Coastal Resilience Grants – FY 2020 Project Summaries

Recipient	Project Title and Description	Award
Braintree	*Watson Park Shoreline Erosion Mitigation and Coastal Resiliency Improvement* The Town of Braintree will advance a coastal bank stabilization project through final design and permitting. When constructed, the project will address flooding and erosion impacts, restore salt marsh and provide area for landward marsh expansion at Watson Park.	*$79,624*
Chatham	*Feasibility Assessment for Shore Protection of the Chatham Mainland Using Nourishment to Enhance Existing Island and Shoal Resources* The Town of Chatham will analyze physical models to evaluate alternatives for reducing erosion along the mainland shoreline while improving habitat for threatened and endangered shorebirds. The project will focus on augmenting the shoals and tidal flats north of Tern Island to naturally protect the mainland shoreline from wave impacts and erosion. The nourishment will also enhance shorebird nesting and foraging habitat.	*$51,666*
Chatham, on behalf of the Pleasant Bay Alliance	*Helping Salt Marsh Keep Pace with Sea Level Rise in Pleasant Bay: Assessing Salt Marsh Vulnerability and Living Shoreline Suitability* The Town of Chatham, in partnership with the three Pleasant Bay Alliance communities of Brewster, Orleans and Harwich, will assess the extent and vulnerability of salt marsh resources in Pleasant Bay, develop a methodology for evaluating the suitability of the Pleasant Bay shoreline for potential treatments to prevent salt marsh loss and design a pilot project to test the effectiveness of salt marsh protection through a nature-based approach.	*$70,050*
Duxbury Beach Reservation, Inc.	*Design and Permitting for Nature-Based Storm-Damage Protection Measures for the Duxbury Beach Reservation Property* The Duxbury Beach Reservation will design and initiate permitting for a comprehensive management approach that will increase resilience at vulnerable locations along Duxbury Beach, including the Atlantic Ocean facing beaches and dunes, High Pines marsh area, cobble berm along the bay-side of the access road, Powder Point Bridge abutment and pilings on the barrier beach and low areas of the access road vulnerable to flooding.	*$131,894*

Eastham	*Targeted Vulnerability Assessment of Low-Lying Roadways in the Town of Eastham* The Town of Eastham will perform a targeted vulnerability assessment of four critical, low-lying roadways—Dyer Prince Road, Bridge Road, Samoset Road, and Smith Lane/Rt. 6—to identify risks to public infrastructure and coastal resources located along the roadways and prioritize adaptation strategies with respect to future tidal, sea level rise and storm surge scenarios.	*$149,014*
Essex County Greenbelt Association	*Essex County Coastal Resiliency: Education and Communication* The Essex County Greenbelt Association will work with municipal partners in Gloucester and Essex to conduct outreach and education on land conservation for flood storage and coastal resiliency by developing maps, using interactive online media platforms and hosting public events to communicate climate threats and the role of land conservation in climate resiliency.	*$34,740*
Gloucester	*Gloucester Water Pollution Control Facility Flood Mitigation* The City of Gloucester will conduct a feasibility assessment and prepare conceptual design alternatives for protecting the long-term function of its primary wastewater treatment plant from current and future flooding. The design alternatives will consider the use of natural systems, such as earthen berms, in addition to structural techniques to retrofit the critical facility.	*$70,650*
Hull	*Dune Restoration and Accessibility at North Nantasket Beach* The Town of Hull will design and permit a restored dune and accessible crossover ramp at A Street and Beach Avenue that closely matches the adjacent dune configurations to reduce flooding while providing public beach access. The project will seek a permit for the closure of a large, non-permitted path through the dune along Beach Avenue and continue public engagement efforts to involve year-round and seasonal residents in dune restoration, crossing design and long-term plans to add sand to the dune.	*$118,936*
Hull	*Hull Waste Water Treatment Facility (WWTF) Nature-Based Resiliency Measures* The Town of Hull will prepare final design plans and permit applications for a combination of onsite adaptation measures, including vegetated berms, flood gates and low flood barrier walls, to improve the resilience of the facility to flooding and sea level rise impacts.	*$259,896*

Ipswich and The Trustees of Reservations	*Building Climate Resilience through Adaptation at Argilla Road and the Crane Estate - Expanded Alternatives Analysis, Design and Permitting* The Town of Ipswich will partner with the Trustees of Reservations to perform additional evaluations of adaptive roadway design alternatives that balance access, resiliency and wetland health at Argilla Road, a key point of access for over 350,000 visitors to The Crane Estate. The project will advance a preferred alternative to permit-level plans and include opportunities for public engagement.	*$163,732*
Kingston	*Continued Establishment of a Living Shoreline Project at Gray's Beach* The Town of Kingston will continue to refine and implement monitoring and maintenance methods for a recently constructed living shoreline project at Gray's Beach. Tasks include assessing the health of planted vegetation, surveying dune and beach heights and managing invasive species to help ensure that the living shoreline project successfully gets established.	*$28,458*
Marblehead	*Increasing Resilience through Community Engagement: Facilitating Climate Adaptation Strategies for Marblehead and its Harbor* The Town of Marblehead will assess the vulnerability of municipally owned facilities and infrastructure in Marblehead Harbor to current and future flooding and sea level rise. The project includes an extensive stakeholder and public engagement process to increase understanding and awareness of resilience-based adaptation concepts to address vulnerabilities.	*$93,545*
Marshfield and Duxbury	*Planning, Design, Permitting and Public Education in Support of Beach and Dune Nourishment at Critically Eroded Beaches in Marshfield and Duxbury* The Towns of Marshfield and Duxbury will plan, design and begin permitting activities for nourishment and dune enhancement projects at vulnerable coastal beaches along their east-facing shorelines. The project will include necessary field investigations and coastal modeling so that nourishment alternatives can be evaluated for expected levels of storm damage protection and design life.	*$175,842*

Mattapoisett	*Eel Pond Wastewater Force Main Replacement - Permitting Level Design* The Town of Mattapoisett will complete planning and engineering design plans for the replacement of a vulnerable section of the Eel Pond sewer force main, which crosses the West Channel between Goodspeed Island Road and Reservation Road. The sewer main has the potential to become exposed at this location due to inlet migration and coastal storm impacts. The project proposes to horizontally directional drill the force main at a lower depth to help safeguard public health and safety and environmental resources.	*$119,487*
Nantucket	*Design of Long-Term Protection for Polpis Road at Sesachacha Pond* The Town of Nantucket will prepare engineering plans and file permit applications for a project to stabilize and reduce wave impacts to a coastal bank at Sesachacha Pond along a vulnerable section of Polpis Road. The project will help provide storm-damage protection to the critical roadway and maintain access to the village of Sconset and the Quidnet and Wauwinet areas.	*$42,225*
Oak Bluffs	*Assessment of Shore Protection Options to Improve Coastal Resiliency along the Oak Bluffs Harbor Shoreline* The Town of Oak Bluffs will study the effect of tides, waves, storm surge and sediment movement along the harbor shoreline and develop conceptual shore protection strategies to enhance the stability of the barrier beach system, reduce wave impacts in the harbor and minimize coastal flooding impacts to areas surrounding the harbor over the next 50 years.	*$138,396*
Scituate	*Community-Led 50-year Coastal Vision and Near-Term Adaptive Strategy* The Town of Scituate will create a 50-year vision for the coastline through a robust public participation process to help set the stage for future development of a 10-year action strategy. The vision planning process will engage the community around challenging coastal issues and build support for shoreline management recommendations.	*$203,820*
Tisbury	*Evaluation of Coastal Processes and Storm Impacts to Support Resilient Planning and Mitigation Strategies for the Vineyard Haven Harbor Shoreline* The Town of Tisbury will develop an understanding of flooding and sediment transport along the Vineyard Haven shoreline to support a detailed analysis of potential shoreline management strategies. The project will provide a scientific basis for the town to proactively plan for projects that will improve the resiliency of the harbor area over the next 50 years.	*$129,951*

The Trustees of Reservations	*A Focus on Our Most Vulnerable Places* The Trustees of Reservations will use their coastal properties as case studies to evaluate flooding and erosion vulnerabilities and potential adaptation strategies for barrier beaches, coastal banks and publically accessible shorelines. The project will create outreach and communication materials that incorporate broad stakeholder perspectives and build support for nature-based measures.	*$82,000*
Wareham	*Final Design of the Overflow Lagoon at the Wareham Water Pollution Control Facility (WPCF)* The Town of Wareham will develop final engineering plans and complete permitting of a third, lined equalization lagoon to provide the additional plant capacity required during extreme rain events to reduce the potential for overtopping and sewer overflow to the Agawam River.	*$151,140*
Wellfleet	*Increasing Coastal Resiliency through Inter-Municipal Shoreline Management* The Town of Wellfleet will partner with the adjacent towns of Provincetown, Truro and Eastham to develop a comprehensive framework for managing approximately 35 miles of shoreline in a mutually beneficial manner. The project is a first step in addressing the complexities of inter-municipal shoreline management with the goals of maximizing and sustaining the resilience of Eastern Cape Cod Bay through effective management techniques and consistent responses to the increased threat of coastal storms and climate change.	*$115,000*
TOTAL		$2,410,066