

## Coastal Resilience Grants - FY 2015 Project Summaries

Applicant	Project	Award
Town of Chilmark	<p><i>Squibnocket Town Beach Expansion and Restoration</i></p> <p>The town will continue design and permitting activities to expand and restore Squibnocket Town Beach and relocate the beach parking area to a location naturally protected from erosion. The project will support the Squibnocket Farm Homeowner's Association's plan to construct an elevated roadway that provides enhanced public access and protection for a coastal road.</p>	\$52,000
Town of Duxbury	<p><i>Coastal Processes Study and Resiliency Recommendations for Duxbury Beach and Bay</i></p> <p>The town will study the effects of waves, tides and the movement of sand and other sediment on both the ocean and bay sides of Duxbury Beach to understand existing conditions and potential impacts from future storms and sea level rise. The town will evaluate restoration alternatives most likely to expand habitat and improve long-term capacity of the beach system to withstand these impacts.</p>	\$206,250
City of Gloucester	<p><i>Little River Floodplain and Habitat Restoration</i></p> <p>The city will re-establish a coastal floodplain by removing obsolete concrete structures and fill associated with the original operations of the West Gloucester Water Treatment Plant. To provide additional storm damage protection to the shoreline and improve habitat for estuarine species, salt marsh will be created using bioengineering techniques.</p>	\$400,000
Town of Hull	<p><i>Climate Change Vulnerability Assessment and Adaptation Planning</i></p> <p>The town will identify and assess municipal infrastructure and natural resources at risk of impacts from flooding, storm surge, increased storm intensity and sea level rise. The town will develop and prioritize short-, mid- and long-term strategies that can be implemented to minimize future storm damage and disruption of services.</p>	\$45,339
Town of Manchester-by-the-Sea	<p><i>Sawmill Brook Culvert and Green Infrastructure Analysis - Vulnerability and Required Capacity under Climate Change</i></p> <p>The town will evaluate the capacity of bridges and culverts in the Sawmill Brook watershed to provide needed services during storms under future precipitation and sea level rise conditions. The town will prepare design plans, cost estimates and a permitting strategy for infrastructure improvements at key locations in the watershed.</p>	\$154,950

Town of Mattapoisett	<p><i>Protecting Mattapoisett's Potable Water and Sewer Infrastructure in the Face of Climate Change: Assessing Risk and Identifying Solutions</i></p> <p>The town will quantify potential impacts to critical water and wastewater infrastructure under a suite of sea level rise and hurricane conditions and develop priority actions to help ensure the resilience of the infrastructure to future storm and climate impacts.</p>	\$47,791
Town of Nantucket	<p><i>Empowering Coastal Communities to Prepare for and Respond to Sea Level Rise and Storm-Related Inundation: A Pilot Project for Nantucket</i></p> <p>The town will implement flood- and erosion-control measures at three vulnerable and high-use public sites prioritized by the town's Coastal Management Plan (CMP) and identify and map low-lying areas that act as pathways for storm tides to inundate inland areas. The inundation maps will be used to help the town prioritize the remaining 19 CMP action items.</p>	\$177,850
Town of Plymouth	<p><i>Cobble Nourishment of Washover Areas at Plymouth Long Beach</i></p> <p>The town will fill seven severely eroded washover areas on Long Beach with rounded cobbles to increase storm damage protection and flood control for Plymouth Harbor. The cobble is of similar size and texture to the existing beach sediment and is less susceptible to erosion than sand.</p>	\$279,080
Town of Provincetown	<p><i>Increasing Coastal Resiliency and Reducing Infrastructure Vulnerability by Mapping Inundation Pathways</i></p> <p>The town will identify and map low-lying areas that provide a direct pathway for flood waters to reach inland areas and install a tide gauge to provide real-time water level data. The goal of the project is to assess potential flood impacts to critical public infrastructure and recommend short- and long-term strategies for future protection of high risk assets.</p>	\$155,125
City of Salem	<p><i>Green Infrastructure Feasibility Assessment</i></p> <p>The city will identify sites that are vulnerable to the impacts of climate change and evaluate the feasibility of green infrastructure enhancements at these sites. Three sites are expected to be selected for detailed analysis, including conceptual designs of the green infrastructure enhancements, required permitting and estimation of the cost and timing of implementation.</p>	\$75,000

Town of Sandwich	<p><i>Analyze and Permit a Nearshore Sediment Borrow Source for Sandwich Town Beaches</i></p> <p>The town will analyze a nearshore site adjacent to Scusset Beach to determine its viability as a source of sand for future placement on eroding public beaches downdrift of the Cape Cod Canal jetties. Results from the scientific and engineering analyses will support the town's efforts to apply for and obtain required local, state and federal permits.</p>	\$300,000
Save Popponeset Bay, Inc.	<p><i>Improving the Coastal Resilience of Popponeset Spit and Bay</i></p> <p>Save Popponeset Bay, with support from the Town of Mashpee, Mass Audubon Society and Popponeset Beach Association, will evaluate, design and seek permits for an alternative beach nourishment and dune restoration strategy to stabilize and restore habitat for the publicly accessible barrier beach on Popponeset Spit.</p>	\$194,188
Town of Scituate	<p><i>North Scituate Beach Nourishment</i></p> <p>The town will complete all necessary local, state and federal permits for future sand, gravel and cobble nourishment along 2,800 feet of severely eroding public beach at Glades and Surfside Roads in North Scituate. This project follows up on a grant last year to design the beach nourishment project.</p>	\$241,163
Town of Swampscott	<p><i>Climate Change Coastal Resiliency and Flood Control Plan</i></p> <p>The town will use storm surge and sea level rise inundation models to assess vulnerabilities of municipal infrastructure and natural resources. The project will develop conceptual engineering solutions and policy recommendations to help protect residents, property and infrastructure from extreme weather and climate change impacts.</p>	\$70,100
Town of Wareham	<p><i>Wastewater Infrastructure Vulnerability Assessment and Emergency Response Plan Related to Coastal Flooding and Climate Change</i></p> <p>The town will produce a vulnerability assessment and emergency management plan for critical wastewater infrastructure and identify necessary improvements to help the system endure future storm and climate change impacts.</p>	\$93,750
Town of Weymouth	<p><i>Puritan Road Flood Mitigation and Ecological Resilience</i></p> <p>The town will study the existing drainage system and runoff characteristics between the Back River and an inland salt marsh and design adaptive solutions for retrofitting a persistently collapsing culvert to improve drainage and tidal flow capacity given anticipated climate impacts.</p>	\$75,000

Town of Winthrop	<i>Veterans Road Drainage Improvements Design</i>  The town will model watershed drainage patterns, tidal influences and sea level rise as a basis for redesigning and permitting a tide gate at Lewis Lake to increase flood water drainage from low lying areas, improve water quality and possibly reduce the accumulation of sediment where the gate discharges to Winthrop Harbor.	\$173,845
<b>TOTAL</b>		<b>\$2,741,431</b>