

Association to Preserve Cape Cod (APCC)
DRAFT Scope of Work, July 1, 2019 – June 30, 2020
as Cape Cod 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

APCC will implement the programs and projects below, reviewed by the Cape Cod Local Governance Committee (the Barnstable County Coastal Resources Subcommittee or CRS), to make progress toward these overarching outcomes. A Cape Cod Regional Coordinator (RC) will lead APCC's efforts.

In addition to the region-specific Actions below, the RC and APCC 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 titled ***Invoices, Reporting, and Deliverables***.

Strategy 1.1 Address data gaps

Action 1	Monitor diadromous fish runs	
Description/Objective	This ongoing monitoring program provides local, state and federal fisheries managers with population estimates of river herring at monitored runs to inform protection, restoration and management efforts. Monitoring by volunteers also supports citizen stewardship of runs. APCC will support citizen monitoring of fish runs by providing partners and volunteers with training, data management, QA/QC of count data, and outreach.	
Partners:	Natural resource directors in 12 towns on Cape Cod (Barnstable, Brewster, Chatham, Dennis, Eastham, Falmouth, Harwich, Mashpee, Orleans, Sandwich, Yarmouth), River Herring Network, MA DMF, NOAA Restoration Center, Barnstable County Cooperative Extension, MassBays.	
Budget, RC level of effort (hrs):	\$65,300 (volunteer in-kind), 160	
APCC Activities	Deliverables	Timing (Q1 - 4)
Compile 2019 herring run count data	Final data report for 2019 herring counts submitted to DMF	Q1
Provide training, data management, QA/QC, reporting, and other assistance	Report out on 2019 results at Fall 2019 River Herring Network annual meeting or other venue. Conduct Spring 2020 training sessions for volunteers.	Q2-Q4
Compile data from 2020 runs	Draft data report for 2020 herring counts	Q4
Synthesize historical data for Cape Cod runs	Synthesis report of 2- to 10-year data sets through 2019	Q4
Action 2	Monitor Cyanobacteria blooms	
Description/Objective	Since FY18 APCC has been monitoring cyanobacteria in lakes and ponds that discharge to estuaries and serve as diadromous fish spawning habitat. The goal is to collect useful actionable information on harmful cyanobacteria blooms for the public and decisionmakers. Monitoring has provided actionable information, including one pond closure, and elicited interest from other agencies (e.g., USGS, EPA). To date, 10 ponds have been monitored. APCC will continue monitoring this year and will expand the program to other water bodies as funding becomes available.	
Partners:	EPA, towns of Brewster, Chatham, Barnstable, Dennis, Yarmouth, MA Department of Public Health, MA DEP	
Budget, RC level of effort (hrs):	\$25,324, 40	

APCC Activities	Deliverables	Timing (Q1 - 4)
Develop new QAPP for rapid reconnaissance monitoring	Draft and final QAPP	Q3-Q4
Train and supervise staff and interns re: protocol; collect and analyze data	Brief report on monitoring and findings	Q4

Strategy 1.2 Support valid (QA/QC) data collection and use

Action 3	State of the Waters: Cape Cod	
Description/Objective	APCC will work with partners to provide a comprehensive “State of the Waters: Cape Cod” program to report on the condition of the Cape’s coastal and fresh waters and their problems, causes, and possible solutions. Water report cards, an annual report, website and other outreach materials will promote action to protect and restore water quality. The project is intended to serve as a model for other communities.	
Partners	Buzzards Bay Coalition, Center for Coastal Studies, Cape Cod Commission, SMAST-UMass-Dartmouth, WBNERR, MBL Ecosystems Center, towns of Chatham, Eastham and Mashpee, CZM, MassBays, Massachusetts Environmental Trust.	
Budget, RC level of effort (hrs):	\$101,000, 440	
APCC Activities	Deliverables	Timing (Q1 - 4)
Report Cards: format, draft, final for 2018	Final report cards for 2018	Q1
Collect WQ data for coastal waters, fresh water bodies, groundwater, drinking water, and other water resources, including in underserved communities, through 2018. Collect updated data through 2019 for the first update in Report Cards.	Draft and final list of data sources incorporated into Annual Report	Q1 (2018 data) Q4 (2019 data)
Convene Advisory Committee members to review and comment on draft materials	List of members, sign-ins, notes or minutes, recommendations, mission statement/charge	Q1-Q4
Generate FAQs	Distribute "Why is a Water Report Card Needed?"	Q2
Draft annual report for 2018	Final report	Q1
Prepare website (may require hiring website designer)	Launch website	Q3
Providing outreach through APCC's annual meeting and other venues	List of presentations and publications	Q4

Action 4	Reviewing and testing AquaQAPP and WQX templates	
Description/Objective	Participate in beta-testing for online QAPP generator and data upload tool	
CCMP Outcome	Improved water quality	
Project partners & roles	MassRivers Alliance: workshop hosting	
RC level of effort (hrs):	20	
APCC Activities	Deliverable	Timing (Q1 – 4)
Onsite assistance for beta testing and train-the trainer workshops	Comments on AquaQAPP and WQX data upload tool	Q2-Q3

Strategy 2.1 Support research to inform policy and actions

Action 5	Publish salt marsh monitoring data from 2003-2015	
Description/Objective	Between 2003 and 2015 APCC monitored more than 15 salt marshes to compare pre-restoration and post-restoration conditions. Reports were provided to state agencies but are not readily accessible otherwise. This information should be made available to resource managers, particularly as climate change and sea level rise may affect coastal wetlands. A short report would also help to build public support for protecting and restoring salt marshes. APCC and he RC are working with DER to analyze data and produce a summary report covering 8 salt marshes.	
Partner	DER	
RC level of effort (hrs):	80	
APCC Activities	Deliverables	Timing (Q1 - 4)
Conduct data analysis	Draft report	Q2
Depending on findings, outreach materials will be prepared (e.g., newsletter article, webpage)	Outreach materials	Q4

Strategy 2.2 Provide technical support and communications &

Strategy 2.3 Increase influence of underserved communities on decisionmaking

Action 6	Conduct Watershed and Coastal Science Education and Outreach	
Description/Objective	Communicate about Cape Cod-based activities to the public, including LGC members and other partners, featuring MassBays' support. Project descriptions will be disseminated via multiple outlets, including presentations, newsletters, and websites.	
CCMP Outcome	Well-informed, multisector input to decisionmaking which includes underserved communities	
Partners	CRC, WBNERR, Cape Cod Commission, Cape Cod Stormwater Managers Group, EPA SNEP, Cape Cod Conservation Agents Network, Barnstable County Coastal Management Committee, Barnstable County Cooperative Extension, Massachusetts Bay Outfall Monitoring Subcommittee (PIAC), River Herring Network, DMF, NOAA Restoration Center, etc.	
RC level of effort (hrs)	320	
APCC Activities	Deliverables	Timing (Q1 - 4)
For all outreach efforts, facilitate new participation by underserved communities	list of accommodations made, sample notices to new audiences	Q1 - Q4
Assist in organizing and hosting the Cape Cod Coastal Conference	Conference agenda, including MassBays' logo, new subscribers to MassBays newsletter	Q4
Update APCC webpage references to MassBays as needed	Website URLs	Q1
Host lecture series	List of speakers, new subscribers to MassBays e-newsletter	Q4
Identify and engage with networks conducting work relevant to and/or with the potential to advance CCMP implementation	List of networks that include MassBays as a member	Q4
Communication to varied audiences	List of publications and presentations by title, venue or publication, and date	Q4

Strategy 3.2 Guide local action for expanded habitat and improved water quality

Action 7	Support municipal and regional actions that promote resilient coastal habitats and communities through the use of nature-based solutions	
Description/Objective	APCC will continue to work with partners and communities to encourage planning for climate change and adoption of adaptation measures that promote resilient coastal habitats, and use of nature-based solutions for coastal resilience.	
Partners	Town of Wellfleet, Cape Cod Commission, others to be determined, Barnstable County Cooperative Extension	
RC level of effort (hrs)	160	
APCC Activities	Deliverables	Timeline (Q1-4)
Assistance to communities in planning MVP projects, attending MVP workshops	Documentation of assistance provided	Q1-4
Inventory resources for developing model bylaws, regulations or policies for climate change adaptations	List of resources shared with communities	ongoing
Recommendations for model bylaw, regulations or policies (e.g., Wellfleet model bylaw for climate change adaptation)	Recommendations for regulations and/or policies, and list of municipalities adopting bylaw changes	ongoing

Action 8	Identify and implement coastal restoration, stormwater mitigation, and low-impact development projects	
Description/Objective	Through the Cape Cod Restoration Coordination Center, pursue priority projects with municipal partners.	
Partners	CZM, towns, Cape Cod Stormwater Managers Group, CRC, Cape Cod Commission, Buzzards Bay NEP, Barnstable County Department of Health & the Environment	
RC level of effort (hrs):	200	
APCC Activities	Deliverable	Timing (Q1 - 4)
Work with partners to prepare grant proposals, coordinate efforts, provide outreach and/or provide other assistance to implement stormwater mitigation projects.	List of communities assisted and technical support provided	ongoing

Pursue priority coastal restoration projects, e.g.: 1) Little Pamet River wetland restoration, Truro; 2) Scargo Lake herring run restoration, Dennis; 3) Mayo Creek tidal restoration, Wellfleet; or other priorities.	Meeting notes, information on potential restoration projects provided to restoration partners, monitoring data, potential grant applications, or other technical assistance or outreach requested by partners or towns	Ongoing
Promote and implement LID and stormwater green infrastructure in MassBays communities, including regional coordination	List of LID education & outreach efforts and regional coordination of stormwater management efforts	Q4
Provide grant proposal scoping and writing support	List of grants applied for, and outcomes of the proposals	ongoing

Reporting for EPA		
Description/Objective	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.	
RC level of effort (hrs):	140	
APCC Activities	Deliverable	Timing (Q1 - 4)
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 CRS 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

Invoices, Reporting, and Deliverables

Invoices on official letterhead detailing reimbursable expenditures for each line item included in the Budget should be submitted to MassBays Central Staff at least quarterly, and preferably monthly. Invoices should include accounting of match (estimated match associated with tasks below), with a running total (year-to-date) for both expenditures and match. APCC should retain records documenting

sources of both direct and project-specific match to be provided in the case of a Federal audit.

Reporting to EPA on “leveraged funds” and “habitat protected/restored” is required twice yearly. These data are used to justify continued Congressional investment in the National Estuary Program. MassBays Central Boston staff will solicit relevant data from APCC as necessary; the scope of work includes responding to requests for this and other reporting information in a timely manner, and as completely as feasible.

Deliverables included in this scope should be provided as each Activity is completed, labeled for ready cross-reference to the Action number.

Status reports on each task included here should be provided quarterly, along with descriptions of changes in scope, timing, or deliverables.

Acknowledgment of MassBays funding (including the APCC website) will cite “Massachusetts Bays National Estuary Program” or “MassBays,” and include relevant EPA grant number(s).