

# Town of Brunswick, Maine


OFFICE OF THE COASTAL RESOURCES

---

## MEMORANDUM

---

**TO:** John Eldridge, Town Manager

**FROM:** Daniel Devereaux, Coastal Resource Manager 

**CC:** **Brunswick Town Council, Brunswick Rivers & Coastal Waters Commission,**  
Julie Henze Finance Director, Fran Smith Town Clerk, Dan Sylvain Harbormaster,  
Ryan Leighton, Assistant Town Manager

**DATE:** 11/23/2021

**SUBJECT:** **Maine Natural Resource Conservation Program (MNRCP)**  
**Conservation Mooring and Eelgrass Restoration Grant Award (\$223,187)**

---

Mr. Manager,

On August 2<sup>nd</sup> the Brunswick Town Council voted unanimously to submit an eelgrass restoration grant application to the Maine Natural Resources Conservation Program in partnership with Stantec Consulting. This grant would allow the replacement of at least 20 traditional style private moorings that are known to be negatively impacting the eel grass beds.

I am pleased to inform the Council that the Conservation Mooring and Eelgrass Restoration Grant Application has been approved by the Maine Natural Resource Conservation Program and is set to receive an award of \$223,187.

Having the capacity to replace these traditional anchoring systems with an environmentally friendly helical anchoring system will help our community promote a more vibrant and sustainable eel grass bed, and in turn create a more stable marine habitat in our shoal waters. The biological diversity supported by healthy eelgrass beds is priceless to the health of our coastal ecology. Eel grass is known to be one of the highest value nurse habitats in world.

Over the next several months we will be working with Stantec Consulting and Brunswick Mooring owners to identify the best mitigation opportunities. Approximate timeline attached.



# Town of Brunswick, Maine

INCORPORATED 1739

## COASTAL RESOURCES

85 UNION STREET

BRUNSWICK, MAINE 04011

TELEPHONE 207-722-4027

Email – [ddevereaux@brunswickpd.org](mailto:ddevereaux@brunswickpd.org)

Daniel Devereaux  
Coastal Resource Manager

Daniel Sylvain  
Marine Resource Officer  
Harbormaster

## MNRCP GRANT PROPOSAL OVERVIEW

Traditional block and chain moorings located in eelgrass (*Zostera marina*) have been identified by state and federal natural resource agencies as one of the significant stressors to eelgrass in Casco Bay. As the traditional mooring chain drags on the bottom, a baren mooring scar is created within the eelgrass bed. Conservation moorings are an alternative to traditional block and chain moorings that utilize a helical anchor and tether system, eliminating bottom chain and associated eelgrass impacts. Conservation moorings have been successfully installed to restore eelgrass beds throughout New England. Eelgrass projects associated with this mooring conversion have a high likelihood of success because the habitat conditions that support eelgrass already exist and eelgrass often re-populate scar areas both by natural vegetative and reproductive growth and expansion. The Town of Brunswick (Town) is proposing to convert 20 traditional moorings within eelgrass beds to conservation moorings with helical anchors. The Town is partnering with Stantec Consulting Services (Stantec) to manage the project and conduct eelgrass surveys and reporting. Stantec has a scientific dive team with extensive experience with eelgrass monitoring and restoration and has been in consultation with state and Federal agencies on mooring conversion. Randlett Marine Services, LLC (a local Maine company) would supply the conservation moorings, complete installation, and conduct annual mooring inspections. The Town currently does not permit new moorings in eelgrass beds and as part of this conservation mooring program will update their mooring regulations to prohibit conversion of conservation mooring back to block and chain. For purposes of initial eelgrass impact area estimates, a scar area of 437 square feet per traditional anchor is assumed based on average scar areas calculated in Portland

Harbor. Site specific eelgrass scar measurements in the Town are included as part of Task 1.

### Task 1: Site Selection, Evaluation and Eelgrass Scar Estimates (2022)

- Work with harbor master to select moorings for replacement
- Characterize moorings based on vessel size, depth, exposure, sediment type, eelgrass scarring
- Dive surveys to measure eelgrass scars
- Survey report

### Task 2: Conservation Mooring Purchase and Installation (2022)

- Purchase of anchor and all tackle for 20 moorings including replacement parts
- Installation

### Task 3: Annual Mooring Inspections (2023-2027)

- Annual inspection and cleaning of moorings. Inspection data included in annual reports.

### Task 4: Annual Eelgrass Survey and Reporting (2023-2027)

- Annual dive of mooring scars to measure eelgrass scar and natural colonization and restoration in the scar area.
- Annual reporting and final report after 5 years of monitoring.

### Description of Conservation Values on the Site:

The Town of Brunswick has substantial eelgrass habitat associated with its approximately 61 miles of coastline. Currently over 50 traditional block and chain moorings are located in eelgrass beds in Brunswick. The western shore of Mere Point was selected as the target location for the conservation mooring program due to the abundance of eelgrass and the presence of traditional block and chain moorings with associated eelgrass impacts.

Eelgrass provides important ecosystem aquatic functions in these areas, including foraging areas for juvenile fish and invertebrates, food for migratory waterfowl, oxygen production, improved water quality through water column filtration, absorption of excess nutrients, sequestration and storing of carbon mitigating climate change, and protection of the shoreline from erosion by reducing wave energy. Eelgrass also strengthens the local economy as high-quality habitat for fish, crustaceans and shellfish that are integral to the commercial and recreational fishing industries in the Town of Brunswick. Healthy eelgrass beds also support waterfowl and shorebirds that offer boaters and visitors recreational wildlife viewing opportunities.

Data collected as part of this conservation mooring project will be used by the Town to inform the replacement of other traditional moorings in eelgrass. This project can also serve as a model for other Maine towns looking at the viability of mooring conversion within eelgrass. While conservation moorings are more widely used in southern New England, very little data exists from Maine waters. A successful, well documented eelgrass restoration project will have much broader benefits to eelgrass in Maine than just the mooring scar areas restored.