MassBays Regional Coordinator's report Barnstable County Coastal Resources Subcommittee meeting, 10/21/20

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Massachusetts Bays National Estuary Partnership (MassBays): For the MassBays mission statement and how we support coastal communities, visit https://www.mass.gov/orgs/massachusetts-bays-national-estuary-partnership. Also see the 3/25/20 report to the BCCRS.

MassBays Regional Service Provider (RSP) projects: The Association to Preserve Cape Cod is the MassBays RSP for the Cape Cod region and provides regional services and projects to help communities meet goals for coastal protection and restoration. Updates on some representative projects are described below. For more information, visit https://apcc.org/who-we-are/partners/mass-bays/

- 1) State of the Waters: Cape Cod: In 2019 APCC initiated this project to evaluate and grade the Cape's water resources. The goal is to raise public awareness of water quality issues using easily understood grades and to motivate action to improve and protect the Cape's water resources. Products include an interactive website with water quality grades for coastal embayments, ponds and public water supplies, new Atlas of Water Restoration Needs and Solutions, Water Action Plan and successes. Each year the grades will be updated using the most recent available data. Results of the 2019 SOTW were announced last fall; results of the 2020 SOTW will be announced shortly. The project involves many partners and an advisory committee comprising local, regional, state and federal agencies and organizations. For more information, visit www.capecodwaters.org.
- 2) Cyanobacteria monitoring: For a description of APCC's cyanobacteria monitoring program, see the Powerpoint presentation given at the 7/15/20 BCCRS meeting. This summer APCC staff and interns monitored 37 ponds for cyanobacteria, of which 10 are located on the MassBays side of Cape Cod. At least 13 ponds connect to estuaries and are spawning areas for river herring. Other updates:
 - <u>Developed tiered cyanobacteria levels</u>: APCC updated our system of categorizing cyanobacteria results in terms of Low, Moderate and High levels of cyanobacteria which reference regional, state and federal advisory levels for human health and pet health risks.
 - <u>Interactive map and webpage</u>: Monitoring results using the tiered system are provided on our interactive map and webpage at https://apcc.org/our-work/science/community-science/cyanobacteria/.
 - <u>Communicating risk</u>: a Cyanobacteria Communications Plan will be developed to communicate results and risk to towns, the public, and to monitoring organizations.
 - MET grant to study transport of cyanobacteria to estuaries: APCC was awarded a Massachusetts Environmental Trust (MET) grant to investigate transport of cyanobacteria to estuaries via streams and herring runs. We will also assist our UNH partners with studies of trophic transfer of cyanobacteria via juvenile herring. Transport of cyanobacteria from freshwater to estuaries was documented in San Francisco Bay, where shellfish were found to contain freshwater cyanobacteria, and in Florida where

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cyanobacteria and marine harmful algal blooms (HABs) caused mass mortalities of fish and wildlife.

- 3) Herring counts: Due to the COVID-19 stay-at-home advisory issued by Governor Baker on 3/23/20, APCC recommended to all volunteer herring count groups to stay at home and not conduct counts. However, a few groups and individuals obtained some count data. The data were reviewed for quality assurance purposes and sent to DMF to calculate run sizes. Runs where count data were obtained were on the MassBays side of Cape Cod and include:
 - o Herring River, Wellfleet: Sufficient count data were collected to estimate the run size (13,267), within the range of previous years' run size estimates;
 - o Bound Brook, Dennis/Brewster;
 - o Scargo Lake, Dennis;
 - o Tom Mathews Pond, Yarmouth; and
 - o Mill Creek, Sandwich.

For spring 2021, APCC will contact herring count coordinators and volunteers to explore their willingness to reconvene volunteer counts, provided that suitable COVID health and safety measures are followed. The possibility of using temperature dataloggers instead of (or in addition to) hand-held water thermometers may also be discussed.

4) Coastal restoration and stormwater projects:

- <u>Cape Cod Water Resources Restoration Project, Phase 3</u>: RCC staff prepared a draft list of salt marsh restoration projects ranked according to newly revised criteria. Following review by the Conservation District, we will contact towns to obtain input on criteria and resulting projects.
- Town information on completed and planned restoration projects are still needed.
- <u>APCC's Restoration Coordination Center (RCC)</u>: Current activities include preparing a summary of 2003-2015 salt marsh monitoring data, conducting salt marsh monitoring this summer, and assisting the Cape Cod Conservation District with planning for Phase 3 of the Cape Cod Water Resources Restoration Project. For more information, visit https://www.apcc.org/rcc/rcc.html. RCC projects include the following:
 - o Childs River bog restoration;
 - o Parker's River salt marsh restoration;
 - o Three Bays stormwater remediation project;
 - o Eastham Schoolhouse Minister's Pond stormwater remediation.

MassBays updates:

- <u>Healthy Estuaries Grant Program</u>: Awards for 2020-2022 are described at https://www.mass.gov/massbays-healthy-estuaries-grants.
- New Coastal Monitoring Circuit Coordinator: Jill Carr joined MassBays as the new Coastal Monitoring Circuit Rider, under a grant from EPA's Exchange Network Program. Jill is available to help organizations and agencies develop monitoring plans, QAPPs, analyze data, and upload data to state and federal data clearinghouses. If you are interested in getting help, please contact her at Jill.Carr@mass.gov or contact Jo Ann Muramoto at jmuramoto@apcc.org. You can also subscribe to the Monitoring Coordinator's Network

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<u>newsletter</u> to stay informed about upcoming training workshops, and visit <u>MassBays'</u> webpage for recordings of past webinars and newsletter.

- <u>State of the Bays assessment</u>: MassBays continues to work with regional coordinators, state
 and federal partners, and consultants to assess the condition of coastal ecosystems in the
 MassBays area. Current conditions will be compared with historical conditions. This
 assessment is important because it will help to prioritize actions for the next five years.
 MassBays has produced a <u>Story Map</u> which compiles existing data in an interactive format,
 allowing users to view data layers in multiple ways.
- MassBays' Federal Fiscal Year 2020 workplan was approved by EPA in August; you can find that plan on MassBays' webpage.

Abbreviations:

APCC Association to Preserve Cape Cod

BCCMC Barnstable County Coastal Management Committee
BCCRS Barnstable County Coastal Resources Subcommittee
MassBays Massachusetts Bays National Estuary Partnership

QAPP Quality Assurance Project Plan