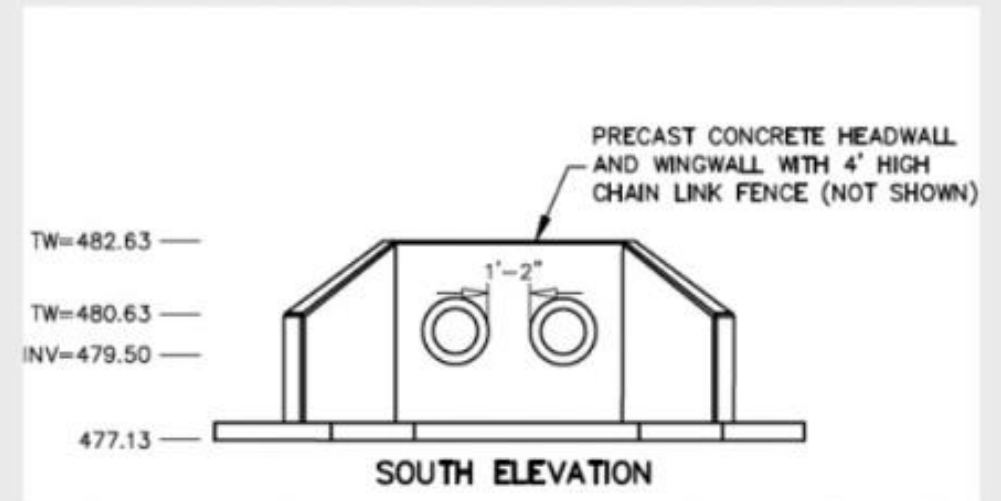
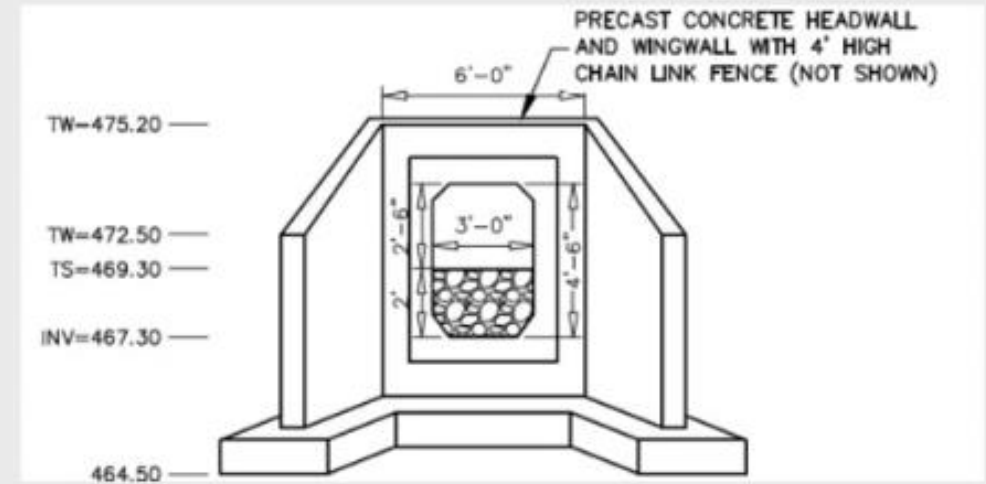
PROJECT TYPE Design and Permitting

CORE PRINCIPLES DEMONSTRATED Addressing climate change impacts

DESCRIPTION

Replaced two failing and undersized stream crossings:

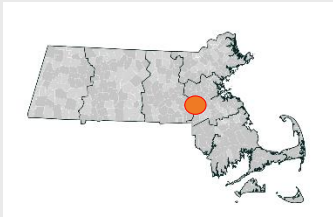
- 30" CMP replaced with 3' x 4.5' precast concrete box culvert lined with native stone
- 12" HDPE replaced with two 15" reinforced concrete pipes and concrete headwalls
- Wetland replication area
- No unnecessary PVC coating on chain-link safety fence to reduce plastics use and the environmental and human health impacts of PVC production



Walnut Street Flood Mitigation Study



City of Framingham, FY20



Learn more:

- [City of Framingham MVP Report](#)
- [Stormwater Management in Framingham](#)

AWARD

\$207,000 (grant total); \$152,000 for flood study

PROJECT TYPE

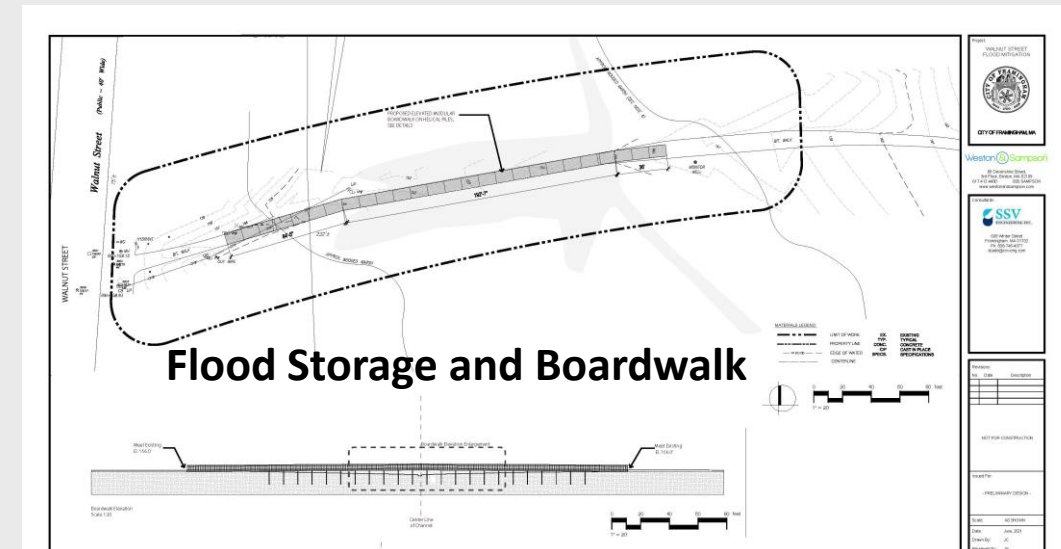
Flood Mitigation Designs

CORE PRINCIPLES DEMONSTRATED

Nature based flood protection, reduce vulnerability to climate change impacts, ecological restoration/habitat management

DESCRIPTION

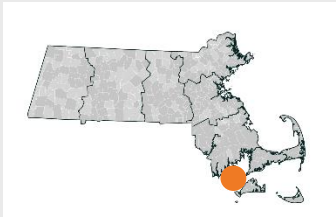
- Developed and evaluated flood mitigation design alternatives
- Enhanced flood storage capacity
- Restoration and ecological enhancement to return natural habitat and function to floodplains



Cuttyhunk Land Conservation Project



Gosnold FY20



AWARD

\$1,400,000

MATCH

\$1,400,000

PROJECT TYPE

Land Acquisition for Conservation

CORE PRINCIPLES
DEMONSTRATED

Committing to monitoring project success and
maintaining the project into the future

DESCRIPTION

Project Priorities:

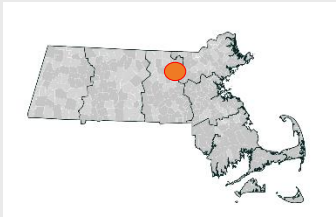
- The direct purchase of land by the Town of Gosnold and their partner the Buzzards Bay Coalition (67 acres)
- Purchase of permanent conservation restrictions on these lands
- Protect harbor for public safety and protect drinking water source as well as prevent future development



Harvard Climate Action and Land Stewardship Plan



Harvard FY20



Learn More:

[Primary Project/Program Website](#)

[Agricultural Climate Action Plan Website](#)

AWARD

\$70,860

PROJECT TYPE

Detailed Vulnerability and Risk Assessment and Further Planning; Community Outreach and Education; Local Bylaws, Ordinances, Plans, and Other Management Measures

CORE PRINCIPLES
DEMONSTRATED

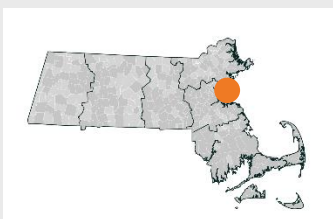
Furthering a community identified priority to achieve broad and multiple community benefits

DESCRIPTION

Development of an Agricultural Sector Climate Action Plan and the outline and high-impact actions for a full Climate Action Plan. The Agricultural Plan also included a full marketing and branding program, logo, website, map, and brochure.



Hull FY20



AWARD

\$25,373

MATCH

\$8,850

PROJECT TYPE

Vulnerability Assessment and Nature based solutions

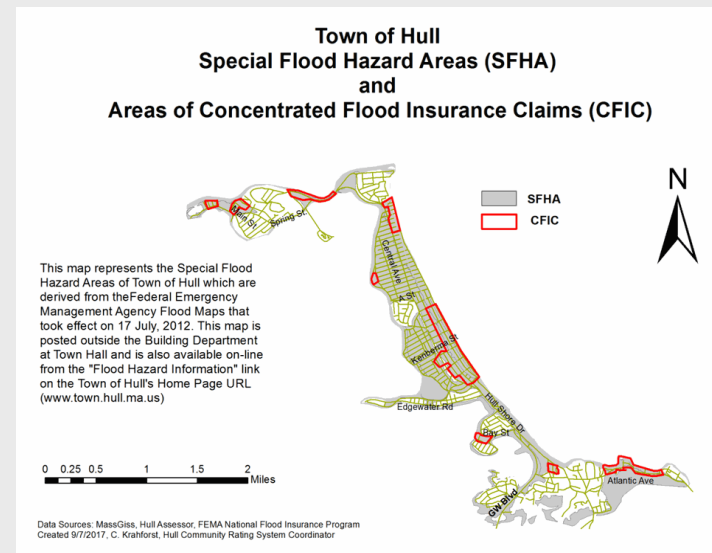
CORE PRINCIPLES
DEMONSTRATED

Committing to monitoring project success and maintaining the project into the future

DESCRIPTION

Project Priorities:

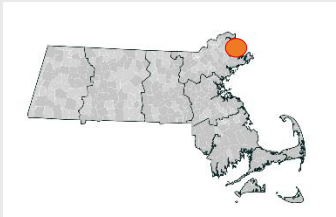
- Flood Protection Alternatives Assessment
- Improve long-term resiliency to frequent coastal storm events
- Evaluation of historical site information, coastal flooding data, and future sea level rise information
- Coastal processes analysis



Ipswich River Sewer Interceptor and Siphon Risk Mitigation and Resiliency Improvements Design



Ipswich FY20



AWARD

\$18,945

MATCH

\$7,093

PROJECT TYPE

Redesigns and Retrofits; Nature Based Flood Protection, Drought Mitigation, Water , Quality, and Water Infiltration Techniques; Ecological Restoration and Habitat , Management to Increase Resiliency; - Nature-Based Solutions to Reduce , Vulnerability to other Climate Change Impacts

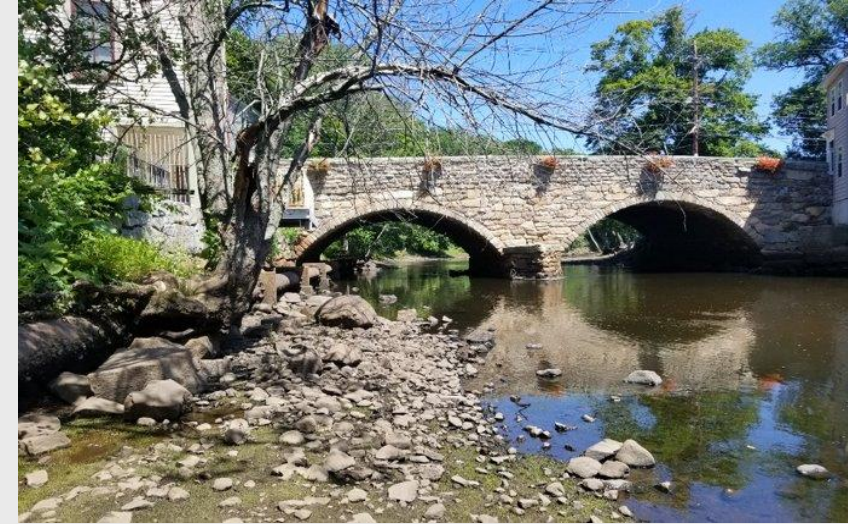
CORE PRINCIPLES DEMONSTRATED

Employing Nature-Based Solutions (NBS)

DESCRIPTION

Project Priorities:

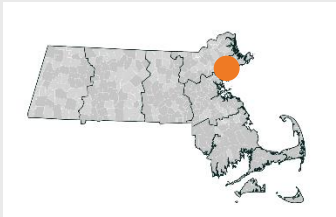
- Nature Based Solutions to stabilize and improve natural systems
- Resiliency of sewer system to protect properties, natural habitat, and beaches
- Reduce riverbed scour
- Establish marine habitat



Strawberry Brook Watershed Flood Relief



Lynn FY20



AWARD

\$112,500

MATCH

\$37,500

PROJECT TYPE

Detailed Vulnerability and Risk Assessment

CORE PRINCIPLES
DEMONSTRATED

DESCRIPTION

Project Priorities:

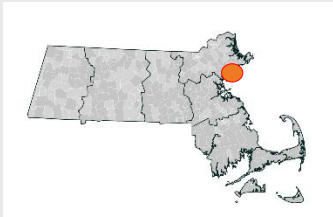
- Develop hydraulic model to understand stream and stormwater flows
- Assess drainage system to identify deficiencies
- Explore channel cleaning and culvert improvements to improve flow
- Evaluate climate factors that could have future impacts



Sawmill Brook Central Pond Restoration Project Phase 2: Permitting and Design



Manchester By The Sea FY20-21



Learn More:

[Manchester By The Sea Restoration Project Website](#)

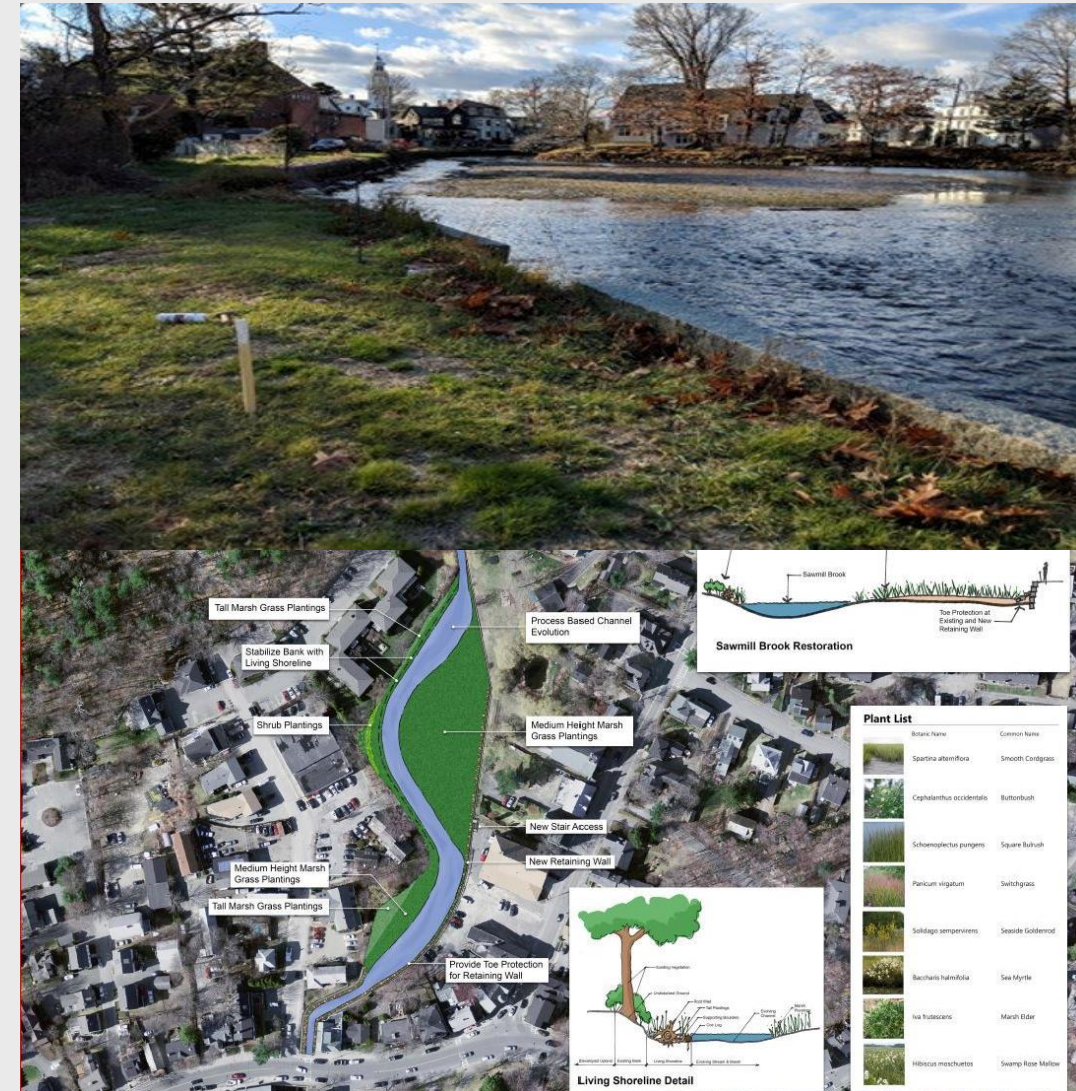
AWARD \$72,385

PROJECT TYPE Design and Permitting

CORE PRINCIPLES DEMONSTRATED Utilizing climate change data for a proactive solution, Employing Nature Based Solutions

DESCRIPTION The Central Pond Restoration design entails replacing or restoring walls along the sides of the Pond (both hard and soft solutions), restoring the pond interior to a tidal salt marsh, and drainage improvement

The goal for the second phase of the Central Pond Restoration is to obtain the necessary permits and develop the final design and specifications for the Pond Restoration elements in preparation for the third and final phase: construction.

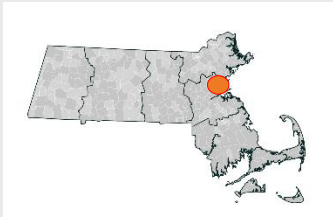


Plant List	
Botanic Name	Common Name
 <i>Spartina alterniflora</i>	Smooth Cordgrass
 <i>Cephalanthus occidentalis</i>	Butterbush
 <i>Schoenoplectus pungens</i>	Square Rush
 <i>Panicum virgatum</i>	Switchgrass
 <i>Solidago sempervirens</i>	Seaside Goldenrod
 <i>Baccharis halimifolia</i>	Sea Myrtle
 <i>Iva frutescens</i>	Marsh Elder
 <i>Hibiscus moscheutos</i>	Swamp Rose Mallow

Equity-Centered Process for Climate Action and Adaptation Planning



Medford / 2019-2021



Learn More:

[Project Website](#)

AWARD

\$36,136

PROJECT TYPE

Community Outreach and Education

CORE PRINCIPLES
DEMONSTRATED

Centering equity and the lived expertise of environmental justice communities

DESCRIPTION

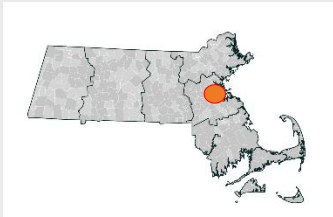
- Held one of a series of bilingual community dinners (modified due to the pandemic)
- Hosted an equity workshop to build a shared understanding of how addressing racism is central to climate planning
- Convened Outreach & Community Collaboration Working Group to center lived expertise of low-income communities and communities of color in Medford



Suitability Assessment for Equitable, Community-Driven Resilience Hubs in Medford



Medford FY20



Learn More:

[Medford Resiliency Project Website](#)

AWARD \$ 65,259.00

PROJECT TYPE Planning, Assessments, Capacity-Building, and Regulatory Updates

CORE PRINCIPLES DEMONSTRATED Increasing equitable outcomes for and supporting strong partnerships with Environmental Justice (EJ) Populations and Climate Vulnerable Populations; Conducting robust community engagement; Achieving broad and multiple community benefits; Pursuing innovative, transferable approaches

DESCRIPTION The Resilient Medford Resilience Hubs project aims to assess Medford's ability to withstand climate events from a public health perspective by 3 main tasks.

- Task 1 - Justly identify priority service areas for a pilot Resilience Hub based on neighborhood resources, sensitivity to climate change, and adaptive capacity.
- Task 2 - A) Evaluate adaptability of vulnerable residents and gauge community provider's readiness to climate impacts. B) Listen to residents on resilience concerns to amplify the voices of residents facing social inequities. Engage providers in discussions to understand resilient programming that would support their constituents.
- Task 3 - Explore areas within the identified service areas that may accommodate resilient programming, share the requirements of a Resilience Hub site and recommendations to advance equitable community resilience.

Results: The assessment revealed that residents were intrigued by Resilience Hubs but were skeptical of reliable community engagement and questioned for whom Hubs would truly serve. Similarly, local providers were interested in Resilience Hubs, but would like to further understand how a physical space would be attained and how a multi-use, co-located space would operate. It is clear that next steps must first lay a foundation of trust between community and City Hall through inclusive outreach and an active commitment from the city to practice anti-racism. Further planning is also needed to organize Resilience Hub coordination, communications, and operations.

Event in/Èvènman an/
Evento em/Evento en/
حدث
English/Kreyòl Ayisyen
/Português/Español/
العربية

CLIMATE &
COMMUNITY
RESILIENCE

**JOIN OUR COMMUNITY
CONVERSATION**

From risk to resiliency.

WHEN: SATURDAY, MAY 9

FROM: 9:00 - 10:30 AM

WHERE: ZOOM

BONUS: \$20 STOP&SHOP GIFT CARD

LIMITED SPACE - REGISTER ONLINE!

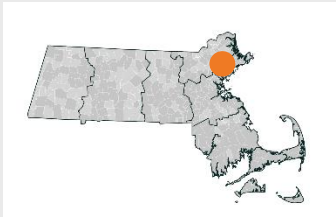
<http://www.medfordma.org/climate-community-resilience-may-9-2020/>

IN PARTNERSHIP WITH THE CITY OF MEDFORD BOARD OF HEALTH



City Hall Parking Lot Green Infrastructure Design

Melrose FY20



AWARD

\$70,313

MATCH

\$23,428

PROJECT TYPE

Nature Based Flood Solutions

CORE PRINCIPLES
DEMONSTRATED

Employing Nature-Based Solutions (NBS)

DESCRIPTION

Project Priorities:

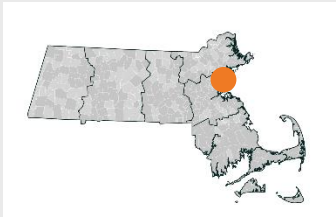
- Create rain gardens/bioswales to mitigate flooding in the parking lot from Dix Pond
- New drain line connections to the lot, improve stormwater filtration
- Replace paved areas with landscaping
- Educate the public with signage



Increasing the Resiliency of Short Beach on Nahant to Sea Level Rise: Access Point Restoration and Modification Plan



Nahant FY20



AWARD

\$35,565

MATCH

\$12,548

PROJECT TYPE

Detailed Vulnerability and Risk Assessment and Further Planning , Community Outreach and Education, Nature-Based Flood Protection, Ecological Restoration and Habitat Management to Increase Resiliency

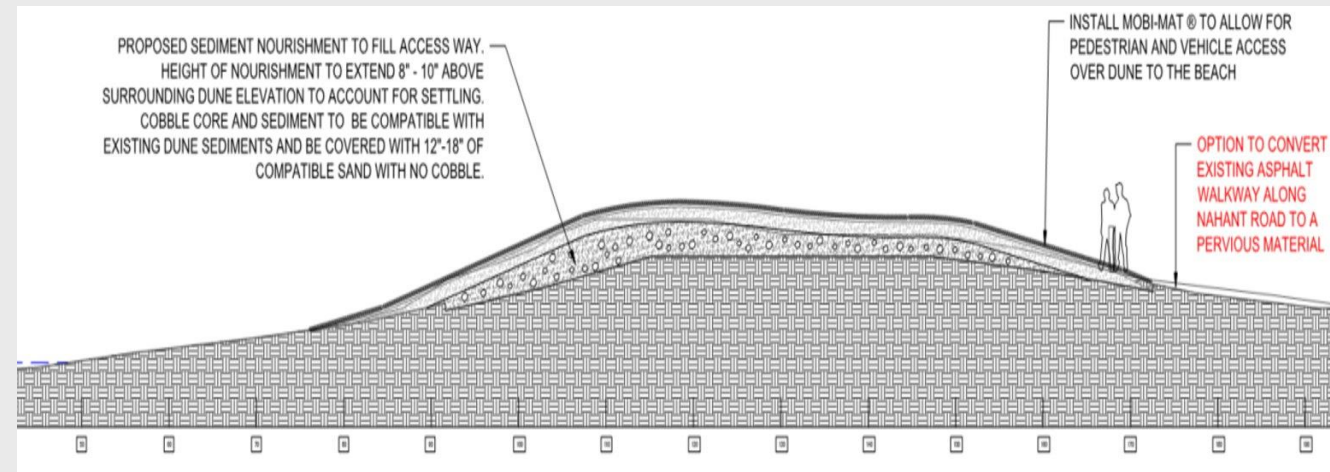
CORE PRINCIPLES DEMONSTRATED

Building community capacity for climate resilience

DESCRIPTION

Project Priorities & Results:

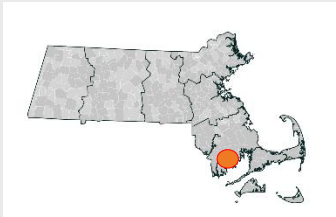
- Public Signage installed to educate community on Grant & Dune Grass as well as protective signage
- Public Outreach – Library Newsletter & Publications, Beach Cleanup and Dune Grass Plantings
- Permit Plans for Access Points and Dune Restoration



MC-FRM Evaluation and Resilience Design Guideline Development



New Bedford and Fairhaven FY20



Learn More:

[Project Website](#)

AWARD

\$58,662

PROJECT TYPE

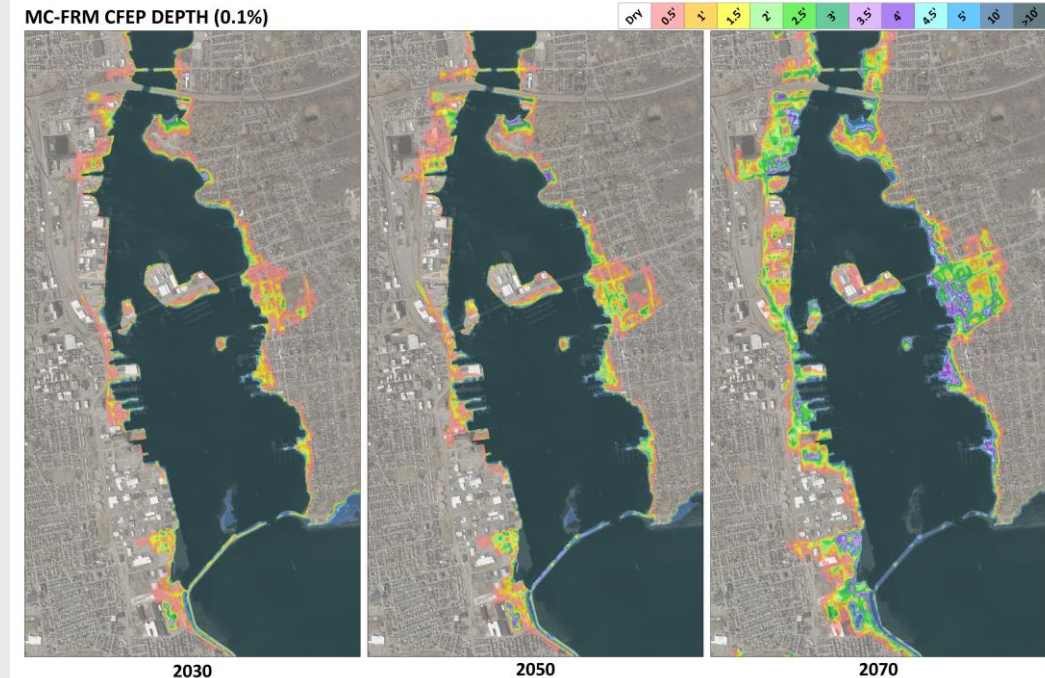
Detailed vulnerability and risk assessment and further planning, Community outreach and education

CORE PRINCIPLES
DEMONSTRATED

Utilizing climate data for proactive solutions, Furthering a community identified priority action to address climate change, Utilizing regional solutions for regional benefits

DESCRIPTION

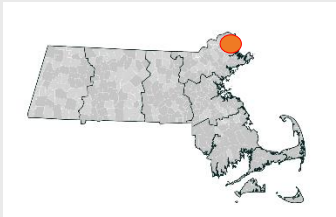
- Evaluating the sea level rise projections in New Bedford Harbor
- Developing Resilient Design Guidelines based on those projections and the project design life
- Engaging landowners, developers, employers, front line workers and other stakeholders in the Harbor
- Creating a Maritime Business Resilience Toolkit



Controlling Flooding and Addressing Future Climate Impacts through Replacement of Orchard St Culvert



Newbury FY20



Learn More:

[Newbury Orchard St Culvert Project Website](#)

AWARD

\$126,324

PROJECT TYPE

Design and Permitting

CORE PRINCIPLES DEMONSTRATED

Utilizing climate data for proactive solutions,
Achieving broad and diverse community benefits

DESCRIPTION

Design and permitting for upgrading an undersized culvert to benefit public safety, flood resilience and the ecology of the area

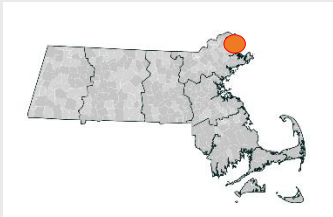
Surveying, data collection, preliminary engineering, hydraulic analysis and geotechnical investigation



Plum Island: Exploring the Fiscal and Economic Implications of Sea Level Rise



Newbury & Newburyport FY20



Learn More:

[Plum Island Project Website](#)

AWARD

\$217,451

PROJECT TYPE

Assessment

CORE PRINCIPLES
DEMONSTRATED

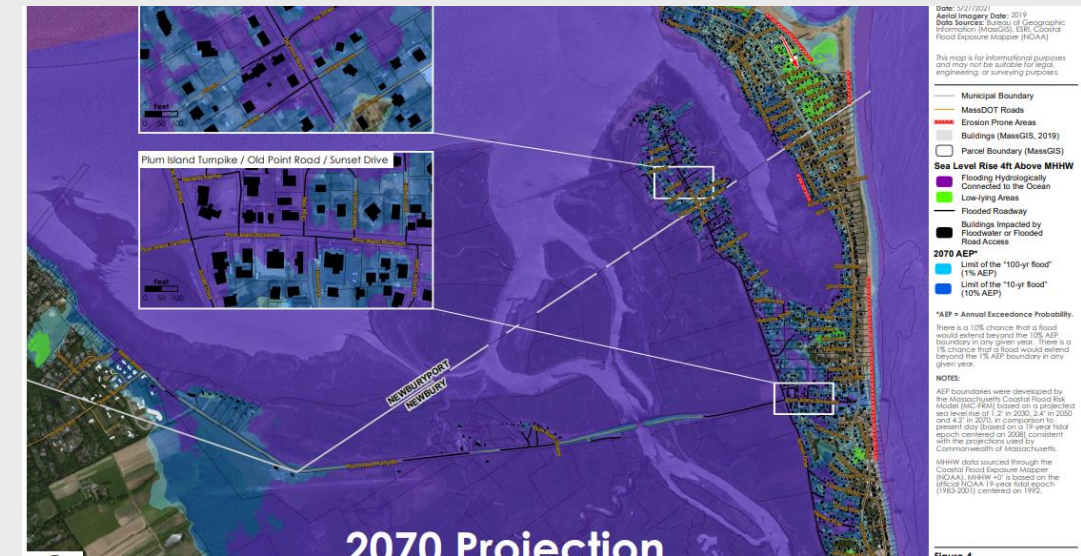
Utilizing climate data for proactive solutions,
Utilizing regional solutions toward regional benefit,
Pursuing innovative, transferable approaches

DESCRIPTION

The project goal was to lay the groundwork to better enable both communities to make thoughtful decisions regarding the challenges brought on by climate change for long-term planning for Plum Island

Economic and fiscal information was gathered to help the towns evaluate long-term management options for the island

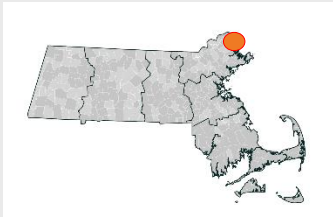
How can both communities responsibly manage the island, with all the public services that accompany that responsibility, and how can both communities prepare for change?



Resilient Critical Infrastructure: Adapting Wastewater Treatment Facility, Infrastructure, and Public Rail Trail to Future Sea Level Rise and Storm Surge



Newburyport FY 20



Learn More:

[Project Website](#)

AWARD \$71,160

PROJECT TYPE Design and Permitting

**CORE PRINCIPLES
DEMONSTRATED** Utilizing climate data for a proactive solution,
Achieving broad and diverse community benefits

DESCRIPTION First phase of multi-year effort to protect WWTF
and UGE, plus fill a critical gap in a Rail Trail
network

Develop design and permits for sloped stone
revetment, elevated berm, and Rail Trail along
1,100' section of shoreline

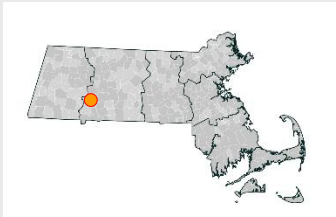
Cleanup PCB-contaminated soil



Restoring Pine Grove Golf Course through removing drainage infrastructure, restoring wetlands, and reforestation



Northampton FY20



AWARD \$225,000

PROJECT TYPE Nature-Based Solutions

**CORE PRINCIPLES
DEMONSTRATED** Nature-based solutions, Pursuing innovative,
transferable approaches

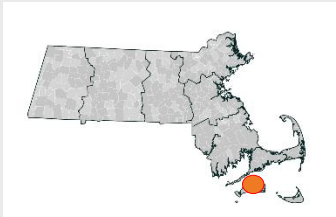
DESCRIPTION Restore historic hydrology patterns and wetlands,
reforest the golf course, plan for long term full
site restoration



Development of an Island-wide Adaptation Strategy



Oak Bluffs (for Martha's Vineyard)/FY20



Learn More:

[Martha's Vineyard Commission](#)

AWARD

\$54,000

PROJECT TYPE

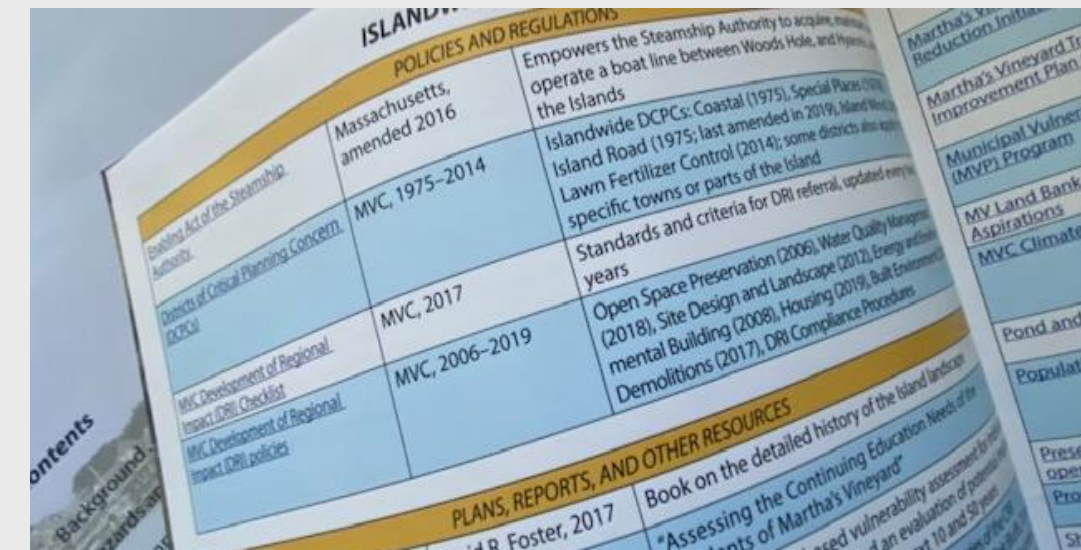
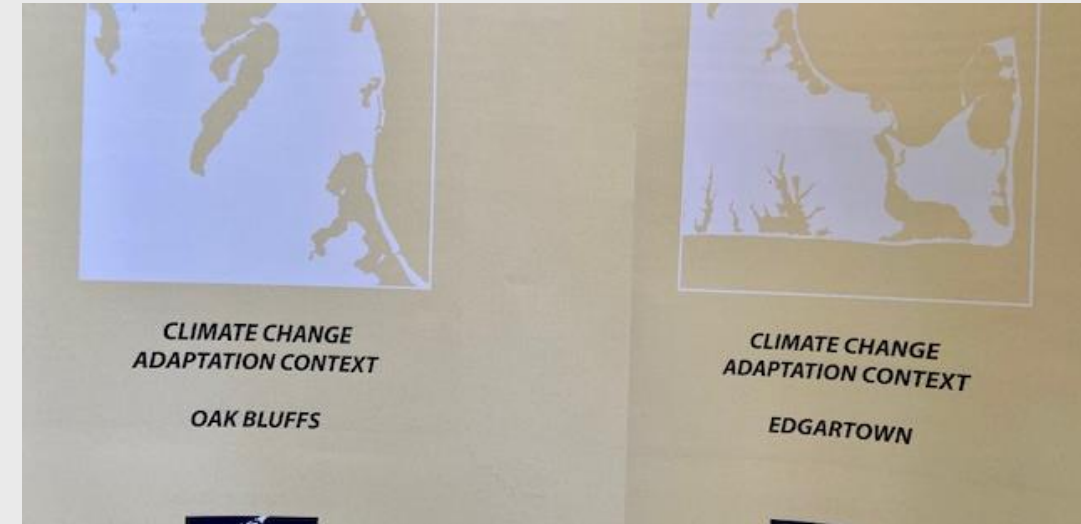
Phase I Climate Action Planning

**CORE PRINCIPLES
DEMONSTRATED**

Develop strong foundation for climate action plan

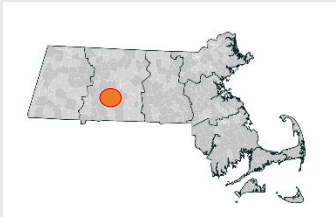
DESCRIPTION

- Gather and create database of climate-related documents
- Stakeholder listening sessions
- Develop climate adaptation resource booklets for six Island towns
- Present booklets to Select Boards



Route 181 Culvert Replacement & Culvert Infrastructure Assessment

Palmer FY20



Learn More:

[Palmer Culvert Project Website](#)

AWARD

\$19,500

MATCH \$6,500

PROJECT TYPE

Permitting & Design

**CORE PRINCIPLES
DEMONSTRATED**

Detailed vulnerability & risk assessment; Employing nature-based solutions; capacity building

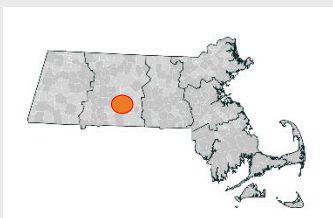
DESCRIPTION

Enhancement of water quality, protection of coldwater fisheries resource, restoration of natural stream processes, protection from flooding



MVP
Municipal Vulnerability
Preparedness

Learn more:



Project Website

AWARD

\$112,500.00

PROJECT TYPE

Town of Palmer Master Plan

CORE PRINCIPLES DEMONSTRATED

Furthering a community identified priority action to address climate change impacts; Conducting robust community engagement; Committing to monitoring project success and maintaining the project into the future

DESCRIPTION

- This project consisted of creating a ten-year Master Plan in accordance with M.G.L. c. 41, § 81D addressing the nine critical areas as well as adding new Chapters entitled Climate Adaptation and Sustainability and Planning for a Healthy Community with a corresponding Health Addendum
- The 18-month process began in March 2020 and began with a community tour, followed by 7 public forums, 2 public surveys, an economic roundtable and 14 steering committee meetings developing results for the 4 following focused efforts:
 1. Identifying Palmers' challenges & opportunities
 2. Setting Palmers' shared visions & supporting goals
 3. Developing and prioritizing supporting actions
 4. Creating an accountable implementation program



PARTICIPATE
IN THE 6TH
PUBLIC
MEETING

PALMER MASTER PLAN

<http://palmermasterplan.com/>

EXPLORE AND DISCUSS PALMER'S SUSTAINABILITY AND CLIMATE RESILIENCE

December 17th - 6:30 PM to 8:30 PM

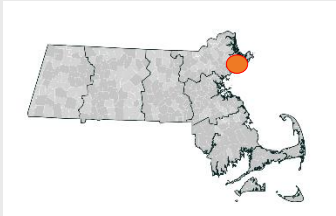
Join us virtually through Zoom: <https://tinyurl.com/palmermpsustain>

Join us by phone: 1 (312) 626-6799, Webinar ID: 994 1103 8783

Resilient North River Canal Corridor Phase 2



Peabody FY20



Learn More:

[Peabody Projects Page](#)

AWARD

\$365,014

PROJECT TYPE

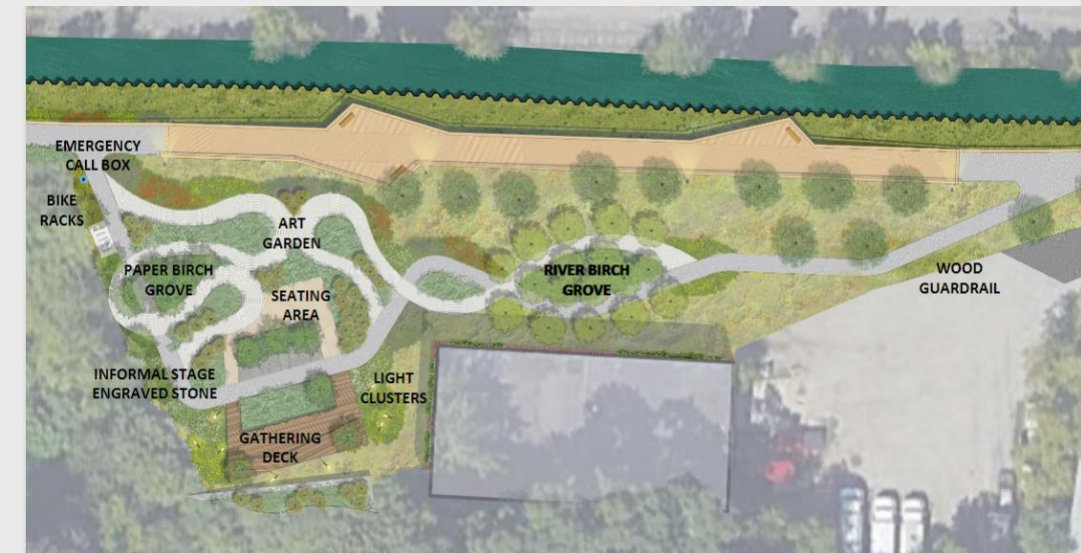
Design and Permitting

CORE PRINCIPLES
DEMONSTRATED

Utilizing climate data for proactive solutions,
Regional solutions, Nature Based Solutions

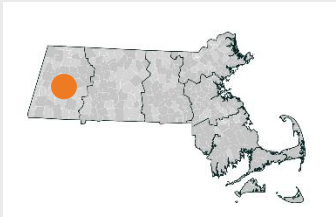
DESCRIPTION

Phase II of the Resilient North River Canal Corridor project included design and permitting for stabilization of the south bank of the North River and inclusion of a Riverwalk. The bank stabilization will increase flood resiliency while the Riverwalk will create a new recreational space and pedestrian corridor for multimodal transportation in an economically disadvantaged part of the community



Mill Street Dam Removal Project

Pittsfield FY20



AWARD

\$99,000

MATCH

\$33,368

PROJECT TYPE

Dam Removal and Ecological Restoration

CORE PRINCIPLES
DEMONSTRATED

Achieving broad and multiple community benefits

DESCRIPTION

Project Priorities:

- Improve public safety by removing the dam
- Support an urban revitalization effort
- Improve river ecology and habitat connectivity to the West Branch of the Housatonic River

Before
Removal



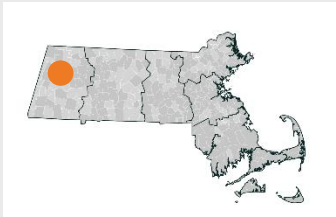
After
Removal



Transportation Infrastructure Improvement, Inventory, and Prioritization Plan



Plainfield FY20



AWARD \$33,550

PROJECT TYPE Culvert Replacement and Vulnerability Assessment

CORE PRINCIPLES DEMONSTRATED Furthering a community identified priority action to address climate change impacts

- DESCRIPTION**
- Project Priorities:**
- Culvert replacement and surface repair at Bow Street
 - Undertake a road stream crossing inventory and vulnerability assessment

Bow Street Lot 4



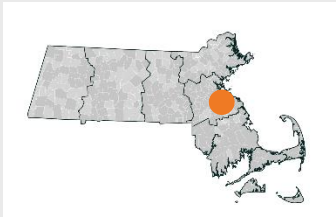
Culvert Replacement



Coastal Flood Mitigation Storm Drainage Improvements – Phase 1: Engineering and Public Outreach



Quincy FY20



AWARD

\$164,046

MATCH

\$58,954

PROJECT TYPE

Planning and Community Education

CORE PRINCIPLES
DEMONSTRATED

Employing Nature-Based Solutions (NBS)

DESCRIPTION

Project Priorities:

Assessing opportunities for nature-based solutions, specifically to improve salt marsh habitat

Engage the public with the town's efforts to make it more climate resilient

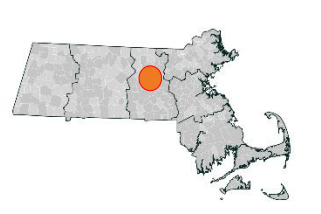
Assess benefits of projects to improve flood protection



Shirley Microgrid Feasibility Study



Shirley FY20



AWARD

Learn More:

[Meeting Minutes of the Board of Selectmen Meeting](#)

[Project Webpage On Shirley's Website](#)

PROJECT TYPE

\$58,794

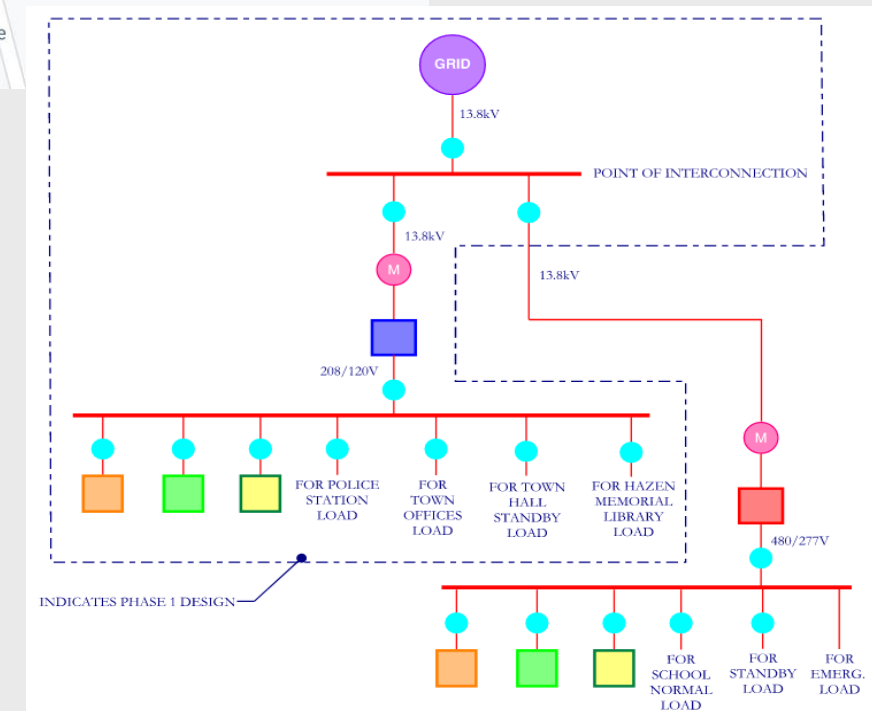
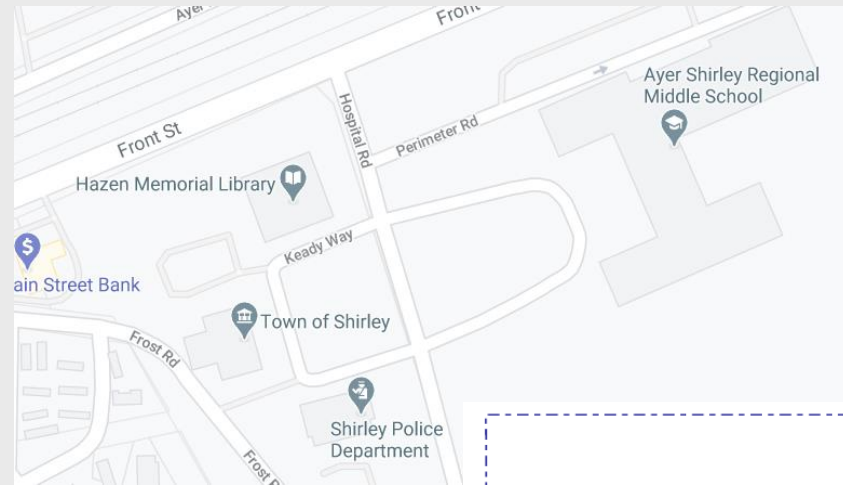
Feasibility Study

CORE PRINCIPLES
DEMONSTRATED

Energy Resilience Strategies; Vulnerability and Risk Assessment

DESCRIPTION

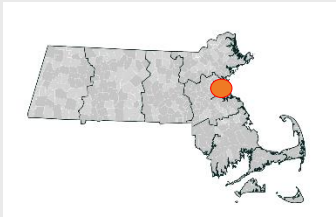
- Studied the potential of creating a microgrid at Town's complex and adjacent Regional Middle School.
- Addressed concerns for power loss and public health issues due to severe weather incidents and maturing electric grid infrastructure.
- Explored options to reduce greenhouse gas emissions associated with fossil fuel for energy by investigating available renewable energy sources to integrate with microgrid to provide alternate source of power.



Critical Regional Infrastructure and Social Vulnerability in the Lower Mystic Watershed



Somerville, FY20



Learn More:

[Project website](#)

[Project StoryMap](#)

AWARD

Action Grant

PROJECT TYPE

Detailed Vulnerability and Risk Assessment and Further Planning; Community Outreach and Education; and others

CORE PRINCIPLES
DEMONSTRATED

Regional and stakeholder collaboration; infrastructure vulnerability assessment; social vulnerability assessment

DESCRIPTION

- Two streams of integrated work: a critical infrastructure vulnerability assessment and a social vulnerability assessment.
- Key findings and recommendations on actions and investments critical to protecting priority populations during and after a major coastal storm
- Extensive collaboration from infrastructure owners/operators, community-based organizations, and community residents in Boston, Chelsea, Everett, Revere, Somerville, and Winthrop.

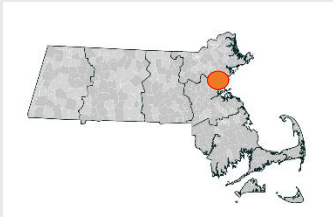


Beach Access Resiliency and Accessibility Improvements

Cassidy Park Beach



Swampscott FY20



Learn more:

- [Town of Swampscott](#)
- [Beach Access and Resiliency Improvements](#)

AWARD \$ 367,054 **MATCH** \$ 122,351

PROJECT TYPE Design, Permitting & Construction

CORE PRINCIPLES DEMONSTRATED Employing Nature-Based Solutions; Achieving Broad and Multiple Community Benefits

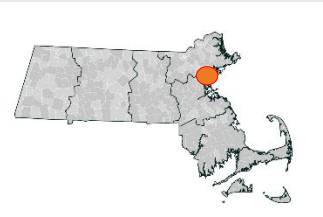
- DESCRIPTION**
- Adding compatible sand to the maximum elevations and slopes feasible without adversely impacting abutting properties or accessibility
 - Stabilizing sand using native vegetation
 - Install ADA compliant access mats



Beach Access Resiliency and Accessibility Improvements Phillips Beach



Swampscott FY20



Learn more:

- [Town of Swampscott](#)
- [Beach Access and Resiliency Improvements](#)

AWARD \$ 367,054 **MATCH** \$ 122,351

PROJECT TYPE Design, Permitting & Construction

CORE PRINCIPLES DEMONSTRATED Employing Nature-Based Solutions; Achieving Broad and Multiple Community Benefits

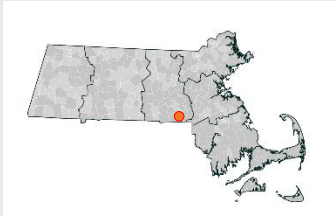
- DESCRIPTION**
- Adding compatible sand to the maximum elevations and slopes feasible without adversely impacting abutting properties or accessibility
 - Stabilizing sand using native vegetation
 - Install ADA compliant access mats



Integrated Vector-Borne Disease Control Program



Uxbridge FY20



Learn More:

- [Uxbridge Core Team Page](#)
- [Recording of Regional Conference](#)

REGION

Central

AWARD

\$256,926

MATCH

\$97,245

PROJECT TYPE

Planning, Assessments, Capacity Building & Regulatory Updates

CORE PRINCIPLES DEMONSTRATED

Employing Nature-Based Solution/ Achieving Broad and Multiple Community Benefits/ Innovative, Transferrable Approaches

PRIORITIES

Increase public awareness of ecological mosquito management processes in relation to a changing climate

REGIONAL MOSQUITO CONTROL CONFERENCE

Hosted by the Town of Uxbridge
Funded by a Municipal Vulnerability Preparedness Grant

Join Us
WEDNESDAY, JULY 22, 2020 9:30AM - 12:30PM

To learn about the current state of EEE and West Nile Virus in MA, integrated mosquito management, and environmental considerations from the following presenters

CLICK HERE TO REGISTER

This Conference will be held remotely via Zoom.

This learning and networking opportunity is intended for municipal staff, and board and committee members in communities in southern Worcester County that do not belong to a mosquito control project

For questions, email Kristin Black at kblack@uxbridge-ma.gov

PRESENTERS

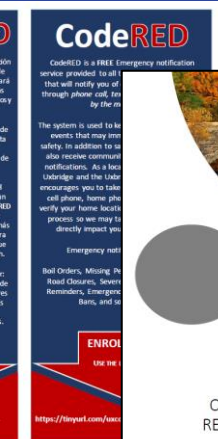
Chris Horton, Superintendent, Berkshire County Mosquito Control Project
Topic: Integrated mosquito management in Massachusetts

Heidi Ricci, Acting Director of Advocacy, Mass Audubon
Martha Gach, Ph.D., Conservation Coord., Mass Audubon
Topic: Mosquito control from an ecological perspective

Catherine Brown, DVM, MPH, MS, State Epidemiologist, Mass. Department of Public Health
Topic: The current state of EEE and West Nile Virus in MA



Berkshire County
Mosquito Control Project



Why Uxbridge's Vernal Pools are Important:

- Breeding ground and habitat:
 - Essential breeding areas for wood frogs, four species of mole salamanders, and fairy shrimp
 - Other amphibian species benefit from breeding in these areas of reduced predation
- Oasis for forest wildlife:
 - Wetland links for species in land passage
 - Water resource
 - Ecosystem services:
 - Flood control
 - Water purification
 - Carbon storage



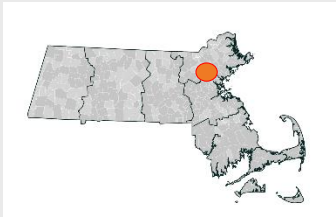
Department

- Board of Health Director
- Fire Department Chief
- Director, Department of Economic Development and Community Planning
- Department of Public Works
- Conservation Agent
- Board of Health
- Chief, Police Department
- Director, Department of Public Works
- Board of Health

Resilient Stormwater Action and Implementation Plan



City of Waltham FY20/FY21



Learn More:

[Waltham Stormwater Project Website](#)

AWARD

\$217,370

PROJECT TYPE

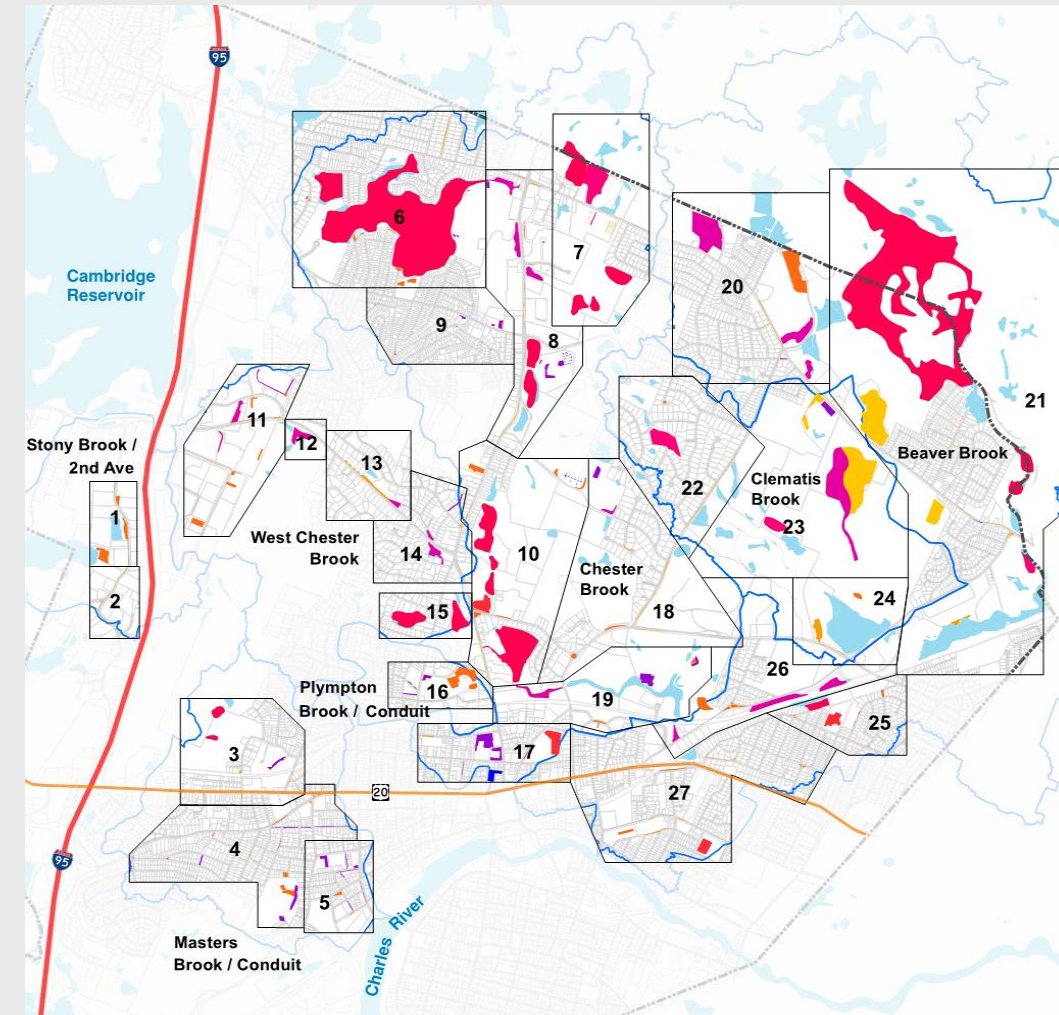
Planning, Assessment, Capacity Building, and Regulatory Updates

CORE PRINCIPLES
DEMONSTRATED

Utilizing Climate Change Data for a Proactive Solution;
Employing Nature-Based Solutions; Achieving Broad and
Multiple Community Benefits

DESCRIPTION

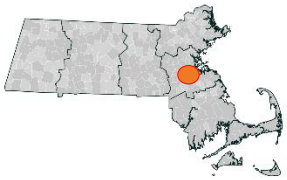
- Identified opportunities for nature-based stormwater controls, flood mitigation projects, and grey infrastructure upgrades at the sub-basin level
- Developed a 10-year stormwater capital improvement plan to build resilience throughout the city



Weston Ahead Climate Action & Resilience Plan



Weston FY20 & FY21



[Weston Ahead Webpage](#)

AWARD \$100,000

PROJECT TYPE Planning, Assessments, Capacity-Building, and Regulatory Updates

CORE PRINCIPLES DEMONSTRATED Furthering a community identified priority action to address climate change impacts; Conducting robust community engagement; Committing to monitoring project success and maintaining the project into the future

- DESCRIPTION**
- Conducted a planning process to bring the community on board by engaging, educating and empowering folks to take climate action.
 - Included a baseline assessment & goal setting, action identification, action prioritization, implementation steps development, final plan development, and community engagement.

What will YOU do to move Weston Ahead?



TAKE A SURVEY



WITH FRIENDS
& FAMILY



WHAT WILL
YOU DO?

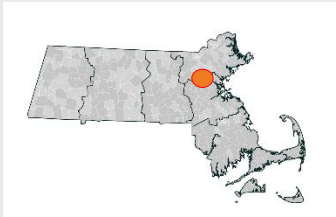


WESTON AHEAD
Creating our Sustainable Future

www.westonahead.org

Shaker Glen Extension Restoration

City of Woburn FY20/FY21



Learn More:

[Woburn Shaker Glen Project Website](#)

AWARD

\$145,445

PROJECT TYPE

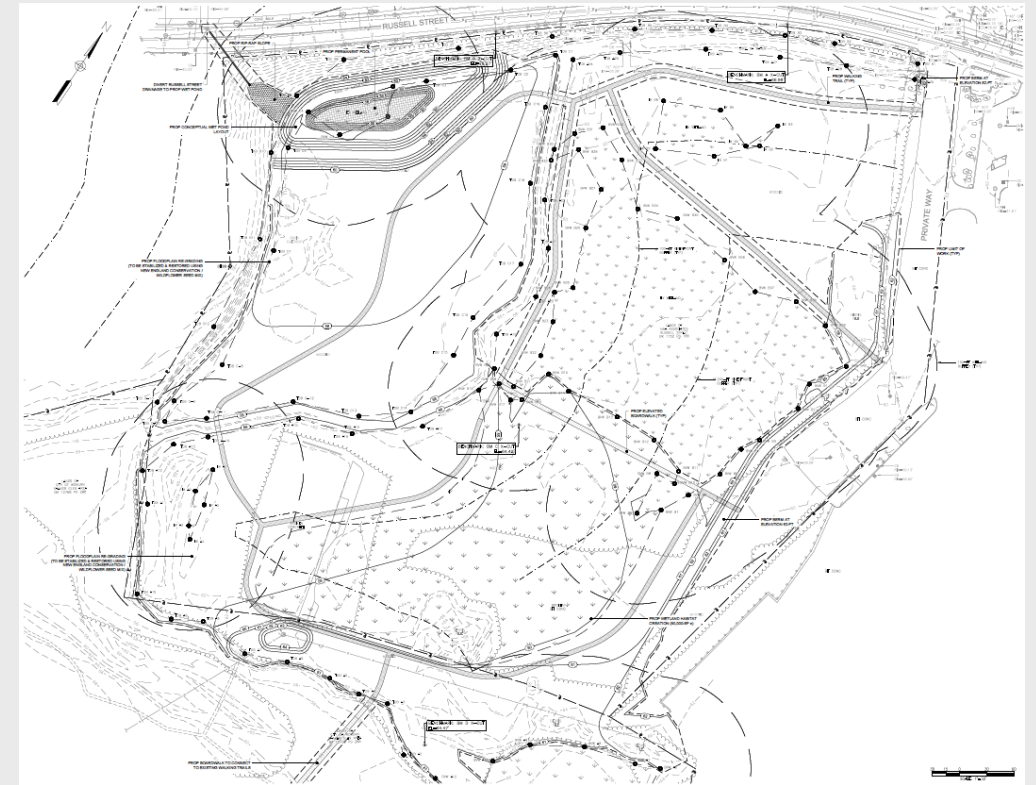
Design

CORE PRINCIPLES
DEMONSTRATED

Employing Nature-Based Solutions; Achieving broad and multiple community benefits

DESCRIPTION

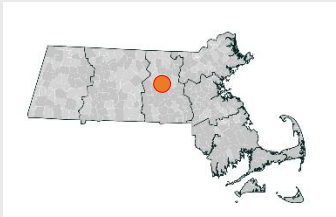
Developed a preliminary design for the restoration and conservation of the Shaker Glen Extension area that will provide stormwater storage, improve habitat, and increase recreational and educational opportunities



Worcester Senior Center: Urban Rain Gardens At Work



Worcester FY20-21



Learn More:

[Worcester Rain Gardens Project Website](#)

AWARD

\$378,356

PROJECT TYPE

Redesigns and Retrofits, Nature-Based Flood Protection, Drought Mitigation, Water Quality, and Water Infiltration Techniques, Nature-Based, Infrastructure, & Tech. Solutions to Reduce Vulnerability to Extreme Heat & Poor Air Quality

**CORE PRINCIPLES
DEMONSTRATED**

Employing Nature-Based Solutions
Pursuing innovative, transferable approaches

DESCRIPTION

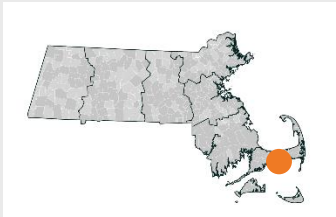
To address flooding and extreme heat hazards in a dense largely impervious area of the city, Worcester incorporated nature-based solutions during a parking lot redesign of the Worcester Senior Center. Because the site was nearly 100% impervious with no stormwater management system, a hybrid approach was utilized – with a rain garden and bioswales installed to treat most of the light and moderate rain runoff, and an underground stormwater treatment system treating runoff from more intense rain events.



Yarmouth Clean Energy Resiliency for Regional Septic Processing & Transfer Station



Yarmouth FY20



AWARD

\$150,000

MATCH

\$50,000

PROJECT TYPE

Planning and Community Education

CORE PRINCIPLES
DEMONSTRATED

Achieving broad and multiple community benefits

DESCRIPTION

Project Priorities:

- Clean energy resiliency
- Greenhouse gas reduction: solar and energy storage
- Operational cost savings

