

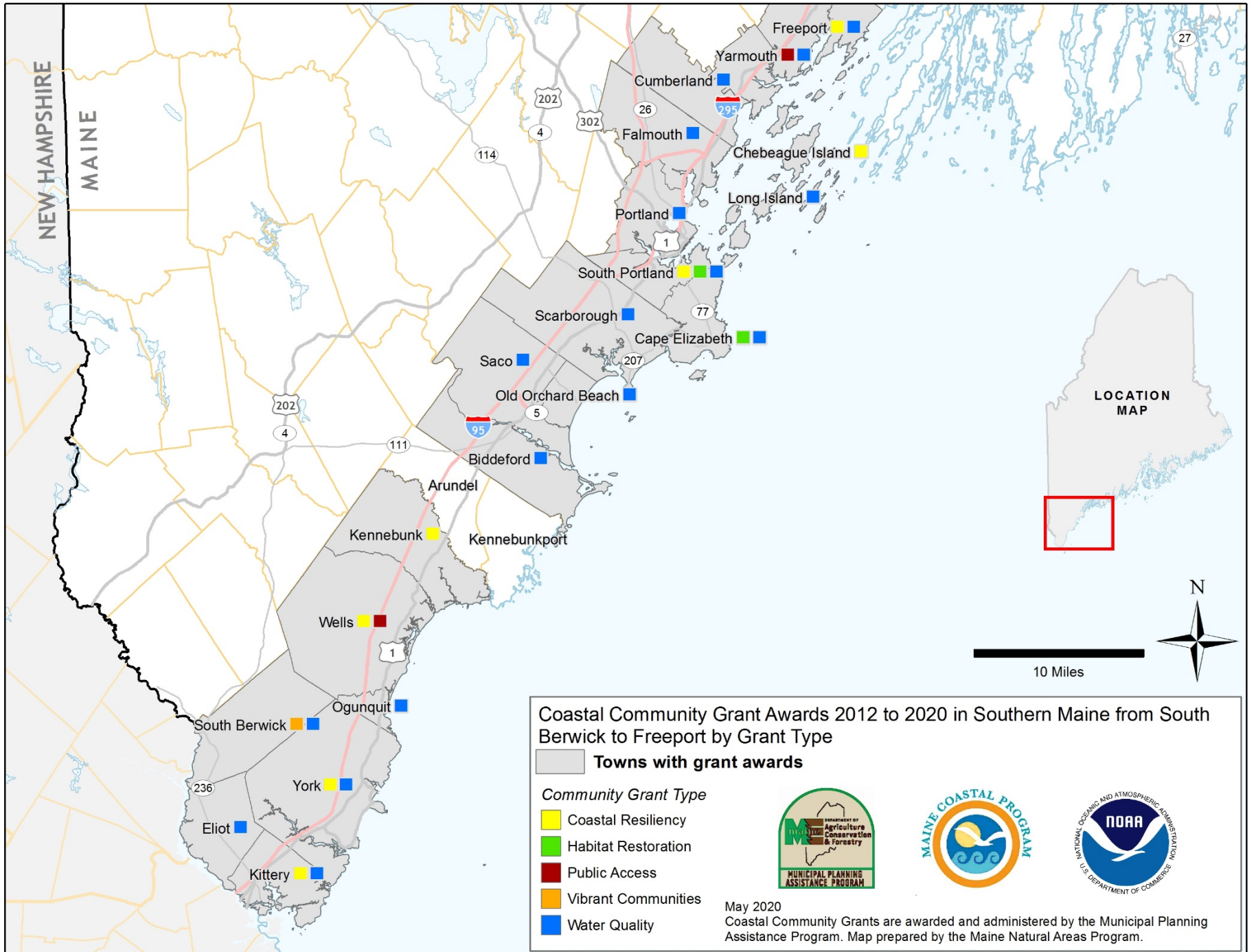
COASTAL COMMUNITIES GRANT PROGRAM

Awards under this program are for *planning, design and implementation* to:

- Promote sustainable development
- Improve water quality
- Conserve coastal habitat
- Improve public access to the coast
- Increase resiliency/adaptation to erosion and flooding



Grant funds *cannot be used* for permit fees or construction.

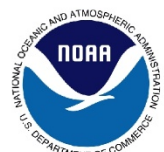


Coastal Community Grant Awards 2012 to 2020 in Southern Maine from South Berwick to Freeport by Grant Type

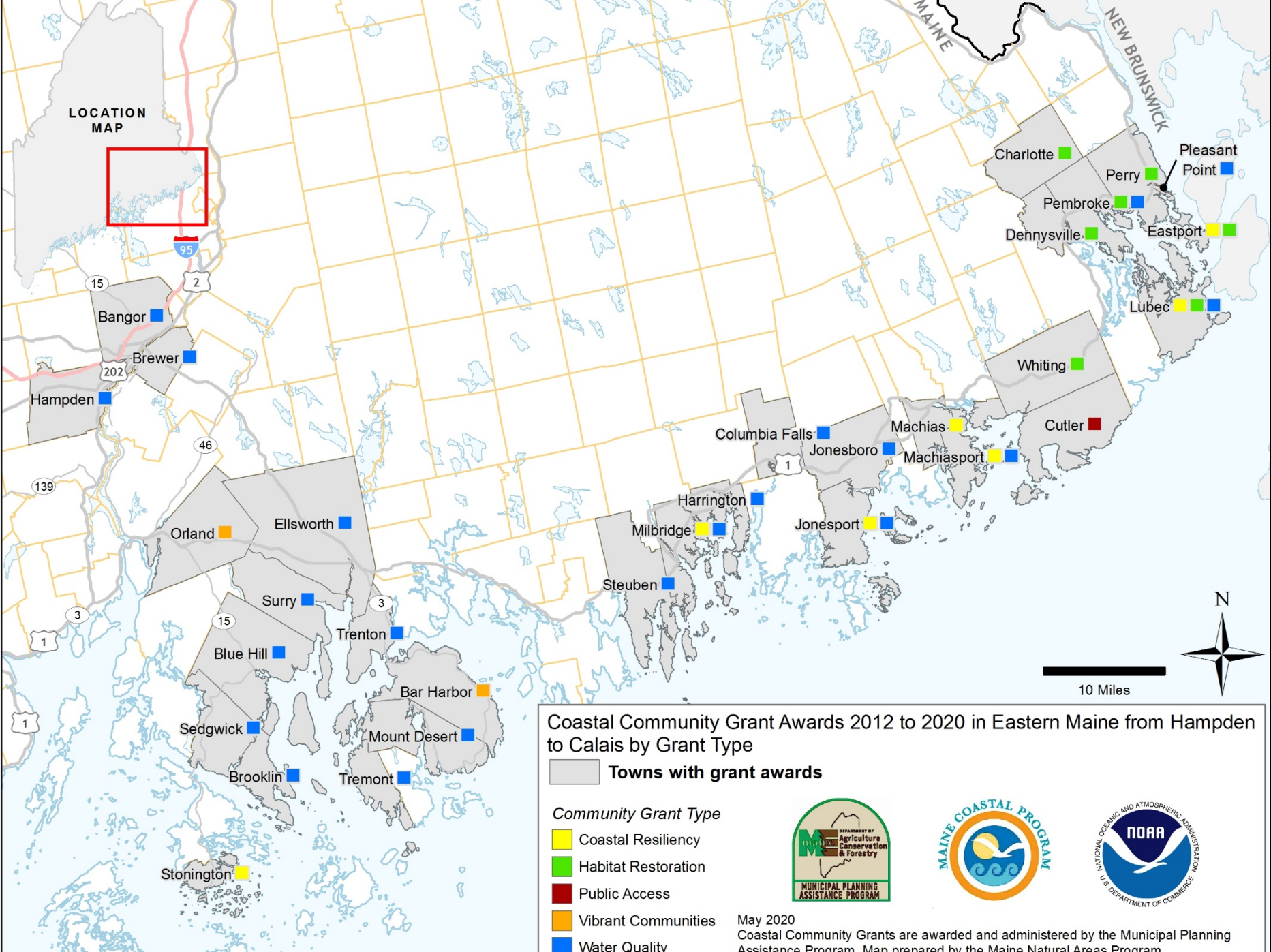
 **Towns with grant awards**

Community Grant Type

-  Coastal Resiliency
-  Habitat Restoration
-  Public Access
-  Vibrant Communities
-  Water Quality



May 2020
 Coastal Community Grants are awarded and administered by the Municipal Planning Assistance Program. Map prepared by the Maine Natural Areas Program.



LOCATION MAP



MAINE
NEW BRUNSWICK

Charlotte
Perry
Pleasant Point
Pembroke
Dennysville
Eastport
Lubec

Bangor
Brewer
Hampden

Columbia Falls
Jonesboro
Machias
Machiasport
Cutler

Orland
Ellsworth

Harrington
Milbridge
Jonesport

Surry
Trenton
Blue Hill

Steuben

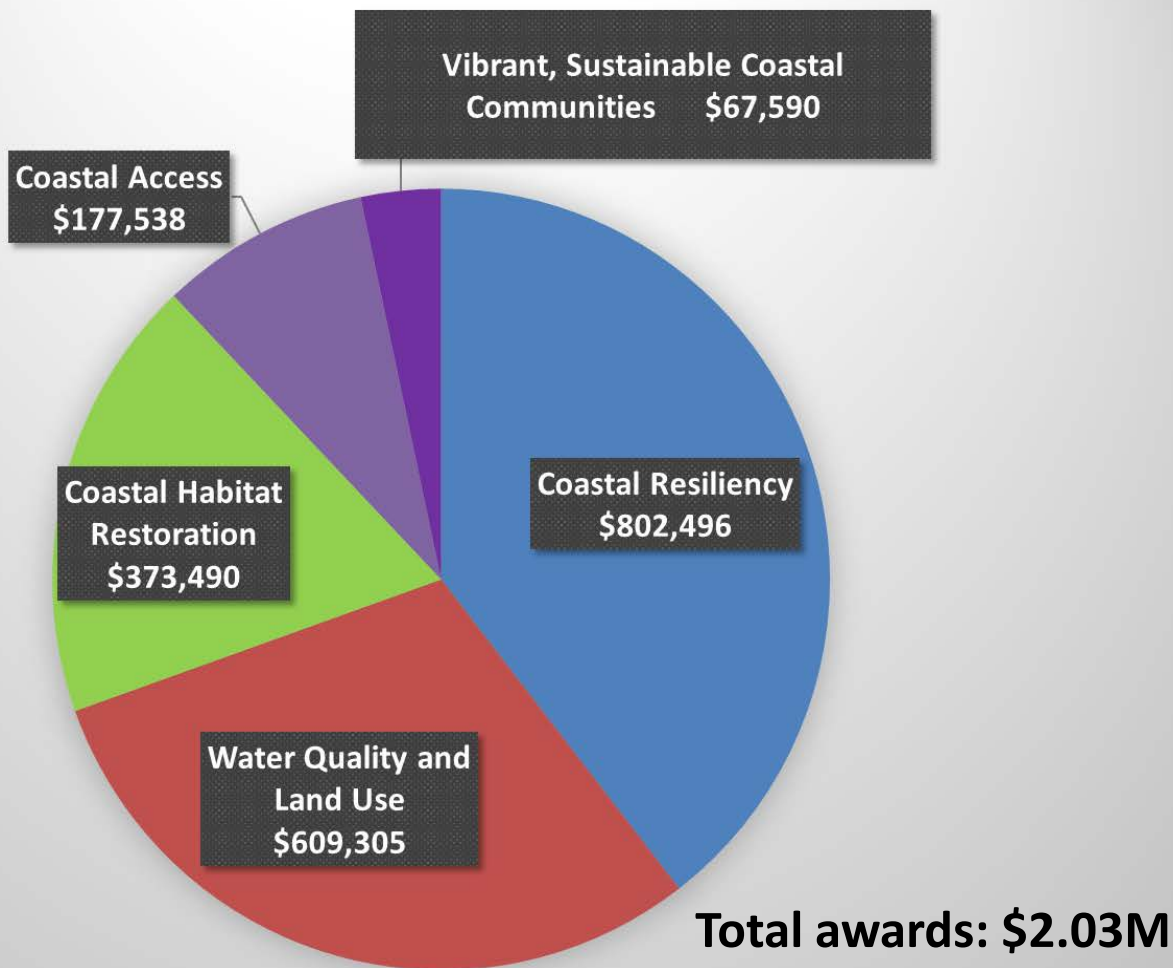
Bar Harbor
Sedgwick
Mount Desert

Brooklin
Tremont

Stonington



COASTAL COMMUNITY GRANT AWARDS BY TYPE 2012 TO 2020



ELIGIBLE APPLICANTS

Eligible applicants include municipalities and regional planning organizations.

Applications must include at least a 25% match for the total project cost which can be combination of in-kind match and cash match.

For grant specifics:

[http://www.maine.gov/dacf/municipalplanning/
financial_assistance.shtml](http://www.maine.gov/dacf/municipalplanning/financial_assistance.shtml)



WHAT MAKES FOR A SUCCESSFUL PROPOSAL

Quality of the proposal; project feasibility and readiness 20 points

Task 1: *Task Name*

Provide narrative/task description

Deliverable(s): *work products*

Responsible Party: *identify lead*

Start Date for Task:	End Date for Task:
----------------------	--------------------

- Describe the composition of the project's advisory committee and approach to soliciting community participation
- Be sure that tasks are well sequenced with start and end dates for each task.



WHAT MAKES FOR A SUCCESSFUL PROPOSAL

Cost effectiveness and match 25 points

- The project budget is broken down by task. (Talk to potential consultants if you need to)
- Individual task budgets are clearly identified and represent a reasonable estimate for that particular activity.
- Letters of support must be submitted to confirm match.

Projects without cash match can only score a maximum of 20 points.



WHAT MAKES FOR A SUCCESSFUL PROPOSAL & SUCCESSFUL PROJECT

**Applicant qualifications and capacity;
past performance** 20 points

- Identify a team leader with experience in community participation, working with consultants and managing projects.

TIP: Include specifics of reporting requirements in consultant agreements.



WHAT MAKES FOR A SUCCESSFUL PROPOSAL & SUCCESSFUL PROJECT

Linkage to identified state, local and regional priorities 15 points

- The project implements ideas and actions identified in adopted municipal or multi-municipal comprehensive plans and other plans created through a public participation process and adopted by the municipality.



WHAT MAKES FOR A SUCCESSFUL PROPOSAL

Economic Impact

10 points

- A core goal of the Maine Coastal Program is to enhance the coastal-dependent economy while preserving natural coastal resources.
- Guidance provided is to estimate the direct or indirect economic impact of project through leveraged funding, private investment, job creation or retention or other economic metrics.



WHAT MAKES FOR A SUCCESSFUL PROPOSAL

Partnerships

10 points

- Letters of support speak to what partners will bring to the project and what they will do.



WHAT MAKES FOR A SUCCESSFUL PROJECT PROPOSAL

- Learn from others - Coastal Community Grant Program Case Studies

<https://www.maine.gov/dacf/municipalplanning/casestudies/ccg-case-studies.shtml>

- Contact us before the Grant Program Statement is released to get some feedback. ruta.dzenis@maine.gov

287.2851



Coastal Community Grant Program Coastal Resiliency Awards	Maine FY	Grant amount	Completion date
Bowdoinham - Re-Development of Public Works Waterfront Property (Phase I & II)	19	\$ 45,750	11.30.20.
Bustins Island Village Corporation/Cumberland County Soil & Water Conservation District: Green Infrastructure	20	\$ 17,802	12.31.20. (ext. proposed)
Camden - Harbor Park Seawall and Montgomery Dam Redesign	20	\$ 40,000	12.31.20. (ext. proposed)
Chebeague Island/Greater Portland Council of Governments - Coastal Hazards and Adaptation Study	16	\$ 15,000	ext. to 3.30.17.
Damariscotta - Downtown Damariscotta Coastal Hazards Preliminary Engineering Study	14	\$ 20,000	ext. to 4.30.15.
Hancock County Planning Commission - Adapting Stonington Working Waterfront: Implementation Strategy for Resiliency	15	\$ 31,562	ext. to 3.31.16.
Harpwell - Coastal Flooding: Plan for Basin Point Road and its Wetlands	18	\$ 20,000	12.31.18.
Islesboro - Resilience Planning for the Future with the Threat of Flooding from Storm Surge & SLR	16	\$ 40,000	ext. to 6.30.17.



Coastal Community Grant Program Coastal Resiliency Awards	Maine FY	Grant amount	Completion date
Lincoln County Regional Planning Commission - Coastal Hazards Resilience Phase I - Outreach to Lincoln County coastal communities with Maine Geological Survey	12	\$ 35,040	6.30.13.
Lincoln County Regional Planning Commission - Coastal Hazard Resilience Phase II - Category 1 Hurricane Map Books for Emergency Management	15	\$ 2,648	12.31.15
Lincoln County Regional Planning Commission - Coastal Hazards Resiliency Tools Phase II - SLR overlay zone in Shoreland Zoning Ordinances	15	\$ 6,960	12.31.15.
Lincoln County Regional Planning Commission - Boothbay Harbor Waste Water Treatment Plant Coastal Hazard Resilience Project (Boothbay Harbor, Boothbay & Southport)	16	\$ 20,000	12.31.16.
Lincoln County Regional Planning Commission - Downtown Boothbay Harbor Adaptation Options for Increased Storm Surge Resiliency	17	\$ 28,000	ext. to 11.30.18.
Lincoln County Regional Planning Commission - Coastal Hazards Resiliency Tools Phase III- SLR overlay zone in Floodplain Management Ordinances	17	\$ 9,850	ext. to 3.30.18

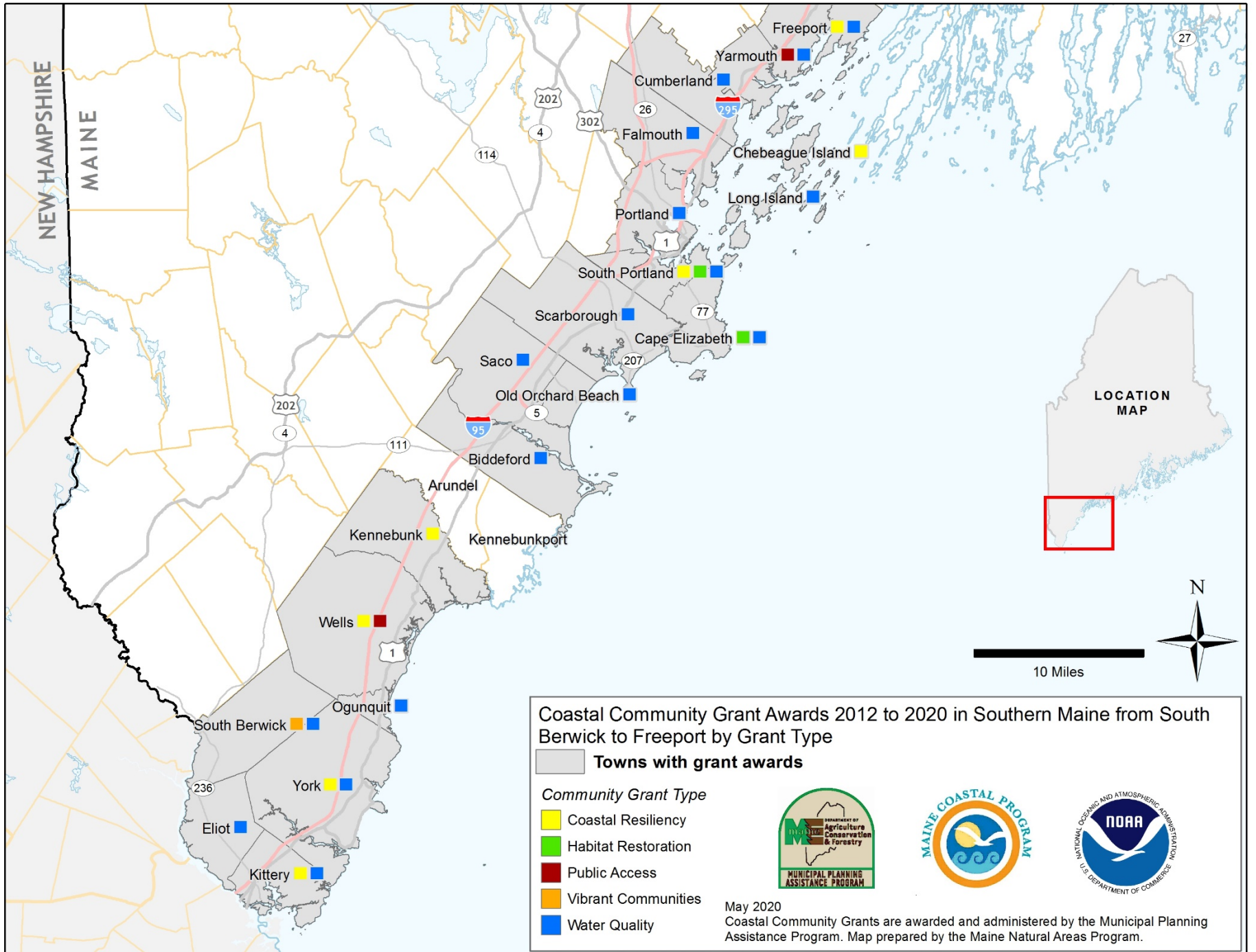


Coastal Community Grant Program Coastal Resiliency Awards	Maine FY	Grant amount	Completion date
Machias Waterfront Resilience and Renewal	18	\$ 45,094	ext. to 3.31.19.
Monhegan Plantation: Monhegan Island Alternative Domestic Water Supply Feasibility Study	20	\$ 39,240	12.31.20.
Phippsburg/Kennebec Estuary Land Trust - Collaboration to Increase Social Resilience in Midcoast Maine	21	\$ 19,541	12.31.21.
South Portland - Vulnerability Assessment Mapping	19	\$ 50,189	11.30.20.
Southern Maine Planning and Development Commission (PREP): Town of York Comprehensive Plan Sea Level Adaptation Chapter	12	\$ 8,000	6.30.13.
Southern Maine Planning and Development Commission: Tides, Taxes and New Tactics	20	\$ 46,187	12.31.20. (ext. proposed)
Southern Maine Planning and Development Commission -Developing A Model Coastal Resilience Ordinance to Protect Maine's Coastal Cities, Towns and Residents	21	\$ 48,600	12.31.21.



Coastal Community Grant Program Coastal Resiliency Awards	Maine FY	Grant amount	Completion date
Stonington - Flood Vulnerability Assessment and Adaptation Plan for Municipally Owned Infrastructure	19	\$ 60,000	11.30.20. (ext. proposed)
Vinalhaven - Coastal Flooding Vulnerability Study of Downstreet Business District	17	\$ 45,000	ext. to 3.30.18
Washington County Council of Governments - Washington County Resilience (Eastport, Jonesport, Lubec, Machias, Machiasport, Milbridge)	19	\$ 62,033	11.30.20.
Washington County Council of Governments - Working Waterfronts Preparing for Climate Change (Milbridge, Jonesport, Machiasport, Cutler, Lubec and Eastport)	14	\$ 26,000	Grantee withdrew from grant program
Wiscasset - Waste Water Treatment Plant Coastal Hazard Resilience Project	16	\$ 20,000	12.31.16.
		\$ 802,496	





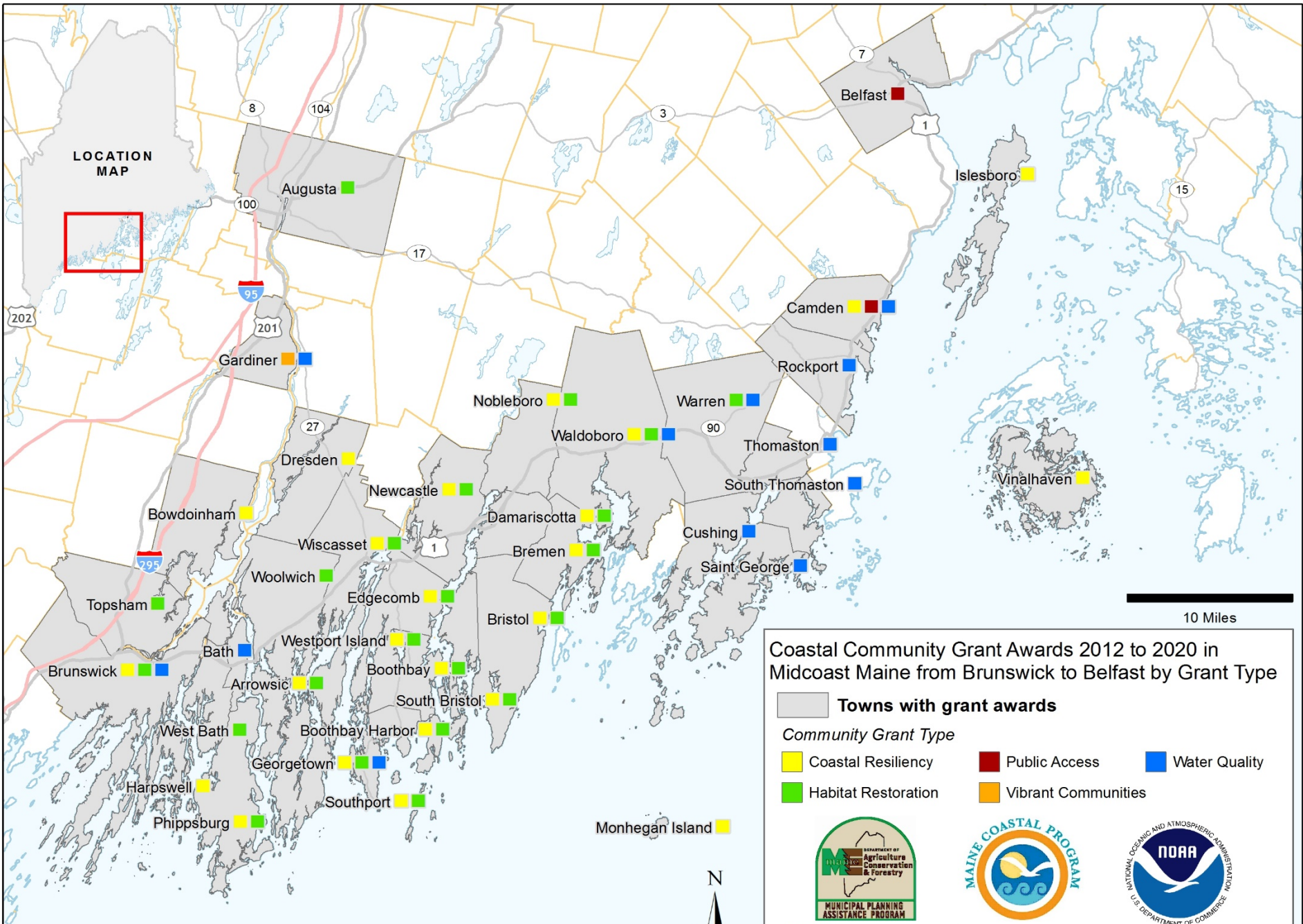
Coastal Community Grant Awards 2012 to 2020 in Southern Maine from South Berwick to Freeport by Grant Type

Towns with grant awards

- Community Grant Type**
- Coastal Resiliency
 - Habitat Restoration
 - Public Access
 - Vibrant Communities
 - Water Quality



May 2020
Coastal Community Grants are awarded and administered by the Municipal Planning Assistance Program. Map prepared by the Maine Natural Areas Program.



Coastal Community Grant Awards 2012 to 2020 in Midcoast Maine from Brunswick to Belfast by Grant Type

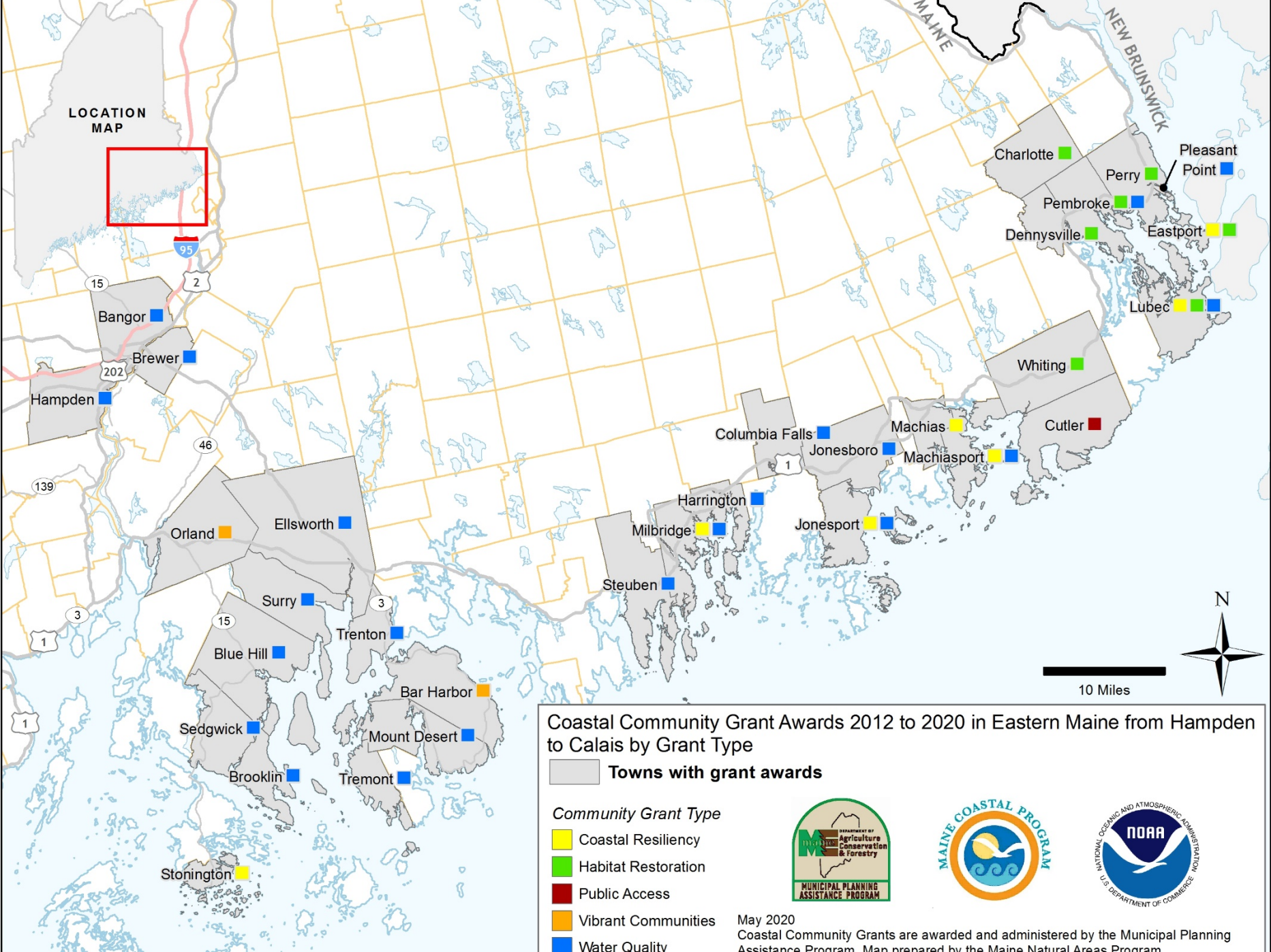
Towns with grant awards

Community Grant Type

- Coastal Resiliency
- Habitat Restoration
- Public Access
- Vibrant Communities
- Water Quality



May 2020
 Coastal Community Grants are awarded and administered by the Municipal Planning Assistance Program. Map prepared by the Maine Natural Areas Program.



LOCATION MAP



MAINE
NEW BRUNSWICK

Charlotte
Perry
Pleasant Point
Pembroke
Dennysville
Eastport
Lubec

Bangor
Brewer
Hampden

Columbia Falls
Jonesboro
Machias
Machiasport
Cutler
Harrington
Milbridge
Jonesport
Steuben

Orland
Ellsworth
Surry
Trenton
Blue Hill

Bar Harbor
Sedgwick
Mount Desert
Brooklin
Tremont

Stonington



Coastal Community Grant Awards 2012 to 2020 in Eastern Maine from Hampden to Calais by Grant Type

Towns with grant awards

Community Grant Type

- Coastal Resiliency
- Habitat Restoration
- Public Access
- Vibrant Communities
- Water Quality



May 2020
Coastal Community Grants are awarded and administered by the Municipal Planning Assistance Program. Map prepared by the Maine Natural Areas Program

COASTAL COMMUNITY GRANT CASE STUDIES

<https://www.maine.gov/dacf/municipalplanning/casestudies/ccg-case-studies.shtml>



COASTAL COMMUNITY GRANTS:
Coastal Resiliency

COASTAL COMMUNITY GRANTS:
Coastal Resiliency

COASTAL COMMUNITY GRANTS:
Coastal Resiliency

Town of Machias Downtown Waterfront Resilience and Renewal

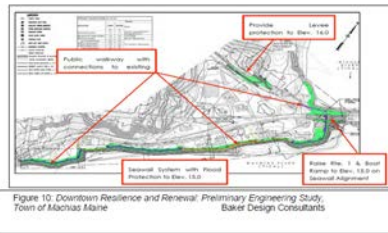


Figure 10. Downtown Resilience and Renewal: Preliminary Engineering Study, Town of Machias Maine
Baker Design Consultants

"The information gained through this study is critical for assessing future flood protection needs for downtown Machias. The town appreciates all the hard work and dedication from all the partners that made this possible"
Christina Thermen, Machias Town Manager 2019

PARTNERS
Washington County Council of Governments, University of Maine at Machias
Consultants: Baker Design Consultants, Ransom Consulting Engineers and Scientists, West Falls Surveying

PROJECT DESCRIPTION (Project completed January 2019)
The Machias village center lies at the head of tide for the Machias River estuary. The Town is working to revitalize the downtown by improving waterfront access while making it more resilient to storm surges and sea level rise. This multi-year effort will involve significant changes to transportation infrastructure, water treatment, landscaping, and shoreline stabilization.

THE CHALLENGE and PROJECT APPROACH
Flooding threatens the health, safety, and welfare of the people of Machias. More specifically, downtown businesses and infrastructure are vulnerable to flooding under a variety of scenarios. The aging Machias dike is at risk of being overtopped by flooding (and possibly failing). The health of Machias, surrounding communities, and surrounding ecosystems



depends on effective wastewater treatment. Flooding of the sewage treatment plant could cause a release of raw sewage to the Machias River that would have multiple negative impacts on water quality and would result in closure of significant shellfish harvesting areas in Machias Bay.

- The approach taken in this project was threefold including:
1. Creation of a conceptual design, next steps and cost estimates required to develop a final design and build for flood protection against future sea level rise while also meeting FEMA requirements to protect against the 1% annual chance flood so that the flood maps could be revised after it is built.
 2. Quantifying the potential economic impacts of flooding and sea level rise and inform stakeholders as they will need to make complex and potentially contentious decisions.
 3. Integrating seawall improvements into downtown revitalization efforts to restore historic wharf and riverfront access to the river including initial assembly of historical photographs and oral histories so that interpretation along the future river-walk is grounded in the town's rich history.

RESULTS

The project generated a very useful set of products that are part of the larger initiative toward final construction of a flood protection structure. These included: 1) detailed mapping of the Machias downtown using aerial drone survey technology supplemented with ground measurements to determine building floor elevations, 2) a flood hazard synopsis that considered current conditions, historical events, and future sea level rise modeling to generate probability predictions for future flooding, 3) an inventory of downtown buildings to evaluate the impacts associated with flood inundation events ranging from BFE+0 feet to BFE+6 feet, 4) damage assessment modeling based on the same flood scenarios that were incorporated into a cost benefit analysis of the concept design, 5) assembly of oral histories and well attended community meetings, 6) a concept design for a seawall system that incorporates a river walkway, 7) an estimate of construction costs for the concept design, and, 8) preparation and submission of a FEMA Pre-Disaster Mitigation Advance Assistance Planning Grant.

NEXT STEPS AND OPPORTUNITIES

- The decision on the FEMA Pre-Disaster Mitigation Advance Assistance Planning Grant is pending. If funded, this grant will take the project to the next step by allowing the town to:
- Assemble pre-engineering and design-build information for a flood protection structure
 - Assess environmental impacts by wetland scientists and wildlife biologists
 - Investigate subsurface conditions to obtain parameters necessary for final designs
 - Review presence and extent of historical onwork structures
 - Evaluate existing stormwater and wastewater treatment facility piping network to determine final design
 - Determine design basis for a pump system to operate in conjunction with the seawall in periods of flooding
 - Complete seawall and walkway alignment optimization to achieve regulatory requirements.
 - Review impact of new construction with local property owners to convey understanding of benefits of seawall (flood protection, reduced insurance premiums, coastal erosion control, shorefront walkway).
 - Identify impacts to property frontage and right of way acquisition
 - Meet with regulatory representatives at all levels to discuss permit requirements
 - File application with property owner and stakeholder support
 - Prepare design-build bid documents and support grant applications for future construction phase.

LESSONS LEARNED

The assemblage of oral histories, while of great interest and importance, is a task that went considerably beyond the scope of the initial project. It could not be completed but provided clear direction for future work. Inclusion of high-resolution survey and economic modeling was instrumental to our ability to prepare the conceptual design as well as the preliminary cost benefit analysis.

APPLICABILITY FOR OTHER MUNICIPALITIES

The approach taken is easily replicated by other coastal municipalities.

For additional information

Judy East, Executive Director, Washington County Council of Governments
jeast@wccog.net
Dr. Tori Johnson, University of Maine at Machias
tori.johnson@umaine.edu
Christina Thermen, Machias Town Manager
townmanager@machiasme.org

Project webpage hosted by WCCOG:
<https://www.wccog.net/machias-resilience.htm>

Final report available at:
<https://www.wccog.net/assets/MachiasResilience/17-50%20Machias%20Downtown%20Resilience%20Final%2010.pdf>

FY18 CCG - 60
7.19.19

Financial assistance provided by the National Oceanic and Atmospheric Administration, U.S. Department of Commerce Grant CZM NA17N04190116 to the Maine Coastal Program. Coastal Community Grants are awarded and administered by the Municipal Planning Assistance Program at the Maine Department of Agriculture, Conservation and Forestry.

