



# ***Municipal Vulnerability Preparedness Grant Program***

*Executive Office of Energy and Environmental Affairs*

## **MVP Action Grant Funded Project Descriptions**

### ***FY22 MVP Action Grant Projects***

**Grantee:** Acton (& Acton-Boxborough Regional School District)

**Project Title:** Climate Action Plan and Electrification Roadmap

**Award:** \$157,940

The Town of Acton and ABRSD will use MVP Action Grant funding to support the: 1) development of a Climate plan to reach net zero carbon emissions as quickly as possible while enhancing local resilience; and 2) development of an Electrification Roadmap, an analysis of action steps and priorities for electrification of seven key existing public buildings.

**Grantee:** Andover

**Project Title:** Shawsheen River Watershed Land Conservation Planning and Prioritization for Climate Resilience and Environmental Justice

**Award:** \$131,700

The grant will fund an assessment of properties along the Shawsheen River to identify and prioritize parcels for future land acquisition, with the goal of increasing climate and flood resiliency. The assessment will focus on properties that could provide flooding relief to the most flood-prone areas in downtown Andover, including repetitive loss areas, as well as down-stream environmental justice communities in neighboring Lawrence.

**Grantee:** Ashfield

**Project Title:** Baptist Corner Road Stream Crossing Ecological Improvements

**Award:** \$448,600

The project will involve the replacement of the Baptist Corner Road Culvert over a tributary to the Bear River to fully meet the Massachusetts Stream Crossing Standards and future modeled climatic conditions. The design will increase flood resiliency, reduce community risk, and restore natural habitats.

**Grantee:** Athol

**Project Title:** Greening Lord Pond Plaza Phase 2

**Award:** \$213,630

Phase 2 of the Greening Lord Pond Plaza is intended to advance the findings from Phase 1 planning efforts to a 100% construction design plan and secure the necessary funds to move the project into construction in 2024. The Greening Lord Pond Plaza Climate Resilience Plan developed for Phase 1 presents preliminary feasibility analysis and conceptual design for the plaza. Phase 2 will finalize a design that achieves infrastructural, social, and environmental conditions to increase the climate resilience of Lord Pond Plaza and downtown Athol.

**Grantee:** Belchertown

**Project Title:** Land Conservation and Restoration of the Scarborough Brook Headwaters for Climate Resilience

**Award:** \$480,025

Belchertown will conduct a multi-pronged project focused on the headwaters of the Scarborough Brook watershed and the Scarborough Brook Conservation Area (SBCA) to increase habitat and water supply resilience under future climate conditions.

**Grantee:** Belmont

**Project Title:** Stormwater Flood Reduction and Climate Resilience Capital Improvement Plan

**Award:** \$195,000

The primary goal of this project is to identify the current and future stormwater flooding risks through Belmont in the context of climate change. The development of a 2-D stormwater model will assist in the confirmation of flood issues and the evaluation of resilience alternatives. Ultimately, the project will coalesce into an infrastructure improvement plan that prioritizes nature-based solutions in environmental justice neighborhoods that would offer multiple co-benefits like open space improvement, air quality improvements, water pollution load reduction, pollution control, or urban heat island reduction.

**Grantee:** Bolton (& Clinton)

**Project Title:** Nashua River Communities Resilient Lands Management Project

**Award:** \$302,691

This project aims to improve residents' quality of life and to enhance ecosystem services in the participating towns through the development and adoption of better land management practices and by-laws and regulations updated to better affect climate mitigation and adaptation.

**Grantee:** Braintree

**Project Title:** Smith Beach Green Infrastructure Project

**Award:** \$47,500

The project will take conceptual plans to create full construction drawings and specifications including all necessary permitting. The proposed project will include a design for increased tree canopy, vegetated islands, permeable pavement, and a subsurface stormwater infiltration and treatment system. These improvements would divert stormwater for 10 acres around the site, reducing nuisance flooding in the road and improving water quality at Smith Beach. Additionally, increasing vegetation and tree canopy will cool the area adjacent to the beach.

**Grantee:** Bridgewater

**Project Title:** High Street Dam Removal

**Award:** \$750,000

The Town will remove an existing dam on High Street referred to as the High Street Dam and/or Jenkins Pond Dam and replace the existing High Street Bridge ("road stream crossing"), which is a series of four undersized culverts with a single span. The project considers climate altered precipitation and complies with the Massachusetts Road Stream Crossing Standards.

**Grantee:** Buckland (& Ashfield, Hawley)

**Project Title:** Watershed-Based Assessment and Climate Resiliency Plan for Clesson Brook

**Award:** \$100,117

The Town seeks to complete a fluvial geomorphic assessment of the Clesson Brook Watershed, develop a baseline of physical conditions that will lead to a hydrologic model and projections for future conditions, create a database of stream crossings, and create a priority list for parcels within the Clesson Brook to focus conservation and restoration efforts.

**Grantee:** Burlington

**Project Title:** Vine Brook Watershed and Urban Heat Island Assessment

**Award:** \$108,500

The project is intended to address urban flood impacts from extreme precipitation and urban heat island effects from anticipated extreme climate events. This project will evaluate this highly developed watershed for opportunities to implement nature-based solutions to address any anticipated impacts due to climate change.

**Grantee:** Chelsea

**Project Title:** Battery Storage System and Solar at Chelsea City Hall

**Award:** \$624,000

The objectives of the project are (1) to increase resiliency in the face of climate-change-induced vulnerability to storms and flooding; (2) to eliminate fossil fuel use and reduce environmental impacts of both on-site and grid-based generation; and (3) to complete the municipal-buildings phase of the Chelsea Community Microgrid. Grant funds will be used for a battery energy storage system (BESS), solar power, energy efficiency, and green-fueling installations at the city hall and the 911 building.

**Grantee:** Conway

**Project Title:** South River Flood Resiliency Project

**Award:** \$191,200

The goal of the project is to continue work from FY20 Mohawk Trail Woodlands Partnership MVP project in the Town of Conway. The main tasks are to secure environmental permits for flood resiliency projects; additional hydraulic and hydrologic modeling; public engagement on NBS and resilient rivers; and land acquisition.

**Grantee:** Deerfield

**Project Title:** Healthy Soils, Green Infrastructure and Climate Resiliency Public Engagement in Deerfield

**Award:** \$40,951

The goal of this project is to actively engage the general public, businesses, students, and town boards in the town's climate resiliency initiatives. Grant funds will be used to implement Deerfield's innovative new town policy on green infrastructure and climate resiliency, protect and manage soils for carbon sequestration, and increase public engagement through a town-wide climate resiliency forum and science class programming in local schools.

**Grantee:** Dennis

**Project Title:** Pound Pond, Dennis- Flood Mitigation and Storm Drainage Improvements

**Award:** \$120,010

This project will provide engineering, public outreach, and permitting for the final phase drainage system improvements originating at Route 28 and extending along Division Street and Chase Avenue to the Nantucket Sound. The concept design for this final phase, located at Pound Pond, addresses both water quality and flooding. The design utilizes bioengineering to enhance the natural system, stabilize shorelines and improve water quality; and culvert daylighting to improve flood plain function and habitat diversification.

**Grantee:** Easthampton

**Project Title:** Cherry Street Green Infrastructure and Slope Restoration Construction

**Award:** \$2,000,000

Easthampton will construct designs developed and permitted under their FY21 MVP Action Grant project for stream bank restoration and stabilization at the Cherry Street outfall and reconstruction of Cherry Street. This project will build resiliency to increased precipitation by infiltrating stormwater in addition to adding tree cover for shade. It will also build new sidewalks for better walkability, safety, and enhanced connectivity to open space and resources in this EJ community.

**Grantee:** Everett (& Chelsea)

**Project Title:** Island End River Flood Resilience Project

**Award:** \$716,500

The City of Chelsea and Everett seek to continue their joint efforts to promote flood resilience in the Island End River (IER) corridor. This project will focus on evaluating flood wall alignments in Everett and initiating design work on a selected alignment while continuing work in Chelsea to address future environmental remediation activities under the Massachusetts Contingency Plan (MCP) and to initiate permitting activities. Community engagement through advisory groups of both residents and private business stakeholders will continue in this phase of the project.

**Grantee:** Falmouth

**Project Title:** Conceptual Design of Flood-Resiliency Improvements for Sewer Infrastructure

**Funding:** \$104,040

The project will build on the findings of completed MVP projects to evaluate multiple alternatives and determine a recommended approach to allow the Town's vulnerable infrastructure to survive a design storm event.

**Grantee:** Fitchburg

**Project Title:** Bolstering Public and Private Action to Improve Flood Resilience in Baker Brook

**Award:** \$173,350

The project team proposes to revise and enhance the existing stormwater model to further evaluate potential flood prone areas and solutions. The improvements will be scored and prioritized for the benefits to environmental justice populations, the reduction of an urban heat island, and other co-benefits to the community. The final product will be a targeted capital improvement plan for identified and assessed public properties and a pilot retrofit program for specific private properties. The feasibility of financing this program through a stormwater and climate resilience utility will be explored.

**Grantee:** Foxborough

**Project Title:** Advancing Green Infrastructure in Foxborough for Enhancing Climate Resilience through Planning and Design

**Award:** \$166,543

This project will site and design green infrastructure to alleviate flooding and protect water quality in an Area of Critical Environmental Concern. The project will also create a master plan to guide future implementation of green infrastructure while simultaneously engaging climate vulnerable populations and portions of the community who are often left out of these conversations.

**Grantee:** Framingham

**Project Title:** Walnut Street Neighborhood Flood Mitigation – Design and Permitting

**Award:** \$269,030

The project will include design and permitting for wetland, stream channel, and streambank restorations to reduce flooding. The project includes the removal of an earthen berm in the wetlands complex between Walnut Street and Stony Brook Road that has experienced flooding. The berm will be replaced with an elevated boardwalk providing ADA accessible, safe, and walkable access through an environmental justice neighborhood to connect community amenities. The project also includes robust public engagement including climate leadership for teens, youth programs, and targeted outreach to various segments of the community.

**Grantee:** Gloucester

**Project Title:** Gloucester Climate Action and Resilience Plan (CARP)

**Award:** \$69,890

Gloucester will develop a city-wide Climate Action and Resilience Plan (CARP). The plan will serve to identify and inventory Gloucester’s community greenhouse gas (GHG) emissions, renewables, and sequestration resources. This baseline will help the community in identifying the highest priority and most feasible solutions to put Gloucester on track to meet its long-term energy, climate, and resiliency goals.

**Grantee:** Groveland

**Project Title:** Johnson Creek Watershed Resiliency Project

**Award:** \$82,186

The purpose of the project is to provide a detailed watershed-wide vulnerability study relative to potential future climate change conditions to improve resiliency throughout the Johnson Creek Watershed. Project activities will include assessments at key watershed locations and development of a hydrologic and hydraulic model to identify and quantify areas of flooding concern throughout the watershed relative to potential future conditions. A prioritized action plan will be developed to increase resiliency throughout the watershed. The action plan will prioritize recommended nature-based solutions.

**Grantee:** Hampden (& East Longmeadow)

**Project Title:** Hampden/East Longmeadow Infrastructure Assessment and Prioritization of Nature-Based Solutions and Public Outreach and Participation

**Award:** \$389,092



The project will include the assessment of infrastructure and prioritization of nature-based solutions, the development and maintenance of a comprehensive public outreach and participation program, and education of the public and DPW staff on best management practices, low impact development, green infrastructure, and native plantings.

**Grantee:** Haverhill

**Project Title:** Little River Dam Removal and River Restoration

**Award:** \$475,000

The City intends to build on its FY21 Dam Removal Feasibility Study and is apply for funds to develop designs and complete permitting processes for the removal of the Little River Dam and restoration of the river corridor as the next step toward implementation. To date, no major hurdles are foreseen for the removal of the dam, which is expected to reduce the extent of flooding risk and provide shade and river access for cooling and recreation in the heart of an EJ community. The design concept developed under the first MVP Action Grant includes community amenities in the EJ neighborhood, such as a fishing platform, a kayak/canoe launch, and a walking trail along the river. The dam removal project is thus at the core of a larger urban revitalization effort.

**Grantee:** Ipswich

**Project Title:** Ipswich River Sewer Interceptor Bank Bio-stabilization Project

**Award:** \$117,803

The Town of Ipswich received a FY20 MVP Action grant for final design of the Ipswich River Sewer Interceptor and Siphon replacement project. Construction of the sewer interceptor and siphon is nearing completion. This project will conduct bio-stabilization of the northern bank of the Ipswich River, implementing nature-based solutions to improve natural systems while protecting critical sewer infrastructure.

**Grantee:** Lenox (& Pittsfield, Stockbridge, New Marlborough)

**Project Title:** Housatonic Stream Restoration for Regional Flood Resilience Project

**Award:** \$295,190

Four communities (Lenox, Pittsfield, Stockbridge, and New Marlborough) will embark on regional, community-wide culvert assessments of approximately 400 culverts, and design the replacement of three priority culverts. A unique feature to this project is the component of youth development—youth from Environmental Justice communities will be hired to conduct the assessments. In target areas, upstream and downstream assessments with a developed nature-based assessment protocol will identify sites for future projects that will allow stormwater to infiltrate, slow flow, restore floodplain, and shore up erosion that has occurred due to increased precipitation.

**Grantee:** Leominster

**Project Title:** Monoosnoc Brook Bank Stabilization Project

**Award:** \$167,625

The project will complete the final design of the Monoosnoc Brook Bank Restoration Project, having completed the preliminary design and permitting phase of the project, partially funded by an FY21 MVP Action Grant. The resilient design, a naturalized slope edge that includes naturalizing of a downgradient culvert structure, was selected through collaboration with interested community members and



informed by modeling of future climate change projections. The goals of the project are to complete a final design with input from the permitting agencies and continued collaboration with the community.

**Grantee:** Leverett

**Project Title:** Shutesbury Road Culvert Enhancement

**Award:** \$258,750

The project will replace this corroding, poorly embedded, and significantly perched culvert with an embedded natural stream culvert.

**Grantee:** Lynn

**Project Title:** Barry Park Green Infrastructure Project

**Award:** \$147,367

This project proposal includes the design, engineering, and construction of Low Impact Design solutions in and adjacent to Barry Park. LID elements include the construction of a previous parking area, rain garden and/or bioswale along the perimeter to the parking area, and a minimum of two bio-swailes along a short stretch of Balchelder's Court leading to the park's parking area. The project seeks to mitigate flooding and improve stormwater management and water quality.

**Grantee:** Lynnfield

**Project Title:** Richardson Green Conservation Acquisition

**Award:** \$1,638,750

The project goal is to acquire the 20-acre Richardson Green property for conservation of the natural resource values provided by maintaining the land in its wooded, undeveloped state. The property sits within the Lynnfield Center Water District Zone II for drinking water and the Lynnfield Groundwater Protection Area.

**Grantee:** Malden

**Project Title:** Malden River Works for Waterfront Equity and Resilience

**Award:** \$354,600

The project goal is to transform the City's Department of Public Works (DPW) yard on the Malden River for better climate change preparedness, and to create a vibrant, resilient public riverfront park for all. The main tasks covered within this application include developing the design from a 25% level to 75% Plans and permitting, and the continuation of ongoing community participation in the project under the leadership of Malden residents of color.

**Grantee:** Marlborough

**Project Title:** Regulatory Updates to Support Climate Resiliency

**Award:** \$56,250

The project will include expert review and update of city ordinances related to development for climate resiliency. A design guidance document will also be developed.

**Grantee:** Marshfield

**Project Title:** Marshfield Long-term Coastal Resiliency Plan

**Award:** \$78,030



The goal of the proposed project is to proactively address future coastal flooding and erosion risks by developing a long-term coastal resiliency plan. The plan will be guided by the best available climate change data; will identify and prioritize the most at-risk sections of town; will include a benefit cost analysis; and will develop a set of guiding principles and recommended zoning policies that will allow the Town to proactively reduce vulnerabilities in these areas, and if necessary, rebuild in a more resilient way after a catastrophic event.

**Grantee:** Mashpee

**Project Title:** Watershed-based Solutions to Increase Resilience to Harmful Algal Blooms in Santuit Pond in a Warmer and Wetter Climate

**Award:** \$131,691

The Town of Mashpee proposes to leverage the 2010 Diagnostic Study and over a decade of water quality monitoring to develop a multi-prong approach to improve the resilience of Santuit Pond to a warmer and wetter climate. The approach: (1) develops concept design for nutrient pollution reduction at key wet water input locations around Santuit Pond and carries one design forward to permitting, (2) reviews and provides recommended changes to municipal bylaws to reduce nutrient impacts to all surface waters in Mashpee, and (3) creates a robust public education and outreach program that incorporates the knowledge and perspective of the Wampanoag.

**Grantee:** Melrose (& Upper Mystic Communities)

**Project Title:** Working Across Boundaries to Minimize Stormwater Flood Damage in the Upper Mystic Watershed

**Award:** \$108,655

This project (an “exposure analysis”) will document where flood damage occurs, and create measures of its social, economic, and infrastructure costs, especially to low-income residents of color. The project team will then come up with a toolbox of policy strategies geared toward cost-effective, multiple-benefit solutions for the most vulnerable areas. Year 1 work will include updating the regional stormwater model with the flood exposure analysis. Year 2 work will include reviewing local regulations, hosting regional workshops to discuss reducing directly connected impervious areas (DCIA) and producing recommended regulation changes to coordinate DCIA reduction strategies across the Upper Mystic.

**Grantee:** Melrose (& Malden, Medford)

**Project Title:** Melrose, Malden, and Medford Building Resilience, Efficiency, and Affordability Project

**Award:** \$101,108

The project will collaboratively develop complimentary sustainable and resilient building design standards for residential and mixed-use developments and retrofits that are co-created in consultation with community members. In particular, the community members will be those from Environmental Justice communities and other populations with high exposure to climate-driven extreme weather.

**Grantee:** Mendon

**Project Title:** Mendon Town Hall Campus Green Stormwater Infrastructure: Design through Contractor Mobilization

**Award:** \$169,905



The purpose of this project is to construct green stormwater infrastructure (GSI) controls at the Town Hall Campus using a suite of nature-based solutions to manage, treat, and infiltrate stormwater runoff using practices such as rooftop runoff capturing planters, bioretention, pervious pavers, infiltration systems, and depaving a portion of the existing driveway and parking lot northwest of Town Hall. The project will also include a robust public engagement campaign documenting the benefits of nature-based solutions.

**Grantee:** Methuen (& Lawrence)

**Project Title:** Searles Pond/Bloody Brook Corridor Resilience Planning

**Award:** \$80,250

Working with project partners Groundwork Lawrence, Merrimack River Watershed Council and the City of Lawrence, the City of Methuen will conduct resilience planning in the Searles Pond/Blood Brook corridor of Methuen and Lawrence— EJ neighborhoods vulnerable to flooding because of inadequate infrastructure. Tasks associated with resilience plan development include a robust civic engagement process, conditions assessment, and alternatives evaluation.

**Grantee:** Millbury

**Project Title:** Armory Village Green Infrastructure Project- Phase II

**Award:** \$366,000

The project aims to address the stormwater capacity and heat island impacts of climate change within an Environmental Justice community, as well as minimize inputs of non-point source pollutants throughout Millbury Center that enter the Blackstone River. Vegetated bump outs, rain gardens, bioswales, porous pavers, perforated underdrains, deep sump catch basins, intersection diets, and street and parking lot areas will work together to reduce heat island impacts and stormwater runoff volumes/pollutant loads, increase groundwater recharge, and help address routine localized flooding and system capacity issues.

**Grantee:** Millis

**Project Title:** Flood Resiliency Plan

**Award:** \$170,000

The Town of Millis has widespread flooding problems, and they are expected to worsen in the future due to the impacts of climate change. This project will develop a Flood Resiliency Plan that will mitigate current and future flooding problems in the Town.

**Grantee:** Natick (& Charles River Watershed Communities)

**Project Title:** Building Resilience Across the Charles River Watershed Phase II

**Award:** \$233,085

The implementation plan will include design for up to four site-specific flood mitigation projects within the Charles River watershed that are prioritized by the project team with public input, as well as policy tools and resources to support each municipality in achieving non-site-specific strategies that the model demonstrates to be effective, such as reducing impervious surface cover and increasing green infrastructure. The policy guideline will mainstream climate adaptation through local processes and actions.



**Grantee:** Natick (& Framingham, Ashland)

**Project Title:** Building Relationships and Resilience with MetroWest Environmental Justice Neighborhoods

**Award:** \$127,150

This project is focused on increasing the resiliency and engagement of Environmental Justice populations in the MetroWest communities of Natick, Framingham and Ashland. As part of their work, municipal staff will complete an equity training and will collaborate with community liaisons to develop a better understanding of regional climate equity and resilience needs. The project will culminate with a series of Community Climate Conversations, in which municipal staff and residents from priority neighborhoods work together to share findings and discuss a path forward. At this project's conclusion, each municipality will update its climate-related plans to reflect feedback received from EJ populations and will identify strategies for sustaining and strengthening the relationships established during the project.

**Grantee:** New Bedford

**Project Title:** New Bedford Green Infrastructure Master Strategy and Implementation Roadmap

**Award:** \$432,440

The proposed Green Infrastructure Master Strategy and Implementation Roadmap will take a holistic look at all the City's major drainage areas and assess existing and proposed future drainage and combined sewer system infrastructure outlined in the City's Long-Term Control and Integrated Capital Improvements Plan and other City projects. The proposed plan will strive to preserve and enhance New Bedford's coastal areas, rivers, streams, ponds, wetlands, and other resource assets.

**Grantee:** Northbridge

**Project Title:** Carpenter Road Causeway Alternatives Analysis and Source Water Green Infrastructure Protection Plan

**Award:** \$146,100

This project looks to protect water quality and improve the resilience of drinking water supplies servicing two communities. By creating a long-term plan for the use of green infrastructure and the evaluation of climate resilient alternatives for key infrastructure in need of repair or replacement, this project will improve the resilience of a vital public water supply.

**Grantee:** Norwood

**Project Title:** Traphole Brook Flood Prevention and Stream Restoration Project

**Award:** \$682,421

This MVP Grant will be used to pay for the cost of removing the Mill Pond Dam. The dam is obsolete and will fail during intense and prolonged storm events, the type associated with the impacts of climate change.

**Grantee:** Oak Bluffs (& Tisbury, West Tisbury, Edgartown, Chilmark, Aquinnah, Gosnold)

**Project Title:** Martha's Vineyard and Gosnold Climate Action Plan, Phase II

**Award:** \$173,843

This project (Phase II) will be a comprehensive, locally driven CAP for the 7 towns that make up Dukes County. The CAP will address six critical regional climate impact themes. The project will result in a final



plan, an interactive dashboard website, and an implementation strategy. The process is highly inclusive of EJ/vulnerable populations and focuses on community engagement and nature-based solutions.

**Grantee:** Peabody (& Salem)

**Project Title:** Peabody-Salem Resilient North River Corridor & Riverwalk Project

**Award:** \$150,000

Ongoing redevelopment and the identification of a gap in the region's expanding multiuse path network has brought a renewed focus to the North River Corridor's vulnerability to climate change impacts. This project will evaluate climate change impacts on this area and identify potential nature-based solutions.

**Grantee:** Pepperell

**Project Title:** Sucker Brook Continuity Restoration

**Award:** \$492,030

This is the on-the-ground construction phase of a project to remove a dam and replace two undersized, failing culverts on Sucker Brook, a cold-water fishery of high ecological value. The dam removal and replacement culvert designs will restore the stream's natural processes, exceed MA River and Stream Crossing Standards, and rely on stream restoration as a nature-based solution to reconnect fragmented sections of the brook and build community resilience by addressing multiple climate change impacts.

**Grantee:** Plymouth

**Project Title:** Subterranean Resiliency: Predicting, Assessing and Mitigating Saltwater Intrusion

**Award:** \$304,915

Using groundwater models, the project team will predict vulnerable areas, suggest nature-based solutions, establish an early warning system, and guide future development. The project will also include a robust outreach and education program on an Indigenous philosophical foundation.

**Grantee:** Revere

**Project Title:** Gibson Park Resiliency Design and Permitting

**Award:** \$161,516

The project addresses the impacts of climate change and storm surge caused by extreme weather events and creates a space that is more resilient to withstand the impacts of sea level rise. The project seeks to design for coastal restoration and protection measures, landscape sculpting, bioswales, raingardens, and unique and practical flood water storage capacity to alleviate impact to the park and adjacent areas while simultaneously increasing the recreational potential of the surface area of Gibson Park.

**Grantee:** Sandwich

**Project Title:** Dynamic Adaptation Pathways and Prioritized Resilient Design Solutions for Historic Sandwich Village

**Award:** \$79,789

The project will work with Town department heads, the Chamber of Commerce, and MassDOT to develop flexible adaptation pathways and design priority near-term implementation projects to reduce vulnerability to sea level rise and storm surge in Historic Sandwich Village. The project will include outreach to local partners and the public via the Heritage Museums & Gardens.

**Grantee:** Saugus

**Project Title:** Saugus Climate Adaptation and Resilience Plan

**Award:** \$74,500

The Saugus Climate Adaptation and Resilience Plan will comprehensively assess the top four (4) hazards identified in the MVP Planning process by the community. The Plan will assess both inland and coastal flood risks and other hazards such as the Urban Heat Island effect. The plan will include quantitative and qualitative vulnerability and risk assessments which will inform the development of future-looking adaptation scenarios. The Plan will result in preferred resilience strategies, including policy, nature-based, and structural recommendations, along with costs estimates and a roadmap for implementation.

**Grantee:** South Hadley

**Project Title:** Queensville Dam Removal Feasibility Study and Buttery Brook Watershed Enhancement

**Award:** \$125,000

South Hadley is seeking an MVP Action Grant to fund a feasibility study for removal of Queensville Dam, located at Titus Pond on Route 116/Newton Street; restoration and ecological enhancement of the Titus Pond impoundment to increase flood storage capacity and habitat function; and downstream watershed improvements along Buttery Brook.

**Grantee:** Southborough

**Project Title:** Planimetric Impervious Surface Mapping Project

**Award:** \$22,875

The project will increase understanding of the amount of locations of impervious surfaces in Southborough. The planimetric data layers will allow departments to assess the ability to reduce impervious surfaces, create a sustainable funding source through a fee-based system, and educate the public on nature-based solutions.

**Grantee:** Southwick

**Project Title:** Klaus Anderson Road/Johnson Brook Replacement Culvert and Green Infrastructure

**Award:** \$728,300

The Town will construct a replacement stream crossing at the Klaus Anderson Road/Johnson Brook culvert and upgradient green infrastructure components. This project will implement the plans that were designed and permitted under the Town's FY19 MVP Action Grant, and the replacement crossing will meet the Massachusetts Stream Crossing Standards.

**Grantee:** Springfield

**Project Title:** Trees, Homes, and People/ Creating a More Resilient Living Environment

**Award:** \$2,000,000

Project tasks include the construction of a resilient Forestry Operation Center as well as community outreach through neighborhood councils to increase civic engagement and build social and economic resilience in Environmental Justice communities.

**Grantee:** Tewksbury

**Project Title:** Stormwater Analysis for Nature-Based Solutions and Community Co-Benefits

**Award:** \$193,935

The Town will develop a stormwater analysis on municipal and vacant Town-owned parcels that could be used for nature-based solutions and flood storage, while considering opportunities for affordable housing and regional benefits.

**Grantee:** Waltham

**Project Title:** Bringing Climate Resilience to Beaver Brook

**Award:** \$362,000

Waltham completed a flood mitigation and stormwater improvement plan as part of their FY22 MVP Action Grant that ranked the proposed resiliency measures in Beaver Brook as a top priority for mitigating flooding in an environmental justice neighborhood. This project will implement a suite of flood mitigation actions: 1) brook restoration design and permitting, 2) stream crossing improvement designs and permitting, and 3) wetland storage preliminary design.

**Grantee:** Watertown

**Project Title:** Equity-Based Community Greening Program

**Award:** \$94,240

The Town will conduct an equity-based green infrastructure program. This program will utilize data to reveal the most climate-vulnerable areas of Watertown and will result in green infrastructure investments in those target neighborhoods.

**Grantee:** Wellfleet (& Truro, Eastham, Brewster, Barnstable, Bourne)

**Project Title:** Regional Low Lying Road Assessment and Feasibility

**Award:** \$236,258

The project will identify and assess roads and road segments prone to flooding. Feasible strategies will also be identified, including nature-based solutions, to reduce vulnerability to coastal hazards and storm induced impacts. A major component of the project is to engage the community, especially Environmental Justice and climate vulnerable populations.

**Grantee:** Wellfleet

**Project Title:** Herring River Restoration Project Phase 1 Final Construction Plans and Bid Specifications

**Award:** \$589,960

The project aims to restore a total of 890 acres of salt marsh at full restoration. Sea level rise was incorporated into hydrodynamic model runs and infrastructure design incorporates up to 2 feet of freeboard. Specific tasks for this phase include preparing final plans and bid specification packages.

**Grantee:** Westford

**Project Title:** Westford Tree and Invasive Species Inventory and Management Plan with Tree Planting Plan

**Award:** \$79,200

Through robust community engagement, the Town will prepare a Tree and Invasive Species Inventory and Management Plan with a Tree Planting Plan to help Westford become more resilient to climate change. The project will also educate the public about invasive species and will be incorporated into the town's GIS to monitor and track progress over time as Westford becomes a greener community.

**Grantee:** Westhampton

**Project Title:** Resilience Building through Community Visioning and Planning

**Award:** \$237,516

The Town will develop a Resilient Master Plan and update its Open Space & Recreation Plan using the lens of climate adaptation and resiliency. The project will help The Town analyze, envision, plan, prepare, and take steps to address the future and reduce vulnerability to climate-related changes, including increased development due to migration, threats to water supplies during drought, shifts in growing seasons, and impacts to the natural world.

**Grantee:** Winthrop (& Boston, Revere)

**Project Title:** Belle Isle Marsh: Evaluating Nature Based Solutions to Protect Abutting Communities and Critical Shorebird Habitat from Coastal Inundation

**Award:** \$145,307

The project aims to identify the conditions under which a nature-based coastal flood resilience solution can both enhance and prolong the habitat value of 300-acre Belle Isle Marsh and prevent coastal flood damage to Winthrop, East Boston, and Revere and the MBTA Blue Line just inland of the marsh.

**Grantee:** Wrentham

**Project Title:** Climate Resilience and Low Impact Development Regulatory Integration and Green Infrastructure Master Plan

**Award:** \$113,344

This project will combine a Town-specific update of Wrentham's bylaws and regulations with the goal of increasing climate resilience with implementation of stormwater green infrastructure. The project also includes a related green infrastructure assessment and community engagement targeting private property owners around the three major lakes in Town.

### ***FY21 MVP Action Grant Projects***

**Grantee:** Agawam

**Project Title:** Agawam Stormwater Master Plan

**Award:** \$216,750

The Town will develop a long-term plan to sustainably manage its stormwater assets, reduce impervious cover, and promote green infrastructure to provide accessory environmental and public health benefits. It also will include development of an Impervious Area Strategy and Municipal Code assessment to maximize community benefit and promote nature-based and green infrastructure solutions to stormwater problems. The project will include an extensive public engagement component including a 10-day intensive program with local art and environmental organizations at a public middle school that will culminate in a public storm drain art project and community event, where students will present a gallery of their work.

**Grantee:** Arlington & Resilient Mystic Collaborative

**Project Title:** Wicked Hot Mystic

**Award:** \$186,200



This project will provide the Resilient Mystic Collaborative with high-resolution, watershed-wide, baseline data on ground-level air temperatures, humidity, wind, and particulate matter. These data will drive social resilience work in the region. The project includes recruiting, training, and supporting youth and adults from the local community in conducting this local STEM learning opportunity and data gathering initiative.

**Grantee:** Athol & North Quabbin Community Coalition

**Project Title:** Lord Pond Plaza Improvement Project

**Award:** \$117,760

This project involves completing a feasibility study for critical improvements to the Lord Pond Plaza parking lot area to install green infrastructure and nature based solutions such as stream daylighting, shade trees for cooling, green space for stormwater/flooding mitigation and open space improvements for social benefits.

**Grantee:** Auburn

**Project Title:** Leesville Pond Water Quality Protection and Community-Wide Resiliency Improvements

**Award:** \$209,895

This project consists of two initiatives. The first initiative would focus on water quality improvements to Leesville Pond through public education and outreach efforts to the surrounding neighborhoods in both Auburn and Worcester. The second initiative looks to build upon outcomes of the Town's FY20 MVP project by furthering design of the Sword Street crossing over Kettle Brook with a focus on green bridge design and ecological restoration.

**Grantee:** Belchertown

**Project Title:** Enhancing Water Supply Reliability: Resilient Water Storage and Water Conservation – Design & Implementation

**Award:** \$698,356

In a continuation of a previous MVP Action Grant, the Town of Belchertown and the Belchertown Water District will replace the Park Street water storage tank with a new tank that would increase storage capacity and resiliency to drought. The tank replacement project includes improvements to the municipal parking lot adjacent to the tank, which will incorporate green stormwater practices that will enhance water quality and provide significant opportunities for public education and outreach at this highly visible site in the Town center. The Town and the Water District will also pursue detailed design and permitting for a rainwater harvesting system at Belchertown High School to irrigate the athletic fields, which would reduce public water use during periods of peak demand.

**Grantee:** Blandford

**Project Title:** Resilient Community-Driven Master Plan and Resilient Regulatory Work

**Award:** \$102,824

The Town will develop a climate resilient focused Master Plan for the community, including an update to the Open Space and Recreation Plan. The planning process and resulting document will assure integration of nature-based solutions and climate resilience with the Town's land protection and recreational development work. The project also includes researching and drafting improvements to



Blandford's stormwater management regulations and other code as appropriate to integrate nature-based solutions and green infrastructure.

**Grantee:** Bolton, Harvard, & Devens

**Project Title:** Apple Country Ecological Climate Resiliency and Carbon Planning Assessment

**Award:** \$250,000

This project would complete an ecological climate assessment for three communities along the outer-495 corridor – all three have significant natural land resources that continue to experience development pressures. Comprehensive ecological planning would focus on Nature-based Solutions for climate resilience, including a soil health assessment (putting the State Healthy Soils Action Plan to work on a downscaled regional approach), literature research regarding wetlands analysis, and recommendations for policy updates and best management practices.

**Grantee:** Boston

**Project Title:** City of Boston Heat Resilience Planning Study

**Award:** \$280,070

The result of this planning process will be a roadmap for strategically reducing hot spots and heat related vulnerabilities in Boston. The project will include four core tasks: (1) a review of existing plans, policies, and procedures as they pertain to heat, (2) an assessment of urban heat island dynamics and heat risk utilizing existing data sets, (3) a robust and community driven engagement process, and (4) the development of heat resilience strategies in specific timelines and locations throughout Boston.

**Grantee:** Braintree

**Project Title:** Monaquot River Restoration – Construction

**Award:** \$750,000

The project is construction of the Monaquot River Restoration Project which includes removal of the “High Hazard” Armstrong Dam and Ames Pond Dam, restoration of the Monaquot River channel in the area of the former mill pond, construction of a bypass fishway for river herring and American eel passage, and construction of a public access trail with interpretive signage along the restored river channel through the site.

**Grantee:** Cambridge & Metropolitan Mayors Coalition

**Project Title:** Building Resilience to Climate Driven Heat in Metro Boston

**Award:** \$268,820

The project aims to bring together municipal staff from the Metro Mayors Coalition Climate Preparedness Taskforce to collaborate regionally on heat response and preparedness efforts in the urban core. The goals of the project include establishing a heat preparedness group as a Subcommittee of the Climate Preparedness Taskforce to coordinate regional planning and implementation; developing a science-based, regional heat preparedness and adaptation plan that incorporates best available climate projections, heat, social vulnerability, and public health data.

**Grantee:** Chelsea

**Project Title:** Urban Heat Island Mitigation Project

**Award:** \$262,996





The City of Chelsea will advance a citywide urban heat island mitigation initiative. This project will complement ongoing regional efforts by analyzing ambient air and land surface temperatures; performing a social vulnerability assessment; prioritizing corridors for public and private heat mitigation interventions; and devising and carrying out five pilot heat mitigation projects on public properties.

**Grantee:** East Longmeadow

**Project Title:** Comprehensive Master Plan

**Award:** \$84,833

The Town will complete a Master Plan, with all work being filtered through a climate resilience lens, giving an opportunity for community consensus to safely, sustainably, and properly advance East Longmeadow into the mid twenty-first century. With large-scale development opportunities on the horizon such as a proposed multi-use development, having an up-to-date Master Plan will be essential in addressing the Town's land uses, infrastructure, transportation, and natural and cultural resources, all in particular regard to climate resiliency. Goals include integrating nature-based solutions and the most up-to-date climate data into the municipal regulatory framework.

**Grantee:** Easthampton

**Project Title:** Green Infrastructure Planning and Resiliency Design for Cherry Street

**Award:** \$175,957

The City of Easthampton will develop a City-Wide Green Infrastructure Master Plan to address stormwater-driven flooding hazards, with a special focus on the Cherry Street neighborhood, which is an ongoing flooding and erosion concern to DPW staff. The city-wide planning process will include a green infrastructure assessment throughout the City, to culminate in 20 concept-level designs that will be identified for future design, permitting, and implementation, as well as a set of standard details for common green infrastructure practices that are low maintenance and could be implemented by the DPW in a variety of locations.

**Grantee:** Fall River, Dighton, Somerset, & Swansea

**Project Title:** Regional Emergency Water System Interconnectivity Analysis

**Award:** \$100,650

To create a significantly more robust and resilient intermunicipal water supply system, and to respond to citizen concerns expressed in its 2019 MVP Report, the City of Fall River seeks funding to evaluate the ability of the combined water supplies to provide redundancy during periods of critical need.

**Grantee:** Fitchburg

**Project Title:** John Fitch Highway – A Resilient Road Corridor

**Award:** \$271,787

John Fitch Highway was constructed over Bakers Brook and its associated wetlands in the 1960s and, over the past decade, several studies have evaluated drainage issues along this busy commercial corridor. Situated within one of the City's Environmental Justice Census Blocks, this project aims to utilize the City's Complete Streets Policy, with a focus on Community Context Design and equitable engagement, to address flooding, heat islands, and an outdated car-oriented roadway design. Grant funds will be used to assess the many proposed flood control suggestions and create a design analysis



focusing on the John Fitch Highway median and roadway drainage areas and addressing runoff from private development parcels.

**Grantee:** Granby

**Project Title:** Resilient Regulatory Work and Refocusing on Climate Resilience Pathway in Master Plan

**Award:** \$34,272

The Town will update its zoning and stormwater management and erosion control bylaw, and subdivision regulations to promote a low impact development approach and include new design standards for stormwater management.

**Grantee:** Great Barrington

**Project Title:** Climate Action, Resilience, and Equity Great Barrington (CARE GB)

**Award:** \$70,400

This project aims to bring the needs of underrepresented and historically marginalized communities into the center of the Town's climate change adaptation and planning strategy. A local group will train key Town staff and stakeholders on climate justice, equity and inclusion and perform community outreach to Climate Vulnerable Populations. As a part of the project, key takeaways will be reported back to the Town and shared with other MVP communities.

**Grantee:** Haverhill

**Project Title:** Little River Dam Removal Feasibility Study

**Award:** \$129,693

Haverhill will conduct a feasibility study for the removal of the Little River Dam, located just north of Winter Street on the Little River. The dam is believed to contribute to upstream flooding in one of the city's Environmental Justice communities.

**Grantee:** Holyoke

**Project Title:** Urban Forest Equity Plan

**Award:** \$135,032

This project consists of interrelated projects aimed at fundamentally reshaping Holyoke's relationship with its trees and people. The Urban Forest Equity Plan will provide detailed background, establish a planning agenda, and set goals for canopy expansion over time. The concurrent Regulatory Review will examine policies and ordinances related to tree-friendly practices and make recommendations for changes. The Street Tree Inventory will document all public trees within the project locus, forming the foundation for continued monitoring and maintenance, and provide preliminary data for a "Historic Trees of Holyoke" interpretive map.

**Grantee:** Lakeville, Middleborough, Freetown, Rochester, Taunton, & New Bedford

**Project Title:** Assawompset Pond Complex Watershed Management and Climate Action Plan

**Award:** \$93,236

Regional climate resilience will be bolstered through the development of a comprehensive management plan that contains actionable strategies for coping with floodwater issues throughout the Assawompset Pond Complex while also equally addressing water supply and drought potential, water quality, preservation of critical habitat, and compatible recreational access, and will improve social resilience



through the commitment of a network of regional stakeholders operating from coordinated best management practices.

**Grantee:** Lawrence

**Project Title:** Flood Study and DPW Yard Adaptation Plan

**Award:** \$213,418

The project is to complete a flood study and develop an adaptation plan for the City's only Department of Public Works Yard, located within the 100-year floodplain of the Spicket River. The DPW Yard is critical for public works operations and emergency management throughout the City. It is also an active waste disposal site. This project will develop a high-resolution flood model of the Spicket and Merrimack Rivers in Lawrence that will support an in-depth understanding of the flooding issues and develop an adaptation plan that will provide recommended measures that will reduce the frequency, extent, duration, and/or impact of flooding.

**Grantee:** Leominster

**Project Title:** Monoosnoc Brook Bank Stabilization Project

**Award:** \$200,661

The project involves the initial phases of work necessary to design and implement a solution to stabilize a section of bank along Monoosnoc Brook in the city's downtown. By further defining the Brook as an environmentally forward and resiliency focused downtown community anchor, this project can begin to catalyze larger revitalization efforts and help set a new tone in Downtown Leominster.

**Grantee:** Lexington & Resilient Mystic Collaborative

**Project Title:** Upper Mystic River Watershed Regional Stormwater Wetlands

**Award:** \$670,000

Furthering a FY20 MVP action grant, the overall goal of this initiative is to develop a multi-community master plan of stormwater wetland projects that help manage regional flooding while providing co-benefits to host communities. Under this grant, the Resilient Mystic Collaborative will select projects to work with willing landowners and community stakeholders to move forward with design on several of the projects.

**Grantee:** Littleton

**Project Title:** Watershed Protection for Climate Resiliency- Brown's Woods Acquisition

**Award:** \$763,050

The Town of Littleton will acquire over 22 acres of land to provide a nature-based solution to potential climate change related impacts in the town and in particular in the Long Lake watershed. The property includes a gradient of habitats that can be resilient to climate change impacts, is uniquely situated in the headwaters of the watershed to Long Lake, and is a key link in the planned bike trail that would connect the train station to neighborhood and commercial areas.

**Grantee:** Lowell

**Project Title:** Claypit Brook Climate Resilience Stormwater Management Capital Improvement Plan

**Award:** \$138,000

This project will increase the resilience of the city's infrastructural, environmental, and societal features through proactive stormwater management and equitable public engagement. The project's main components include hydraulic modeling, assessing the drainage system, completing a preliminary design of the highly vulnerable Stockbridge Avenue culvert for replacement, conducting an Urban Heat Island assessment, and looking for opportunities to design nature-based, Low Impact Development stormwater controls throughout the watershed. This will culminate in a package of materials for a Claypit Brook Climate Resilience Stormwater Management Capital Improvement Plan.

**Grantee:** Lynn

**Project Title:** Strawberry Brook Green Infrastructure Implementation

**Award:** \$199,090

In FY20 the City was awarded an MVP Action Grant to look for opportunities to implement nature-based solutions within the Strawberry Brook watershed to specifically reduce stormwater flooding and urban heat island effect. The final Resilient Stormwater Management and Implementation Plan identified ten conceptual green infrastructure opportunities that were prioritized based on cost, impact, and feasibility. This grant will develop a green street concept design for Boston Street and will start constructing some of the elements. It will also include a stormwater detention concept design and park improvement vision plan for Barry Park and the General Electric Athletic Association Field.

**Grantee:** Malden

**Project Title:** Malden River Works

**Award:** \$150,015

The project goal is to transform the City's Department of Public Works yard on the Malden River for better climate change preparedness (as a key second responder for the city), and to create a vibrant, resilient public riverfront park. Led by a new coalition of community leaders of color, youth, environmental advocates, and government stakeholders as the newly formed Malden River Works Steering Committee, this project has already put in place a community-led design process that will continue into the upcoming phase of design and engineering development.

**Grantee:** Medford

**Project Title:** Conceptualization and Community Building for Equitable, Community-Driven Resilience Hubs in Medford

**Award:** \$202,485

This project will further advance the establishment of a community Resilience Hub by first working to foster a foundation of trust between community members and City Hall through intentional relationship building and by a strong commitment from the City of Medford to equity and to actively practice anti-racism. Additionally, the project will further engage community-based organizations in planning Resilience Hub site co-location or acquisition, management, and operations.

**Grantee:** Milford

**Project Title:** Green Stormwater Infrastructure in Milford Town Park

**Award:** \$419,123

The Town of Milford and Charles River Watershed Association will work together to design and construct green stormwater infrastructure within Milford Town Park. This project will install two rain gardens and 1 one infiltration system. These nature-based solutions will help provide ecological resilience for the town. The project team will engage with the schools that sit adjacent to the site and the surrounding Environmental Justice community.

**Grantee:** Millbury

**Project Title:** Armory Village Green Infrastructure Project - Phase II

**Award:** \$125,600

This project is the second chapter of a multi-year, multi-phase project aimed at addressing the stormwater capacity and heat island impacts of climate change, as well as minimizing inputs of non-point source pollutants throughout Millbury's center that would otherwise enter the Blackstone River. A previous phase was funded by an MVP Action Grant. This phase focuses on surveying, designing, and permitting green infrastructure solutions for several parking lots and a stretch of Elm Street.

**Grantee:** Natick & Charles River Watershed

**Project Title:** Building Resilience Across the Charles River Watershed

**Award:** \$264,171

The Town of Natick, working with 14 additional communities that are part of the Charles River Climate Compact, will conduct a regional project to develop a Charles River watershed model. This initiative will produce both much needed technical information about where and when precipitation driven flood-risk in the watershed is expected to be exacerbated by climate change, and bring consistency across the watershed communities in regards to how they are planning and governing for expected climate impacts, thus promoting a more comprehensive and synergistic approach.

**Grantee:** Newburyport

**Project Title:** Resilient Critical Infrastructure: Adapting a Wastewater Treatment Facility, Underground Electric Lines, and Public Rail Trail to Future Sea Level Rise and Storm Surge

**Award:** \$1,000,000

This project is the construction phase of rebuilding a higher sloped stone revetment and installing an elevated berm with a public trail on top, which will be a critical step towards making the Newburyport Wastewater Treatment Plant resilient to storm surge and future sea level rise, along with protecting the underground electric transmission lines (23kV) serving the city and the region.

**Grantee:** Plympton

**Project Title:** Building a Municipal Resilience Portfolio: Assessment of Critical Land in the Winnetuxet River Corridor

**Award:** \$41,929

The project's focus is to identify, assess, and protect natural systems and open space in the Winnetuxet River corridor. The first phase of the project is an assessment of the resiliency capacity of target properties, with the goal of preserving the resiliency built into the natural green infrastructure of these properties. The second phase will use the results of the assessment to prioritize specific properties to be permanently conserved.

**Grantee:** Provincetown

**Project Title:** Permit Level Design of the Ryder Street Outfall Relocation and Drainage Improvements

**Award:** \$70,465

This project will develop permit level design, including permitting of the relocation of a 36-inch drainage outfall on Ryder Street and the addition of stormwater improvements.

**Grantee:** Revere

**Project Title:** Coastal Resilience Feasibility Study for the Point of Pines and Riverside Area

**Award:** \$210,689

This project will conduct a coastal resilience feasibility study to identify solutions to avoid or minimize damages associated with coastal storms and sea level rise for the Point of Pines and Riverside Area that is comprised of the following main elements: stakeholder outreach and engagement, assessment of current and future conditions, identification of short-term resilience measures, development of a coastal resilience toolkit, assessment of feasibility of coastal resilience options, and preparation of a coastal resilience feasibility report that summarizes the findings from the study and includes an implementation plan.

**Grantee:** Salisbury

**Project Title:** Resilient Rings Island: Preventing a Neighborhood from Being Stranded by Flooding

**Award:** \$250,000

The Town of Salisbury will build upon the FY19 MVP Action Grant that provided funds for the initial assessment and development of concept designs to resolve chronic coastal flooding of the roads leading to Rings Island. This stage of the project involves final design of culvert replacements and raising of access/egress roads.

**Grantee:** South Hadley

**Project Title:** Climate Resilient South Hadley

**Award:** \$105,000

The project includes developing components of a climate resilient transportation asset management plan; implementing a tree planting campaign to expand tree cover within the community; and completing a regulatory review and update of the Town's Stormwater Management Bylaw to ensure the best available climate change data is utilized in design of permitted systems and to ensure nature based solutions/green infrastructure systems are adequately supported through the local regulatory review process.

**Grantee:** Springfield

**Project Title:** People-focused Resilient Redesign and Retrofits for Community/Civic Infrastructure and Critical Facilities

**Award:** \$210,422

The project will consist of two components. The first is to resiliently redesign Springfield’s civic/communications infrastructure by creating and staffing a Frontline Community Resident Advisor Council to work with City department heads and senior staff to oversee this work; engaging an experienced communications specialist with experience in racial equity and outreach with marginalized populations to review current outreach and communications strategies; launching a series of capacity building workshops including participation in an Undoing/Healing Racism workshop; and advancing implementation of a Racial Equity Impact Assessment with the intent of ensuring increased equity in governmental decision making. The second component will include advancing design for a microgrid project.

**Grantee:** Stow & Hudson

**Project Title:** Assessing the Health of Lake Boon – A Key to Climate Resiliency in Stow & Hudson, MA – and Beyond

**Award:** \$154,000

With the help of residents as trained “citizen scientists,” the goal of this project is to collect data on nutrients, water flows, aquatic biology and other aspects of the lake’s dynamics. The data will then be analyzed using hydrologic and water quality models, which will integrate current and projected impacts of climate change. Based on this analysis, the project team will create a set of recommendations for consideration by the residents and civic leaders in Stow and Hudson, with a special focus on nature-based solutions.

**Grantee:** Williamstown & Mohawk Trail Woodlands Partnership

**Project Title:** Mohawk Trail Woodland Partnership Forest Stewardship, Resilience, and Climate Adaptation

**Award:** \$164,575

The project will take emergent ideas such as New England Forestry Foundation’s exemplary forestry standards, Northern Institute of Applied Climate Science’s adaptation recommendations and extensive background work, the Massachusetts Department of Conservation and Recreation’s Working Forest Initiative climate forestry work, and The Nature Conservancy and American Forest Foundation’s Family Forest Carbon Program work and pull these ideas together, fill in the gaps, and make a simple program for private landowners, town forest owners, consultant foresters and harvesters to implement. This project will bridge the divide between climate mitigation and adaptation to achieve multiple goals.

**Grantee:** Windsor

**Project Title:** River Road Site 1 Culvert

**Award:** \$460,000

The Town of Windsor is in the process of upgrading a stretch of River Road that passes through the Windsor State Forest parallel to a branch of the Wild and Scenic Westfield River. The road itself is a major connector between Route 9 and Route 116. Overall, the project includes repaving the entire road, improving drainage, and replacing three old, undersized and failing culverts. This grant will enable the Town to complete construction of one of the culverts.

### ***FY20 MVP Action Grant Projects***

**Grantee:** Acton

**Project Title:** 53 River Street Dam Removal

**Award:** \$112,500

The Town of Acton seeks to produce designs, apply for permits, and perform building demolition to prepare for the removal of a historical but unsafe dam at 53 River Street. Completion of this project will allow for dam removal, and eventually, the creation of a riverside park that will highlight the historical nature of the property.

**Grantee:** Adams & Mohawk Trail Woodlands Partnership

**Project Title:** Mohawk Trail Woodland Partnership Regional Adaptation & Resilience Project

**Award:** \$1,489,956

This comprehensive project addresses the multitude of climate challenges faced by the communities within the Mohawk Trails Woodland Partnership. This will include a regional feasibility study that will explore forestry management practices that incorporate carbon sequestration. Additional sub-regional projects include a stormwater infrastructure asset inventory and prioritization, exploring regulatory options for river corridor protection, and design and implementation of nature-based solution projects in various municipalities. Municipal-scale projects include dam repairs, stormwater infrastructure upgrades, and several culvert repairs.

**Grantee:** Amesbury

**Project Title:** Open Space and Recreation Plan Update

**Award:** \$37,500

The City of Amesbury will prepare a 2020-2027 Open Space and Recreation Plan (OSRP). This will include updating the information from the draft 2012-2019 OSRP and integrating climate resiliency into the OSRP process with a focus on nature-based solutions and education and community outreach.

**Grantee:** Amherst

**Project Title:** Climate Action, Adaptation and Resilience Plan

**Award:** \$ 100,000

The Town of Amherst will develop a Climate Action, Adaptation and Resiliency Plan to further its decarbonization goals and will conduct an intensive equitable community engagement process to prevent decarbonization from disproportionately affecting underrepresented members of the Amherst Community.



**Grantee:** Auburn

**Project Title:** Develop Protection Measures for Vulnerable Drinking Water Supply Areas and Evaluate Green Bridge Design

**Award:** \$ 145,452

The Town of Auburn and the Auburn Water District seek to further protect the Town's public water supply from contaminants. This project will assess threats to drinking water supply areas, establish best practices to address prioritized threats, and evaluate nature-based solutions and retrofits to stormwater infrastructure, including green bridge design concepts for the replacement of an existing culverted stream crossing.

**Grantee:** Beverly & Salem

**Project Title:** Climate Action and Resilience Plan

**Award:** \$ 100,000

Beverly and Salem will develop a joint Climate Action and Resiliency Plan that will inventory greenhouse gas emissions for both municipal and community sources, identify and prioritize mitigation and adaptation actions, complete a Community Climate Action Toolkit to facilitate community actions and engagement, and develop a monitoring and evaluation system for annual reporting that prioritizes community engagement.

**Grantee:** Boxford, Topsfield, & Ipswich

**Project Title:** Increasing Regional Flood Resiliency through Re-Designing Culverts in the Howlett Brook Watershed

**Award:** \$ 45,866

A comprehensive regional culvert design project in the Howlett Brook Sub-basin of the Ipswich River Watershed, the project will provide 30% design plans for priority sites based on the Massachusetts Stream Crossing Standards and future modeled climatic conditions. The project will position the Towns towards implementation and increase flood resiliency, reduce community risk, and restore natural habitats.

**Grantee:** Brookline

**Project Title:** Urban Forest Climate Resiliency Master Plan

**Award:** \$112,500

The Town of Brookline seeks to develop a research- and data-based, actionable Urban Forest Climate Resiliency Master Plan (UFCRMP). In addition to identifying opportunities for tree planting, the plan will also include recommendations on operations, budget allocation, best management practices, and emergency response procedures. Recommendations will consider specific climate impacts on Brookline's tree canopy.

**Grantee:** Canton

**Project Title:** Climate Change Vulnerability and Resiliency Assessment Study

**Award:** \$ 337,500

The Town will develop a hydrologic/hydraulic drainage model that will illustrate the extent of flooding issues and their relation to community assets and vulnerable populations, as well as assess opportunities for effective nature-based flood mitigation strategies. The model will provide the Town with a foundational tool for climate change planning, engineering design, and public education and outreach.

**Grantee:** Chelmsford

**Project Title:** Dunshire Drive Culvert Replacement & Deep Brook Stream Restoration: Phase I

**Award:** \$ 83,545

The project will redesign undersized drainage infrastructure as well as develop an ecological and stream bank restoration plan. These improvements will increase the resiliency of the neighborhood and its roadways, reduce current and future localized flooding, and enhance the resiliency of 13+ acres of residential land within the Merrimack River floodplain.

**Grantee:** Chelsea & Everett

**Project Title:** Island End River Flood Resilience Project

**Award:** \$ 454,555

Chelsea and Everett seek to develop a final design plan consisting of a coastal barrier, salt marsh restoration and expansion of public waterfront space for permitting and land acquisition along Island End River. This final design phase will continue outreach to the environmental justice communities, key stakeholders and the broader community.

**Grantee:** Deerfield

**Project Title:** Flood Resiliency Through Green Infrastructure in Deerfield

**Award:** \$ 572,250

Using design plans funded by a 2019 MVP Action Grant, the Town will replace the failing Kelleher Drive culvert, and will install green infrastructure in both the town center and at the Deerfield Elementary School. The project will also revise current Deerfield zoning and other bylaws to promote climate resiliency as well as low impact development. The Town will actively engage youth from Deerfield and surrounding communities by involving students at Frontier Regional High School in designing water conservation measures for the Frontier Regional High School campus.

**Grantee:** Easton

**Project Title:** Wetland Restoration- Removal of Abandoned Structures

**Award:** \$ 177,620

The project will restore a degraded stream channel, remove derelict farm structures, restore a former wetland, and create an "invasive free" buffer zone around the restored stream and wetland area, all within a Flood Zone A. The approximately 9.7 acre work area is located on town-owned conservation land known as Sam Wright Farm within the Canoe River Area of Critical Environmental Concern.

**Grantee:** Erving

**Project Title:** Wheelock Culvert Repair/Replacement and Data Redundancy

**Award:** \$64,000

With this project, the Town of Erving will address two priority vulnerabilities: culvert repair and replacement, and document redundancy. The Town will prepare designs and permits for repairing and replacing critical culverts in poor condition and will assess and implement the moving of their local server with critical municipal records to a cloud-based system. This will include digitizing hard copies of critical documents that are vulnerable to any hazards that may impact Town Hall.

**Grantee:** Fall River

**Project Title:** Water Supply Risk & Resilience Assessment (RRA) and Distribution System

**Award:** \$ 115,725

The City first will update and recalibrate its existing water distribution system computer model to obtain an accurate representation of current water demand, pipe conditions, and tank level fluctuation data that reflect climate change factors. Upon completion, the calibrated model will be used to develop a comprehensive Resilience Assessment by evaluating system performance and identifying potential risks to, and resilience of, the piping network and distribution storage.

**Grantee:** Framingham

**Project Title:** Walnut Street Neighborhood Flood Mitigation & City Stormwater Utility Feasibility Studies

**Award:** \$ 206,850

This project will conduct a flood mitigation study for the Walnut Street neighborhood. The challenges of mitigating storm impacts in this neighborhood exemplify the need for a City-wide, long-term, sustainable stormwater program, so this project will also assess the potential development of a stormwater utility that would provide sustainable funding for the City's stormwater infrastructure.

**Grantee:** Gosnold

**Project Title:** Cuttyhunk Land Conservation Project

**Award:** \$ 1,400,000

The specific objectives of this project are 1) the purchase+ of land (67 acres) by the Town of Gosnold and its partner, Buzzards Bay Coalition, 2) the simultaneous purchase of permanent conservation restrictions on these lands (to both provide permanent protection and facilitate acquisition), and 3) the recording of a permanent conservation restriction on the adjacent 235-acre parcel to be donated by Ridgely Farm Limited Partnership.

**Grantee:** Harvard

**Project Title:** Community Climate Action & Land Stewardship Plan

**Award:** \$ 70,860

Harvard will develop a community climate action and land stewardship plan framework, with an in-depth assessment of their agricultural community, and high level discussion for buildings, transportation, waste, natural resources, land use, and resilience.

**Grantee:** Holyoke

**Project Title:** Impervious Surface Mapping for Resiliency Planning and Implementation

**Award:** \$ 93,850

The City of Holyoke aims to develop an actionable, scalable and data-driven impervious surface reduction plan. This project will involve two phases of work: 1) a technical analysis using advanced impervious mapping techniques and 2) the development of impervious surface reduction targets city-wide, based on the phase 1 analysis.

**Grantee:** Hull

**Project Title:** Assessment of Shoreline Resiliency Alternatives for Marginal Road

**Award:** \$ 25,373

The Town of Hull seeks to develop alternatives for providing long-term shore protection on Marginal Road, a coastal road with chronic flooding. This analysis will assess the Town's options for increasing resiliency to the shoreline, roadway, and critical infrastructure in this area.

**Grantee:** Ipswich

**Project Title:** Ipswich River Sewer Interceptor and Siphon Risk Mitigation and Resiliency Improvements

**Award:** \$ 18,945

This will produce final construction documents for the redesign and retrofit of vulnerable wastewater infrastructure in and along the Ipswich River. The rehabilitation, replacement, and protection of sewers in the project area will improve the resiliency and reliability of the infrastructure and safeguard the existing environment.

**Grantee:** Lynn

**Project Title:** Strawberry Brook Resilient Stormwater Management and Implementation Plan

**Award:** \$ 112,500

The City of Lynn is seeking to support a Strawberry Brook Resilient Stormwater Management and Implementation Plan to conduct a watershed assessment and develop a comprehensive plan of actions to restore the drainage in Strawberry Brook and address the City's vulnerable stormwater infrastructure associated with the brook and tributary neighborhood.

**Grantee:** Manchester-by-the-Sea

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

**Award:** \$ 72,385

The project aims to complete permitting and final design for the restoration of the Central Pond area of Sawmill Brook. The restoration design addresses failing infrastructure and seeks to: (1) increase resiliency by reducing flooding, and (2) improve habitat value by restoring a currently impounded water body to a tidally flushed riverine/marsh system and planting native vegetation for stabilization.

**Grantee:** Medford

**Project Title:** Equity-Centered Process for Climate Action and Adaptation Planning

**Award:** \$ 36,136

The City of Medford will partner with the Medford Family Network to co-host a set of Community Dinners to create new spaces for underrepresented residents to participate in conversations around climate change and resilience that will inform the City's Climate Action and Adaptation Plan. Deliverables include an abstract and slide deck about this process for use in webinars and conferences about engaging underrepresented residents.

**Grantee:** Medford

**Project Title:** Suitability Assessment for Equitable, Community-Driven Resilience Hubs

**Award:** \$ 65,259

To address community health vulnerabilities, the City of Medford will assess the suitability of establishing a Resiliency Hub in Medford by identifying a priority service area for a pilot Resiliency Hub, exploring potential partner organizations and their resiliency capacity, highlighting community member concerns, interests, and goals relating to community climate resiliency, and prospectively identifying and evaluating potential Resiliency Hub sites.

**Grantee:** Melrose

**Project Title:** City Hall Parking Lot Green Infrastructure Project

**Award:** \$ 70,313

The City will design green infrastructure solutions for the City Hall Parking Lot to alleviate regular flooding and standing water issues and to provide water quality improvements to downstream resource areas.

**Grantee:** Monson

**Project Title:** Energy Resiliency for Town Hall-EOC-Police HQ Facility

**Award:** \$ 75,000

The Town of Monson will work to increase energy resiliency at its Town Hall through identifying a viable strategy for preparing the Town's main emergency response hub for a renewable energy back-up power system.

**Grantee:** Monterey

**Project Title:** Enhancing Flood Resiliency through Culvert Improvements along the Konkapot River in Monterey Town Center

**Award:** \$ 57,893

The Town of Monterey seeks to conduct an engineering evaluation and develop a conceptual design that incorporates climate change projections for the expansion of the upstream Route 23 culvert at Monterey Town center in order to accept projected climate-change related stormwater flows. The project provides flood prevention and protects vulnerable populations of residents and visitors in Monterey town center.

**Grantee:** Nahant

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

**Award:** \$ 35,565

The main goals of this project are to raise and restore concrete pathways that currently cut through a critical barrier beach and leave businesses, critical infrastructure, and an evacuation route highly vulnerable to coastal flooding. The beach restoration will involve nature-based solutions. This phase of the project will result in design and permitting plans as well as an outreach program to educate the public on climate change projections for Nahant and plans for access point restoration.

**Grantee:** New Bedford & Fairhaven

**Project Title:** New Bedford Harbor MC-FRM Evaluation and Resilience Design Guideline Development

**Award:** \$ 58,662

Using Woods Hole Group's Massachusetts Coast Flood Risk Model (MCFRM) data projections for 2030, 2050, and 2070, the City will develop New Bedford Harbor Resilience Design Guidelines for use in future development to avoid future impacts related to sea level rise and storm surge projections. These guidelines will incorporate nature-based solutions into new development and redevelopment to maximize climate mitigation.

**Grantee:** Newbury

**Project Title:** Controlling Flooding and Addressing Future Climate Impacts through the Replacement of the Orchard Street Culvert

**Award:** \$ 126,324

The goal of this project is to upgrade the culvert at Orchard Street to benefit public safety, flood resilience and the ecology of the area. The project includes surveying and data collection, preliminary engineering, hydraulic analysis and geotechnical investigation.

**Grantee:** Newbury & Newburyport

**Project Title:** Plum Island Cost/Benefit Analysis

**Award:** \$ 217,451

This project will identify the public costs and benefits that both communities need to consider in order to evaluate management options for Plum Island and to plan for the Island's future.

**Grantee:** Newburyport

**Project Title:** Resilient Critical Infrastructure: Adapting a Wastewater Treatment Facility, Underground Electric Lines and Public Rail Trail to Future Sea Level Rise and Storm Surge

**Award:** \$ 71,160

This project seeks to produce designs for a sloped stone revetment and elevated berm that will increase the resilience of the wastewater treatment facility, which is currently threatened by sea level rise and storm surge inundation.

**Grantee:** Northampton

**Project Title:** Restoring the Pine Grove Golf Course for Climate Resiliency

**Award:** \$ 225,000

The City of Northampton procured the 105-acre Pine Grove Golf Course in the spring of 2019 and now seeks to restore an adjacent brook's natural hydrology through a combination of targeted reforestation, soil aeration, removal of anthropogenic drainage features, and the development of a masterplan for the future restoration of wetlands and stream channels.

**Grantee:** Oak Bluffs, Aquinnah, Chilmark, West Tisbury, Tisbury, & Edgartown

**Project Title:** Development of an Island-Wide Specific Adaptation Strategy

**Award:** \$ 54,000

The project will develop a specific Island-wide climate change adaptation strategy. This strategy includes the determination of methods and identification of specific physical infrastructure needed to respond to the goals and policies set forth in the various Town MVP plans. The project will focus on and utilize nature based solutions/strategies that rely on ecological processes to achieve climate resilience objectives.

**Grantee:** Palmer

**Project Title:** RT 181 Culvert Replacement & Culvert Infrastructure Assessment

**Award:** \$ 26,000

The project will inventory and assess town culverts according to the North Atlantic Aquatic Connectivity Collaborative standards for aquatic and terrestrial passage. This project will also include permitting, development of construction documents, and construction of the Route 181 culvert redesign to upgrade this crossing to meet MA stream crossing standards, and to address stormwater quality and flow concerns.

**Grantee:** Palmer

**Project Title:** Comprehensive Master Plan

**Award:** \$ 112,500

The town of Palmer last went through a master planning process in 1975. The creation of an updated Master Plan will be essential in addressing the Town's land uses, infrastructure, transportation, and natural and cultural resources, all in particular regard to climate adaptation, vulnerability, and resiliency.

**Grantee:** Peabody

**Project Title:** Resilient North River Canal Corridor– Phase 2

**Award:** \$ 365,014

The project is Phase II of the Resilient North River Canal Corridor project. Phase II will prepare designs and permitting documents for a riverwalk and for stabilization of the south bank. The bank stabilization will increase the stormwater and riverine flood storage capacity in Peabody Square, while the riverwalk will create new recreational open space as well as a pedestrian corridor for multimodal transportation in an economically disadvantaged part of the community.

**Grantee:** Pelham

**Project Title:** Pelham Severe Weather Mitigation Project

**Award:** \$ 140,000

The Town of Pelham will receive funding to install a Variable Refrigerant Flow (VRF) HVAC system at its Community Center, which contains Pelham's public library as well as its police and fire stations. Installation of this system will enhance the Town's ability to provide services to residents during extreme temperature events.

**Grantee:** Pittsfield

**Project Title:** Mill Street (Tel-Electric) Dam Removal Project

**Award:** \$ 99,000

This project contributes to the removal of the Mill Street dam, which will support ecosystem and climate resilience through restoration of riparian continuity and by eliminating obsolete and deteriorating infrastructure. Additionally, the removal of this dam and contaminated sediment will further address the City's obligation to increase community and neighborhood health and resilience in this Environmental Justice neighborhood.

**Grantee:** Plainfield

**Project Title:** Transportation Infrastructure Improvement, Inventory, and Prioritization Plan

**Award:** \$ 33,550

The Town of Plainfield will conduct a culvert replacement and surface repair at Bow Street as well as undertake a road stream crossing inventory and vulnerability assessment.

**Grantee:** Quincy

**Project Title:** Coastal Flood Mitigation Storm Drainage Improvements- Phase 1: Engineering & Public Outreach

**Award:** \$164,046

Quincy seeks to evaluate opportunities to improve resiliency to climate change in the Adams Shore and Houghs Neck neighborhoods. The first phase of this project includes detailed engineering analysis to better understand site-specific flood conditions in low-lying areas now and under various storm and climate change scenarios, refining recommended alternatives for storm mitigation system design, and outreach to the community and permit agencies.

**Grantee:** Salem

**Project Title:** Ocean Ave. West Pump Station Flood Mitigation – Preliminary Design

**Award:** \$ 174,750

The objective of this project is to develop preliminary designs for improvements to the stormwater system to alleviate flooding to this vulnerable portion of the City. Specifically, the design will improve the collection system piping and pump station to accommodate the 100-year flood event.

**Grantee:** Sheffield, New Marlborough, & Sandisfield

**Project Title:** Rural Dirt Road Resilience: Assessment, Pilot Study, and Recommendations Report

**Award:** \$ 123,972

The project will conduct a regional assessment of the vulnerabilities of rural dirt roads due to climate change impacts. Once assessments and recommendations are made, they will be incorporated into a pilot project that will apply nature-based solutions to a rural dirt roadway, Weatogue Road, in Sheffield. This project will include community outreach on the lessons learned across the three subject communities.

**Grantee:** Shirley

**Project Title:** Microgrid Feasibility Study

**Award:** \$ 63,272

This project will investigate the feasibility of implementing a microgrid for the town's key municipal complex, which includes the town hall, public library, town police station, and the adjacent regional middle school. The study will provide design options for maintaining the critical operations/facilities independently from the utility electrical grid via digitized renewable energy microgrid during loss of utility power incidents.





**Grantee:** Somerville, Boston, Chelsea, Everett, Winthrop, & Revere  
**Project Title:** Critical Regional Infrastructure and Social Vulnerability in the Lower Mystic Watershed  
**Award:** \$ 389,995

The Resilient Mystic Collaborative will conduct a two-part vulnerability assessment of the Lower Mystic watershed. The first will identify interdependencies among critical infrastructure and potential cascading failures during and after an extreme coastal storm, while the second will engage with community and public health experts to identify possible impacts to vulnerable residents and workers when critical infrastructure fails.

**Grantee:** Swampscott  
**Project Title:** Beach Access Resiliency and Accessibility Improvements  
**Award:** \$ 375,521

This project aims to design, permit, and implement nature-based coastal resiliency improvements at the Cassidy Beach Park and Phillips Beach access ways, which serve as flood pathways into inland floodplains during coastal flooding events. By reducing flooding through these access ways, the project will increase the resilience of critical transportation, public safety, water, wastewater, and recreational assets.

**Grantee:** Uxbridge  
**Project Title:** Integrated Vector-borne Disease Control Program  
**Award:** \$ 256,926

The Town of Uxbridge seeks to develop an integrated vector-borne disease management plan. This would include (1) a tailored, biological-based, and regional approach to mosquito control, (2) replacing highly degraded priority culverts, and (3) strengthening the emergency communications plans and systems in order to reach all members of the community.

**Grantee:** Waltham  
**Project Title:** Resilient Stormwater Management and Implementation Plan  
**Award:** \$ 217,370

The City of Waltham will create a Resilient Stormwater Management and Implementation Plan to address the City's vulnerable stormwater infrastructure. This plan will allow the City to identify priority stormwater projects and key areas to equitably incorporate green infrastructure, to evaluate projects to more efficiently direct future resources, and to better maintain, protect, and improve the assets and natural resources of the City through proactive stormwater management.

**Grantee:** Weston  
**Project Title:** Climate Action & Resiliency Plan  
**Award:** \$ 100,000

Weston seeks to develop a Climate Action & Resiliency Plan, which takes the MVP planning work to the next level by engaging in a deep and equitable engagement process with all community members and municipal staff. This engagement will also allow the community to build a common language on what a sustainable and resilient future looks like for Weston, and together, to create a 3-5 year work plan for the Town and community partners.

**Grantee:** Woburn

**Project Title:** Shaker Glen Restoration and Flood Mitigation

**Award:** \$ 145,445

This project seeks to assess the possibility of building flood storage and stormwater features in the upstream Shaker Glen Extension by restoring wetlands in this previously developed area. The City envisions the redesign will also provide an opportunity to build passive recreational walking trails with interpretive signage to educate the public on climate resiliency.

**Grantee:** Worcester

**Project Title:** Worcester Senior Center Parking Lot – Nature-Based Solutions

**Award:** \$ 466,140

The City is looking to provide green infrastructure solutions to a parking lot redesign of its Senior Center – a potential emergency shelter within the community that is central to Environmental Justice neighborhoods. This project could provide an important case study for installing nature-based solutions to address flooding and heat resiliency within an urban constrained site.

**Grantee:** Yarmouth

**Project Title:** Energy Resiliency for Mission-Critical Facilities

**Award:** \$ 150,000

The Town of Yarmouth will engage in energy resilience planning for two mission-critical facilities: The Regional Septage Plant and the Police Headquarters. The project scope will include (1) planning, feasibility assessment and siting, (2) design and (3) developing strategies for energy resiliency, finances, and operations, as well as a supporting engineering design.

### ***FY19 MVP Action Grant Projects***

**Grantee:** Belchertown

**Project Title:** Enhancing Water Supply Reliability: Resilient Water Storage and Water Conservation Planning

**Award:** \$223,513

The Town of Belchertown and the Belchertown Water District will design and permit for a replacement water storage tank that would increase storage capacity and resiliency to drought, and complete a feasibility/concept design of a rainwater harvesting system at Belchertown High School to irrigate the athletic fields.

**Grantee:** Boston

**Project Title:** Moakley Park - Resilience Preliminary Design, Technical Analysis, and Pre-Permitting

**Award:** \$1,500,000

The City of Boston is advancing climate readiness along Boston's shoreline at Moakley Park. The project will result in a preliminary design, technical analysis, and pre-permitting assessment of Moakley Park in order to begin phased construction.

**Grantee:** Braintree

**Project Title:** Armstrong Dam and Ames Pond Dam Removal - Final Design and Permitting

**Award:** \$90,000

The project consists of the final design and permitting of the Armstrong Dam and Ames Pond Dam removal, two obsolete and deteriorating dams on the Monaquot River in Braintree, river channel restoration in the area of former mill pond, as well as the design of a public access walkway and interpretive trail along portions of the river through the site.

**Grantee:** Brockton

**Project Title:** Integrated Water Infrastructure Vulnerability Assessment for Climate Resiliency

**Award:** \$312,615

The City will conduct modelling and assessment that will provide a baseline understanding of risks to infrastructure, environment, and residents associated with flooding events.

**Grantee:** Cambridge

**Project Title:** Completing a watershed-wide analysis to optimize and coordinate regional stormwater management in the Mystic River Watershed

**Award:** \$350,000

The Resilient Mystic Collaborative (RMC) will identify and pursue site-specific green infrastructure opportunities for regional stormwater management and local co-benefits. The project will include ranked, mapped, and characterized descriptions of each of the regional opportunities for green infrastructure, along with an understanding of the remaining need for other flood management strategies.

**Grantee:** Concord

**Project Title:** Climate Action and Resilience Plan

**Award:** \$100,095

The Town will develop a comprehensive Climate Action & Resilience Plan.

**Grantee:** Concord

**Project Title:** Reforestation and Tree Resilience

**Award:** \$150,000

This project includes planting 100-125 trees (following Greening the Gateway Cities Program standards), ash tree treatment to control the spread of Emerald Ash Borer, and a tree farm feasibility study and preliminary design to determine if the development of a municipal tree farm/nursery on a predetermined site is feasible and will provide long-term climate benefits. A preliminary design will be created for such a tree farm.

**Grantee:** Dedham

**Project Title:** Dedham Climate Action & Resilience Plan

**Award:** \$185,895

The Towns will conduct a Climate Action & Resilience Plan project that will include updates to its existing hazard mitigation plan, a targeted vulnerability assessment focused on identifying recommendations to improve the resilience of its infrastructure, an accounting of the greenhouse gas emissions and a pathway to reduce them, the development of a climate resilience framework, and an equitable engagement process.

**Grantee:** Deerfield

**Project Title:** Reducing Flooding Vulnerability in Deerfield

**Award:** \$278,023

The Town will install green infrastructure in the town center, develop a municipal green infrastructure policy, replace two top priority culverts with more resilient culverts with improved wildlife passage, coordinate a community climate awareness event, conduct public education on the town's new Rave emergency alert systems, create an evacuation action plan for potential dam failures and major floods on the Deerfield River, and develop a land conservation priority plan for protecting key parcels in the Deerfield River floodplain.

**Grantee:** Devens

**Project Title:** Devens Climate Action & Resilience Plan

**Award:** \$142,170

The Devens Enterprise Commission in partnership with Mass Development Devens will create a community wide climate action and resilience plan.

**Grantee:** Duxbury

**Project Title:** Climate Change Flood Vulnerability Assessment/Adaptation Planning

**Award:** \$131,712

The Town of Duxbury will conduct a detailed vulnerability and risk assessment of municipal infrastructure, commercial infrastructure in the Snug Harbor business district, and natural resources to develop targeted strategies aimed at reducing risks from flooding, increased storm intensity, sea level rise and storm surge.

**Grantee:** Edgartown

**Project Title:** Climate Change Flood Vulnerability Assessment/Adaptation Planning

**Award:** \$90,035

The Town of Edgartown will conduct a climate change vulnerability assessment of municipal infrastructural and environmental features to develop targeted strategies aimed at reducing risks from flooding, increased storm intensity, sea level rise and storm surge. The goal of the project is to develop a GIS database the Town can use moving forward with resiliency planning.

**Grantee:** Essex & Ipswich

**Project Title:** Impacts of future storminess, greater wave energy, and increased sediment transport along Castle Neck and into Essex Bay: Essex, MA

**Award:** \$190,349

Using a suite of Delft3D models (hydrodynamic, wave, and sediment transport), the Town will quantify how future sea-level rise and increased storminess will impact the relationships amongst the longshore transport, erosion/depositional patterns, and spit growth/retreat along Castle Neck Island in Ipswich and into Essex Bay. The Town will also determine how to *work with the system* to improve the resilience of the coastline around Essex via nature-based solutions.

**Grantee:** Falmouth

**Project Title:** Coastal Resiliency Planning for the Surf Drive Area

**Award:** \$74,787

The Town will develop a phased management approach for reducing vulnerability to natural hazards and enhancing coastal resiliency along the Shining Sea Bike Path and Surf Drive between Trunk River and Shore Street. The study will consist of three main components: identify vulnerabilities and threshold, develop a conceptual phased management approach, and public outreach.

**Grantee:** Falmouth

**Project Title:** Coonamessett River Restoration Project: Construction of Phase 2

**Award:** \$760,000

The Town is currently undertaking the restoration of the lower Coonamessett River and associated former cranberry bog complex. Phase 2 includes removal of a second dam, replacement of a failing culvert, and restoration of the remaining 39 acres of the cranberry bog complex and 3,000 linear feet of the Coonamessett River.

**Grantee:** Mattapoissett

**Project Title:** Pine Island Pond Watershed Lands Project

**Award:** \$960,000

The Town of Mattapoissett is partnering with the Mattapoissett Land Trust and the Buzzards Bay Coalition to purchase 120 acres of pristine forest, streams, freshwater wetlands, and coastal salt marsh in the Pine Island Pond area of Mattapoissett.

**Grantee:** Medford

**Project Title:** Flood Mitigation Strategy Feasibility Analysis and Conceptual Design

**Award:** \$93,529

This project will include an implementation feasibility analysis of two mitigation alternatives (identified in Medford's previous MVP Action Grant award), and development of the preferred alternative to conceptual design.

**Grantee:** Millbury

**Project Title:** Armory Village Green Infrastructure Project

**Award:** \$1,000,000

This project represents Phase 1 of a larger project addressing stormwater capacity throughout Armory Village. Green infrastructure like stormwater planters, bioretention bump outs, rain gardens, tree box filters, tree planting, and selective application of porous pavers and pervious pavement will reduce heat island effects and stormwater runoff to the Blackstone River. Interpretive signage will be installed on the Lower Common to describe green infrastructure techniques used and their benefits for ameliorating climate change, improving water quality, and minimizing the quantity of water impacting the Blackstone River.

**Grantee:** Nantucket

**Project Title:** Designed for Adaptation

**Award:** \$78,000

The Town will develop a public awareness toolkit incorporating information on flooding adaptation strategies for private property owners in the Nantucket National Historical Landmark District, the development of Design Guidelines for the Town of Nantucket's locally-designated historic districts, and a Resilient Nantucket statewide workshop to address flood risk, public awareness strategies and design guidance for adapting historic districts to a future of flooding.

**Grantee:** Northampton

**Project Title:** Protecting Downtown: Northampton's Flood Control Levees

**Award:** \$315,000

The project will provide the field work, borings, analysis, and engineering necessary to identify what upgrades are necessary so the flood control levees protecting downtown Northampton can withstand floods from the Connecticut River and the Mill River.

**Grantee:** Oak Bluffs

**Project Title:** North Bluff Preservation Project

**Award:** \$2,069,310

The Town will conduct a beach nourishment project to dredge Sengekontacket Pond, retrofit existing timber groins on the North Bluff beach to better contain the beach nourishment, and nourish the North Bluff beach below mean high water to enlarge it for climate resiliency and increased recreational value.

**Grantee:** Pittsfield

**Project Title:** Churchill Brook and West Street Culvert Replacement Project

**Award:** \$814,524

Pittsfield's MVP Action Grant will include work on two high priority culverts in Pittsfield, MA: replacement of Churchill Brook at Churchill Street culvert and design of West Street at May Brook replacement culvert.

**Grantee:** Rehoboth

**Project Title:** Culvert and Green Infrastructure Concept Design and Dam Resiliency Assessment

**Award:** \$119,622

The Town will assess two stream crossings on Danforth Street, downstream of the Perryville Dam, and a stream crossing on County Street. The Town will prepare concept designs to replace the culverts, prepare concept designs for green infrastructure at each stream crossing site, and prepare order of magnitude costs for design and construction for the stream crossing and green infrastructure.

**Grantee:** Salem

**Project Title:** Green Infrastructure for Stormwater Management in City Projects

**Award:** \$320,861

The City is seeking to incorporate flood prevention measures using green infrastructure in renovations to Gallows Hill Park and Bertram Field, and the planting of new streets trees in downtown Salem.

**Grantee:** Salisbury

**Project Title:** Resilient Ring’s Island: Preventing a Neighborhood from Being Stranded by Flooding

**Award:** \$157,500

The Town will take steps to increase the resilience of the neighborhood of Ring’s Island by raising its access/egress roads and by improving tidal flushing through culvert replacements at both First Street/March Road and Ferry Road. This project involves a redesign and retrofit of infrastructure, as well as a natural storm damage protection technique.

**Grantee:** Sandwich

**Project Title:** Communicating the Local Benefits of a Resilient Coast

**Award:** \$46,795

The Town will develop outreach and education materials – including an ArcGIS StoryMap, printed materials, and a 7<sup>th</sup> – 8<sup>th</sup> grade STEM curriculum unit – to communicate climate change vulnerabilities and the benefits that the Town’s ongoing coastal resilience initiatives provide to the community as a whole.

**Grantee:** Scituate & Cohasset

**Project Title:** Mapping Storm Tide Pathways in Scituate and Cohasset: Assessing Coastal Vulnerability to Storms and Sea Level Rise

**Award:** \$112,668

The Towns will identify storm tide pathways and develop associated maps and GIS data. Field work necessary to verify the location of pathways identified through spatial analysis, as well as to document accurate locations, will be conducted and incorporated into the project.

**Grantee:** Southwick

**Project Title:** Klaus Anderson Road/Johnson Brook Road-Stream Crossing Redesign, Floodplain Restoration and Green Stormwater Management

**Award:** \$128,056

The Town will complete specific designs and permitting for a replacement stream crossing at the Klaus Anderson Road/Johnson Brook culvert that will meet Massachusetts Stream Crossing Standards. The project will include upstream stormwater management and flood resiliency improvements that utilize green infrastructure, Low-Impact Design, or other nature-based solutions such as floodplain restoration and reconnection.

**Grantee:** Spencer

**Project Title:** Green Infrastructure Implementation in Downtown Spencer, Mechanic Street Parking Lot

**Award:** \$370,492

The Town will implement green stormwater infrastructure techniques as part of a parking lot redevelopment project in downtown Spencer. The design will incorporate rain gardens/bioretention and belowground infiltration systems to reduce runoff and pollutant loads from the lot, as well as green stormwater practices along Mechanic Street to capture and treat additional runoff. The requested grant funding would support the design, permitting, and construction of the project.

**Grantee:** Springfield

**Project Title:** Community Resilience Through Urban Forestry: Improving Emergency Response and Environmental Conditions in Springfield Massachusetts

**Award:** \$315,000

The project aims to support detailed vulnerability and risk assessment of Springfield's urban forest, increase capacity of municipal nursery operation, and support green job skills training through engaging local non-profits, academic institutions, and city residents.

**Grantee:** Uxbridge

**Project Title:** Integrated Water Infrastructure Vulnerability Assessment and Climate Resiliency Plan

**Award:** \$288,904

Uxbridge will create an Integrated Water Infrastructure Vulnerability Assessment and Climate Resiliency Plan. The plan will address water infrastructure and will include a review of local bylaws with consideration for green infrastructure and nature-based solutions, as well as a robust public outreach and education program.

**Grantee:** Walpole

**Project Title:** Culvert Assessment and Green Infrastructure Survey, Walpole, MA

**Award:** \$166,496

The assessment addresses flooding concerns related to increases in precipitation totals and intensity. Tasks include an inspection and review of major road-stream crossings with consideration for green infrastructure and nature based solutions, and a robust public outreach and education program targeting vulnerable and environmental justice communities in Walpole and neighboring communities.

**Grantee:** Westport

**Project Title:** Assess and Plan for Climate Threats to East Beach Corridor

**Award:** \$75,000

The Town will carry out assessments of the potential risks to the roadway and utility lines along East Beach and recommend feasible actions to reduce or eliminate these risks.

**Grantee:** Winthrop

**Project Title:** Climate Resilient Land Use

**Award:** \$99,740

Winthrop will work with the Metropolitan Area Planning Council (MAPC) to conduct a policy scan and audit and draft a new resilient zoning policy or land use tool. Winthrop will also work to further the development of best practices and resources/templates for the municipalities in the Metropolitan Mayors Coalition and design and implement a resilient land use planning and zoning training for municipal staff and volunteers.

**Grantee:** Woburn

**Project Title:** Horn Pond Brook Improved Fisheries Habitat and Flood Control

**Award:** \$235,355

The City will evaluate and restore Horn Pond Brook so that flooding is reduced, and habitat is improved for migratory fish passage. The City also plans to install two green infrastructure demonstration projects: a rain garden near its water treatment plant on Lake Avenue, adjacent to Horn Pond, to capture and treat stormwater and protect the brook's water quality, as well as shade tree plantings at the City's Senior Center.



**Grantee:** Wrentham

**Project Title:** Eagle Dam Removal

**Award:** \$46,000

The Town will partner with Charles River Watershed Association (CRWA) to assess the feasibility of removing Eagle Dam to restore natural flow patterns and re-establish the floodplain along the Eagle Brook.

### ***FY18 MVP Action Grant Projects***

**Grantee:** Adams

**Project Title:** Assessment and Design for Adaptation and Resilience

**Award:** \$56,250

The Town of Adams will assess, analyze, evaluate, and prioritize small storm water conveyances to understand current conditions. The Town will advance the recommendations that result from this process, and conceptual designs will be developed for 2-3 of the highest priority sites.

**Grantee:** Arlington

**Project Title:** Mill Brook Corridor Flood Management Demonstration Project: Pilot Study and Implementation

**Award:** \$399,260

The Town of Arlington will expand upon an existing project supported by Community Preservation Act funds to survey the Mill Brook corridor, design public access improvements between Wellington Park and the Brook and enhance the natural resources of the Brook and surrounding areas. Improvements to Mill Brook include invasive plant removal, flood storage capacity, bank stabilization, and revegetation.

**Grantee:** Belchertown

**Project Title:** Town-wide Road Stream Crossing Assessment and Climate Change Adaptation Plan

**Award:** \$151,437

The Town of Belchertown will identify and provide recommendations and concept designs for high-priority crossings to enhance community resilience, mitigate existing and potential flooding, and increase stream continuity and aquatic passage. The project will also provide recommendations for areas that are known to be heavily influenced by beaver activity.

**Grantee:** Boston

**Project Title:** Climate Ready Zoning and Design Guidelines

**Award:** \$250,000

The Boston Planning and Development Agency and Boston Environment Department will establish a future sea level rise zoning layer with urban design guidelines for reconstruction, retrofits in historic districts, district level flooding interventions, and requirements for new construction through a community engagement process.

**Grantee:** Brookline

**Project Title:** Climate Resiliency Policy Audit/Amendments and LID and Design Guidelines

**Award:** \$56,188

The Town of Brookline will engage with an engineering firm to conduct an audit of its storm water, floodplains, zoning, and wetlands bylaws and DPW Site Plan Review Checklist to identify opportunities to mandate higher standards for climate resiliency or identify any conflicts with State policy.

**Grantee:** Cambridge

**Project Title:** Cambridge Climate Change Preparedness & Resilience Catalyst Project

**Award:** \$118,000

The City of Cambridge will develop four resilience toolkits for renters, small residential owners, small businesses, and large businesses. Each toolkit will be presented in a workshop targeting the relevant audience.

**Grantee:** Carver

**Project Title:** Climate Change Water Resource Vulnerability and Adaptation Strategy Assessment

**Award:** \$196,979

The Town of Carver will conduct a climate change vulnerability assessment and management plan that addresses natural and man-made water resource features in the community. The project will consist of a series of technical assessments focused on these major types of water resources within the community and associated climate change vulnerabilities. The results of the technical assessments will guide the development of an integrated water resources climate resiliency management plan.

**Grantee:** Charlton & Spencer

**Project Title:** Integrated Water Infrastructure Vulnerability Assessment and Climate Resiliency Plan

**Award:** \$300,000

The Town of Charlton and the Town of Spencer will conduct a comprehensive, regional climate change vulnerability assessment and climate resiliency plan that addresses water infrastructure in both communities. The results of these assessments, combined with input from a committee, will guide the development of an integrated climate resiliency plan.

**Grantee:** Deerfield

**Project Title:** Municipal Vulnerability Preparedness Plan Implementation

**Award:** \$47,325

The Town of Deerfield will design and permit for the replacement of a vulnerable culvert on Mill Village Road to accommodate the larger flows anticipated with climate change and accommodate fish and wildlife passage. The Town will update the Town's floodplain zoning regulations to protect natural flood storage areas and incorporate new flood maps reflecting climate change.

**Grantee:** Essex

**Project Title:** Feasibility Study for an Essex Bay Living Shoreline

**Award:** \$15,000

The Town of Essex will conduct a feasibility study on the creation of a "living shoreline" that will investigate how a nature-based solution relying on green infrastructure for storm protection can be designed to also provide ecological restoration and habitat management to increase coastal resiliency for the Town.

**Grantee:** Essex, Ipswich, & Newbury

**Project Title:** Documenting Effects of a Large-Scale, Natural Sediment Event on Salt Marsh Resiliency in the Great Marsh Estuary

**Award:** \$60,000

The Towns of Essex, Ipswich, and Newbury will study the effects of large-scale sediment additions over marsh areas to recreate given environmental regulations. Results will be used to characterize marsh plant and soil responses to sediment nourishment on a landscape scale and determine whether this natural event increases or decreases marsh resilience to sea level rise.

**Grantee:** Gloucester

**Project Title:** Watershed and Water Supply Vulnerability, Risk Assessment, and Management Strategy

**Award:** \$107,044

The City of Gloucester will develop an in-depth climate change risk assessment and management strategy for its water supply and reservoir system, including its watersheds. The project will assess the potential impacts of long-term climate change on this system. The City will also identify and evaluate the effectiveness of different management, operational, and infrastructural strategies to mitigate identified climate risks to water supply reliability.

**Grantee:** Holden

**Project Title:** Water/Sewer Infrastructure Green Emergency Power Study

**Award:** \$24,588

The Town of Holden will conduct a study to investigate the possibilities of providing “green” emergency power.

**Grantee:** Holyoke

**Project Title:** Meeting an Immediate Need by Learning from Hurricane Maria Survivors in Holyoke

**Award:** \$149,825

The Town of Holyoke will partner with a bilingual consulting team to gather a detailed demographic analysis of individuals who arrived in the Town from Puerto Rico as a result of Hurricane Maria. In-person interviews will be conducted with local social service providers, local politicians, local governmental agencies, and state/federal agencies to determine the ground rules for what transpired during and after Holyoke’s response to Maria. This will produce an institutional analysis and checklist for steps that communities need to implement to be more prepared for accommodating climate migrants.

**Grantee:** Manchester-by-the-Sea

**Project Title:** Sawmill Brook Central Pond Restoration Design

**Award:** \$88,180

The Town of Manchester-by-the-Sea will complete the permit level design for its Sawmill Brook Central Pond Restoration. The restoration design will be optimized to maintain flood storage capacity and will consider hard and soft solutions for erosion control, evaluate options to retrofit a storm water outfall, and improve habitat value within the Pond through a shift from the currently impounded water body to a tidally flushed riverine/marsh system.

**Grantee:** Medford

**Project Title:** Medford Open Space Plan Update

**Award:** \$60,000

The City of Medford will update its Open Space Plan and incorporate current climate change projections for the City. It will identify open space and recreation resources within the city and identify growth trends that will help project future availability and demand.

**Grantee:** Medford

**Project Title:** Drainage Model and Conceptual Strategies to Reduce Future Flooding in South Medford

**Award:** \$60,830

The City of Medford will refine its city-wide drainage model and create a more detailed 2-D map of South Medford, including simulations of future storms and the potential impact of increased water volumes flowing down the Mystic River from the Upper and Lower Mystic Lakes. Additionally, the City will develop both green and grey infrastructure options for flow reduction and flood attenuation to provide protection on a neighborhood scale.

**Grantee:** Mendon

**Project Title:** Integration of Low Impact Development Standards into Local Bylaws and Subdivision Regulations

**Award:** \$8,025

The Town of Mendon will build on the work done in 2016 with Mass Audubon and the MVP process to hire a consultant to undertake the drafting of comprehensive Low Impact Development (LID) bylaws.

**Grantee:** Montague

**Project Title:** Montague City Road Flooding Protection Project: Design and Permitting

**Award:** \$33,750

The Town of Montague will employ nature-based storm damage protection and other bioengineering methods to adapt to seasonal flooding that routinely closes one of Montague's main thoroughfares.

**Grantee:** Natick

**Project Title:** Tree Planting Plan to Mitigate Heat Islands and Reduce Runoff

**Award:** \$9,025

The Town of Natick will develop a 5-10 year tree planting plan focused on mitigating heat islands, providing shade for vulnerable populations, and reducing stormwater runoff. The Town will focus on public and private properties with significant impervious surface, areas with known environmental justice communities and vulnerable populations, and land with significant stormwater runoff.

**Grantee:** Natick

**Project Title:** Water Conservation Campaign

**Award:** \$16,640

The Town of Natick plans to implement a new water utility software, WaterSmart, that uses data and behavioral science to save water. The Town will use funds to support community outreach to achieve widespread adoption of the WaterSmart technology. Engagement includes mailings, a main street banner, and "Water Week" community outreach activities.

**Grantee:** Natick

**Project Title:** Low Impact Development Regulation Development and Zoning Bylaw Inclusion

**Award:** \$39,053

The Town of Natick is seeking to update its current regulations to incorporate as many of the Mass Audubon LID Zoning ByLaw suggestions in order to create more LID rich zoning bylaws fit for the Town of Natick. The Town will hire a consultant to review and analyze the feasibility for the suggested opportunities for LID inclusion into Zoning Bylaws and draft subsequent Bylaw modifications.

**Grantee:** New Bedford

**Project Title:** Comprehensive Climate Adaptation and Resilience Action Plan and Interactive Community Dashboard

**Award:** \$165,120

The City of New Bedford will develop a Community Climate Adaptation and Resilience Action Plan and an associated online Community Sustainability Dashboard. The City will also update its existing Multi-Hazard Mitigation Plan.

**Grantee:** Newbury

**Project Title:** Assessing storm energy reduction by the vegetated salt marsh platform in Newbury, MA: A background to enhancing natural protection by the living shoreline

**Award:** \$225,840

The Town of Newbury will use hydrodynamic and wave modeling and fields studies to improve marsh resiliency and evaluate the effectiveness of marshes in reducing storm surges and wave energy, as well as determine if defenses to Newbury can be improved through CZM StormSmart principals and Living Shoreline solutions.

**Grantee:** Newburyport

**Project Title:** Wastewater Treatment Plant Climate Resilience

**Award:** \$122,695

The City of Newburyport will improve the resilience of Newburyport's Wastewater Treatment Plan to effects of various climate change stressors. The project will involve performing a detailed climate risk assessment to the various components within the wastewater facility, identifying solutions to reduce flood risk, and creating a roadmap with timeline for implementing these solutions.

**Grantee:** Northampton

**Project Title:** Northampton Designs with Nature to Reduce Storm Damage

**Award:** \$400,000

The City of Northampton will design green infrastructure to detain, retain, and treat stormwater using nature-based solutions. The City will do site analysis on ten opportunity sites on public land that have been identified and prioritized based on harm/vulnerability reduction and stormwater benefits.

**Grantee:** Peabody

**Project Title:** Peabody North River Canal Resilient Wall, Riverwalk, and Park

**Award:** \$224,216

The City of Peabody will conduct a comprehensive project along the North River Canal with project components that will improve resilience, address site contamination from historic use as a tannery district, and create a park resource that enhances public access and vitality of the area.

**Grantee:** Peabody

**Project Title:** Lawrence Brook Watershed Flood Mitigation and Water Quality Improvement

**Award:** \$243,400

To address ongoing flooding issues along City streets in the watershed, the City evaluated alternatives to mitigate flood depth and extent while also addressing water quality, including LID and green infrastructure approaches, to mitigate flooding and improve stormwater quality in the watershed. The City determined that a combination of GI and LID as well as a new stormwater outfall will serve to alleviate flooding. A conceptual design for the outfall and BMPs/LID elements has been completed, and this project entails evaluation of climate change predictions on the final design, as well as execution of the final design and permit application preparation.

**Grantee:** Pelham

**Project Title:** Resilient Pelham

**Award:** \$137,250

The Town of Pelham proposes 3 projects: 1) Resilient Roads 2) Resilient Communications and 3) Resilient Campus for emergency operations and sheltering. The Town will 1) assess and incorporate nature-based solutions toward removing vulnerabilities such as failing culverts and the potential threat of roads washing out, 2) conduct a study to identify residential neighborhoods at risk of total isolation due to culvert failure, roadway flooding, and temporary or long term route closure, 3) compile data and assess and enhance various forms of communication in the town, and craft an education and outreach strategy.

**Grantee:** Salem

**Project Title:** Salem Sanitary Sewer Trunk Line Relocation Assessment

**Award:** \$345,000

The City of Salem will evaluate and identify a feasible solution to remove and relocate critical sewer infrastructure out of a resource area and outside a hazardous area where it is subject to damage from storms and storm surge.

**Grantee:** Sandwich

**Project Title:** Climate Change Vulnerability Assessment/Adaptation Planning for the Town of Sandwich

**Award:** \$88,025

The Town of Sandwich will conduct a detailed vulnerability and risk assessment of municipal infrastructure and natural resources to develop targeted strategies aimed at reducing risks from flooding, increased storm intensity, sea level rise, and storm surge. Through this project the Town will provide data on likely scenarios and degrees of potential impact.

**Grantee:** Scituate

**Project Title:** Comprehensive Wastewater Treatment Resilience Feasibility Study

**Award:** \$75,100

The Town of Scituate will conduct a feasibility study to more closely assess the vulnerability of specific wastewater infrastructure facilities with respect to current and future coastal flood hazards, identify and prioritize the most suitable climate adaptation strategies for each facility based on the results of the feasibility study, and budget for future costs associated with the recommendations.

**Grantee:** Somerville

**Project Title:** Detailed Vulnerability and Risk Assessment, Green Infrastructure, Public Education & Communication

**Award:** \$350,000

The City of Somerville will enhance its basic city-wide storm water and sanitary system model to understand its vulnerability to flooding on a street-by-street basis, and use this data to learn where green infrastructure can best impact flood control and water quality management and to develop a flood risk communications strategy, messaging, and materials targeted towards residents in inundation-prone areas.

**Grantee:** Swansea

**Project Title:** Public Water Supply Infrastructure Vulnerability Assessment

**Award:** \$28,495

The Town of Swansea will conduct a climate change vulnerability assessment of its desalination treatment facility's raw water intake infrastructure and the primary access road to the infrastructure. The assessment will be conducted by an engineering consultant, in collaboration with the Town's technical staff, to develop a future resiliency plan to protect the public water supply from sea level rise and extreme storms.

**Grantee:** Wareham

**Project Title:** Climate Change Flood Vulnerability Assessment/Adaptation Planning

**Award:** \$62,735

The Town of Wareham will conduct a climate change vulnerability assessment of municipal infrastructural, societal, and environmental features to develop targeted strategies aimed at reducing risks from flooding, increased storm intensity, sea level rise, and storm surge.

**Grantee:** Weymouth

**Project Title:** Fort Point Road Coastal Infrastructure Resilience Project

**Award:** \$129,557

The Town of Weymouth will redesign critical coastal infrastructure within the Fort Point Road neighborhood. The seawall, revetment, and drainage structures in the area of Fort Point Road will be redesigned to new standards of protection, relying on new generation materials, best practice and engineering techniques, and anticipation of climate change impacts.

**Grantee:** Winthrop

**Project Title:** Ingleside Park Feasibility Study and Permitting

**Award:** \$156,750

The Town of Winthrop will conduct a feasibility study to mitigate flooding in Ingleside Park. In addition, the coastal processes at the site will be evaluated to determine the water levels, tidal influence, waves, and storm surge elevations at the project site for present day, as well as three future time periods (i.e., 2030, 2070, and 2100) incorporating sea level rise. These data will inform the alternatives analysis to select an appropriate nature-based or conventional infrastructure type.