

**Merrimack Valley Planning Commission (MVPC)**  
**DRAFT Scope of Work, July 1, 2019 – June 30, 2020**  
**as South Shore Regional Service Provider for the MassBays National Estuary Program**

The Massachusetts Bays National Estuary Program's (MassBays') Workplan for Federal Fiscal Year 2019 is the first implementation workplan for MassBays' Comprehensive Conservation and Management Plan (CCMP). Actions for the coming year are driven by the following Goals and Strategies described in our Revised CCMP:

**Goal 1. MassBays provides new resources to support research and management in the Bays.**

- Strategy 1.1 Address data gaps
- Strategy 1.2 Support valid (QA/QC) data collection and use

**Goal 2. MassBays reaches all planning-area municipalities with actionable information about coastal habitats**

- Strategy 2.1 Support research to inform policy and actions
- Strategy 2.2 Technical support and communications
- Strategy 2.3 Increase influence of underserved communities on decisionmaking

**Goal 3. MassBays provides regular and locally informed State of the Bays reporting that reflects the unique characteristics of MassBays assessment units (embayments, rocky shore, barrier beach), and documents progress toward target conditions.**

- Strategy 3.1 Establish target conditions
- Strategy 3.2 Guide local action for expanded habitat and improved water quality

Through implementation of these strategies, MassBays anticipate achieving the following Outcomes:

- Sustainable NEP
- Improved habitat continuity and restored hydrology
- Improved water quality
- Resilient coastal habitat, including nature-based coastal protection
- Restored natural communities
- Robust interagency and interdisciplinary collaboration and partnerships
- Well-informed, multisector input to decisionmaking which includes underserved communities

MVPC will implement the programs and projects below, developed and approved by the Upper North Shore Local Governance Committee (LGC), to make progress toward these overarching outcomes. An Upper North Shore Regional Coordinator (RC) will lead MVPC's efforts.

In addition to the region-specific Actions below, the RC and MVPC will assist MassBays' overarching efforts to implement the CCMP by:

- Attending quarterly MassBays Management Committee meetings, providing updates on progress under each Strategy prior to each meeting.
- Participating in periodic Regional Coordinators' meetings and conference calls.
- Participating on at least one Management Committee Subcommittee.
- Responding to requests for information from Central Staff in a timely manner.

Reporting requirements are listed under the final section below, ***Invoices, Reporting, and Deliverables***.

**Strategy 1.1 Address data gaps**

<b>Activity 1</b>	<b>Marine Invasive Species Monitoring (Ongoing)</b>	
<b>Description/Objective</b>	Monthly monitoring of marine invasives as part of the state MIMIC at preselected and previously monitored sites in Ipswich, Essex, and Gloucester	
<b>CCMP Outcome</b>	Restored natural communities	
<b>Project Partners &amp; Roles</b>	Eight Towns and the Great Marsh and local volunteers will assist in MIMIC monitoring and identification	
<b>Project Budget and RC Level of Effort</b>	\$3,500, 35hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Monthly marine invasive monitoring: June, July, August, September, October	Data sheet	Q1, Q2

**Strategy 2.1 Support research to inform policy and actions**

<b>Activity 2</b>	<b>Mussel Bed Water Quality Monitoring (Ongoing)</b>	
<b>Description/Objective</b>	Two sites existing healthy mussel bed sites are being monitored for quality for future development of a mussel reef living shore line. Determine water quality parameters at each location will inform necessary quality conditions needed for mussel bed and mussel reef development	
<b>CCMP Outcome</b>	Restored natural communities	
<b>Project Partners &amp; Roles</b>	MA Division of Marine Fisheries, co-lead and data analysis	
<b>Project Budget and RC LOE</b>	\$10,000, 25hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Deployment of water quality equipment and download data	Equipment installation	Q1
Maintain equipment and download data	Data table for DO, conductance, salinity, temperature, pH	Q1, Q2, Q3
Summary of findings	Interim report	Q4

<b>Activity 3</b>	<b>Monitoring and Treatment of Invasive Phragmites in the Great Marsh (Ongoing)</b>	
<b>Description/Objective</b>	Invasive Phragmites in the open marsh in east Salisbury marsh, northern Plum Island Sound, and along the marshes of the Plum Island River will be treated. Baseline monitoring will be performed.	
<b>CCMP Outcome</b>	Restored natural communities	
<b>Project Partners &amp; Roles</b>	PRNWR: equipment and storage and treatment assistance and support	
<b>Project Budget and RC LOE</b>	\$75,000, 135hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Pre-project monitoring	Interim report of status of Phragmites in marshes to be treated	Q3

Hire contractors	List of contracts	Q4
Treat Phragmites in conjunction with contractors and project partners	Photo documentation	Q4
Document effectiveness and justify continued investment in ongoing treatment	Map(s) of change over time, memo with references to current research re: treatment	Q4

<b>Activity 4</b>	<b>Pepperweed Management and Control in the Great Marsh (Ongoing)</b>	
<b>Description/Objective</b>	Treat selected pepperweed sites in Merrimack River, Newbury, and Ipswich marshes	
<b>CCMP Outcome</b>	Restored natural communities	
<b>Project Partners &amp; Roles</b>	Mass Audubon, PRNWR: project co-leads, volunteers: manual pepperweed removal	
<b>Project Budget and RC LOE</b>	\$100,000, 65hr	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Prioritize treatment locations	Map of priority sites	Q1
Working with partners, treat priority areas	Map of treated sites	Q1

<b>Activity 5</b>	<b>Natural Thin-layer Sediment Deposition Assessment (Ongoing)</b>	
<b>Description/Objective</b>	Monitor native marsh vegetation, benthic and avian response to natural thin-layer deposition of sediment on the marsh and outreach/present second year results	
<b>CCMP Outcomes</b>	Restored natural communities, resilient coastal habitat	
<b>Project Partners</b>	PIE-LTER, UNH, Mass Audubon	
<b>Project Budget and RC LOE</b>	\$125,000, 25hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Assist in the collection and assessment of data in sediment deposition sites	Interim report	Q1, 2
Presentation of results	Power point presentation	Q4

### Strategy 2.2 Provide technical support and communications

<b>Activity 6</b>	<b>Great Marsh Symposium (Ongoing)</b>	
<b>Description/Objective</b>	Outreach and present to municipal officials and the general public through a one-day symposium on the importance and value of the Great Marsh	
<b>CCMP Outcome</b>	Well-informed, multisector input to decisionmaking, including underserved communities	
<b>Project Partners &amp; Roles</b>	Ipswich River Watershed Association, Essex County Greenbelt Association, Parker River Clean Water Association, MA Coastal Zone	

	Management, Essex National Heritage Commission, Metropolitan Area Planning Commission, Mass Audubon, The Trustees of Reservations. All partners share in the development of the symposium	
<b>Project Budget and RC LOE</b>	\$10,000, 30hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Recruit speakers, present, and assist with outreach for the Fall symposium	Agenda and speaker list, presentation title	Q2

<b>Activity 7</b>	<b>Greenscapes Program (Ongoing)</b>	
<b>Description/Objective</b>	Establish target and improved water quality and habitat conditions tied to desired uses and ecosystem services	
<b>CCMP Outcome</b>	Improved water quality	
<b>Project Partners &amp; Roles</b>	Ipswich River Watershed Association, Merrimack River Watershed Council, Salem Sound Coastwatch (lead partner)	
<b>Project Budget and RC LOE</b>	\$85,000, 40hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Solicit communities into program	Community member list	Q1
KWC presentations	School list	Q4
Development of new outreach products	Product	Q4

<b>Activity 8</b>	<b>Merrimack River CSO Working Group (New)</b>	
<b>Description/Objective</b>	Provide guidance and input and seek funding for CSO projects recommended by the Merrimack River CSO working group	
<b>CCMP Strategy</b>	Improved water quality	
<b>Project Partners &amp; Roles</b>	Merrimack River communities, Upper North Shore Legislative Delegation, Department of Environmental Protection will provide input and direction	
<b>Project Budget and RC LOE</b>	Unknown \$ , 60hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Attend/lead meetings	Agendas	Q1
Obtain funding for studies or research	Funded Contracts	Q2-3

<b>Activity 9</b>	<b>Upper North Shore Specific Program Development (Ongoing)</b>	
<b>Description/Objective</b>	Partnership building and project development with environmental and other organizations on the upper north shore	
<b>CCMP Outcome</b>	Robust interagency and interdisciplinary collaboration and partnerships	
<b>Project Partners &amp; Roles</b>	Municipalities, nonprofits, businesses, and government agencies with jurisdiction or management on the north shore	
<b>Project Budget and RC LOE</b>	\$20,000, 250hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>

Attend meetings, workshops, presentations, etc of partners	Agendas	Q4
Work with partners to develop projects	Project list	Q4

<b>Activity 10</b>	<b>Marsh Edge Erosion Monitoring Plum Island Sound (New)</b>	
<b>Description/Objective</b>	Determine the erosional/deposition status of marsh band and marsh edge in the creeks and rivers of Plum Island Sound	
<b>CCMP Outcome</b>	Resilient coastal habitat	
<b>Project Partners &amp; Roles</b>	Boston University, project lead	
<b>Project Budget and RC LOE</b>	\$50,000, 30hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Map erosion/deposition status of Plum Island marsh banks	Map	Q4

### Strategy 3.2 Guide local action to expand habitat and improve water quality

<b>Activity 11</b>	<b>Eelgrass Restoration (Ongoing)</b>	
<b>Description/Objective</b>	Restore eelgrass at additional sites in Plum Island Sound; monitor existing Plum Island Sound pilot Eelgrass site and continue restoration effort; investigate and establish eelgrass pilot site in Joppa Flats; engage volunteers also citizen stewardship in the Great Marsh. Eelgrass re-establishment at multiple locations in the Great Marsh will increase marsh resiliency and habitat.	
<b>CCMP Outcome</b>	Restored natural communities	
<b>Project Partners &amp; Roles</b>	BU is co-project lead, PRNWR will provide volunteer support, MA DMF will provide eelgrass seed planting, Mass Audubon will provide outreach	
<b>Project Budget and RC LOE</b>	\$45,000, 111hrs	
<b>MVPC Tasks</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Locate new restoration pilot sites in Plum Island Sound and associated harvest sites to match water site conditions	Photo documentation and interim report	Q1, Q2, Q4
Locate new restoration pilot sites in Merrimack River and associated harvest sites to match water site conditions	Photo documentation and interim report	Q1, Q2, Q4
Monitor eelgrass success in Plum Island Sound, Merrimack River estuary and Essex Bay (previously established)	Interim report	Q1, Q2, Q4

	<b>Reporting for EPA</b>	
<b>Description/Objective</b>	Reporting to MassBays Central Staff, engaging LGCs & regional stakeholders; promoting MassBays in local communities; attending staff and management committee/ subcommittee meetings; assisting the LGC with meetings and activities; and addressing requests for technical assistance or outreach.	
<b>RC level of effort (hrs):</b>		
<b>MVPC Activities</b>	<b>Deliverable</b>	<b>Timing (Q1 - 4)</b>
Maintain workflow according to scope of work	Reports and deliverables to MassBays central staff	monthly
Provide updates to MC	Quarterly reports to MassBays central staff, coinciding with MC meetings	Q1-4
Participate in MassBays MC and RC meetings	Attendance and participation in meetings	bimonthly
Participate on at least one MC Subcommittee		ongoing
Participate in NEPORT reporting	Spreadsheet with data for acres of habitat restored and funds leveraged	Q1
Seek input from LGC on progress and proposed workplan	Proposed FFY2020 workplan	Q4
Represent MassBays in regional associations and societies	List of associations and societies where MassBays is represented	Q4
Promote MassBays in local community settings	List of presentations and publications	Q4