



## **Management Committee Meeting Summary**

October 25<sup>th</sup>, 2017

9:30 am – 12:30 pm

Executive Office of Energy and Environmental Affairs

100 Cambridge Street, Room 2B, Boston

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### **Attendees:**

#### *Management Committee*

Joe Cosgrove (Merrimack Valley Planning Commission [MVPC])  
Mark Fine (Metropolitan Area Planning Commission [MAPC])  
Georgeann Keer (MA Division of Ecological Restoration [DER])  
Wendy Leo (Massachusetts Water Resources Authority [MWRA])  
Regina Lyons (U.S. Environmental Protection Agency [EPA])  
Rebecca Newhall (National Oceanic and Atmospheric Administration [NOAA])  
Gabby Queenan (Massachusetts Rivers Alliance [MRA])  
Julie Simpson, (MIT Sea Grant) [STAC Chair]  
Kristin Uiterwyk, Chair (Urban Harbors Institute [UHI])  
Colin Van Dyke, Vice Chair (Anderson-Kreiger )  
Samantha Woods (North and South Rivers Watershed Association [NSRWA])

#### *Coordinators and Staff*

Pam DiBona (MassBays, Executive Director)  
Prassede Vella (MassBays, Staff Scientist)  
Barbara Warren (SSCW, Lower North Shore Regional Coordinator)  
Sara Grady (NSRWA, South Shore Regional Coordinator)  
Carole McCauley (NUMSC, Metro Boston Regional Coordinator)  
Jo Ann Muramoto (APCC, Cape Cod Regional Coordinator)  
Peter Phippen (MVPC, Upper North Shore Regional Coordinator)

### **Welcome and Introductions**

Chair Kristin Uiterwyk opened the meeting and welcomed the attendees. After introductions and review of the agenda, the Chair proceeded to Committee Business

### **Committee Business**

#### Proposed 2018 meeting dates

Committee members reviewed the proposed 2018 meeting dates and cited no major conflicts. Proposed dates:

- Wednesday, January 24
- Wednesday, April 25
- Wednesday, July 25
- Wednesday, October 24

#### Finance Subcommittee

Finance Subcommittee Chair Colin Van Dyke introduced the draft charge (Attachment 1) to the Finance Subcommittee. The charge will guide the Finance Subcommittee to explore options and opportunities of funding. In particular, the Subcommittee will identify options for matching funds that will allow Regional Service Providers to dedicate their match for other opportunities. Options include: (1) potential partnership with Restore America's Estuaries (RAE), (2) strategies for securing directed state funding, and (3) establishing an affiliated fundraising non-profit. EPA requires development of a finance plan as part of the CCMP and the plan should include options for seeking additional funding sources. Colin

invited management committee members to share any additional ideas and/or serve on the Finance Subcommittee that has been tasked to review and approve a Fiscal Plan submitted as an Appendix to MassBays' Comprehensive Conservation and Management Plan by October 2019. Colin will provide information on the scope of the Finance Subcommittee as well as meetings for Members to be able to decide about committing time to this effort.

#### *Discussion*

Committee members were intrigued by examples of RAE's experience working with Tampa Bay NEP, and Margherita offered that more recently they were selected by the Southern New England Program to run the grant program. Some members cautioned against establishing a non-profit organization unless appropriate measures are put in place to ensure that MassBays' interests are served.

### **CCMP Update Progress on Goal 3: Applying the Biological Condition Gradient approach to tracking ecosystem improvements**

*Julie Simpson, Science and Technical Advisory Subcommittee Chair*

Julie Simpson presented an update of the status of the Estuary Delineation and Assessment (EDA 2.0), in particular the development of embayment types and associated targets. Julie proceeded to present an overview of the Biological Condition Gradient (BCG), a tool developed by EPA and will be useful to guide MassBays' next steps in tracking and assessment of changing conditions in the planning area.

Briefly, the BCG is a conceptual scientific framework for interpreting biological response to increasing levels of stress on aquatic ecosystems, across a gradient from "naturally occurring" (no disturbance) condition to "severely altered condition". Through 11 steps, the BCG will help identify stressors and their impacts on ecological resources, guide communication of these conditions to stakeholders and the public, and help managers identify the best response strategies and measure improvement over time. The BCG was implemented successfully in some NEPs including Tampa Bay NEP and Narragansett Bay NEP. In August the tool was presented to the Science and Technical Advisory Committee (STAC) for discussion and deliberation. STAC is seeking approval from the Management Committee to proceed with exploring the feasibility of adopting the BCG for the MassBays' CCMP and State of the Bays reporting.

#### *Discussion*

In response to questions by the management committee, Julie explained that development of the BCG will be conducted by the Office of Science and Technology (specifically Emily Shumchenia) in coordination with MassBays and STAC. The committee agreed that it would be a major step forward to have robust metrics for management and to address data gaps. It was recommended that meetings of stakeholders from embayments within the same category would generate meaningful discussion and feedback as they share similar conditions. A one day workshop where RCs could work together to discuss specific habitat condition and management actions and solicit expert input was also suggested. Input and discussion on BCG development and implementation could have two tracks: experts looking at the ecology, and stakeholders looking at the actions part.

The results of the BCG will provide information on embayment condition. MassBays plans to develop a state of the bays reporting system using data visualization like report cards. Pam explained that the University of Maryland develops such products and several NEPs use them. UMaryland also rounds workshops/webinars on data visualization and how to communicate complex data. Jo Ann pointed out that for the State of the Waters of Cape Cod, reporting cards will be used. She added that the BCG will be a good tool to assess the ecology of Cape Cod Bay.

### **CCMP Communications Planning**

*Pam DiBona, MassBays*

Pam DiBona explained that a Communication Plan will be developed as part of the CCMP. As part of this process MassBays is generating materials to develop a specific outreach plan that will be one of the

components of the Communications Plan. The CCMP and associated actions to reach the goals will be presented to stakeholders for input and discussion on how this can be moved forward. One of the first things to decide is who the audience is and what we want them to hear.

### *Discussion*

Some take-home messages: It is important to build lasting relationships with volunteers and decision makers, as well as to communicate that MassBays is helping citizen monitoring groups to link to scientists.

Also be sure to communicate that MassBays is not a regulatory or advocacy agency; it is service-oriented, will influence decisionmaking by providing researched and established facts.

It is a challenge to describe the relationship between the RSPs and MassBays – what they give vs. what they get. Maybe through an infographic that displays the multi-faceted roles of MassBays players and keep it simple.

## **Staff Updates: Regional Coordinators**

Regional updates are organized according to the seven action areas of the implementation workplan:

1. Gathering data on conditions and trends (DATA)
2. Reducing stormwater discharge volumes and pollutant loadings (SW)
3. Reducing contamination from wastewater (WW)
4. Adapting to/mitigating impacts of climate change (CC)
5. Removing barriers to streamflow and tidal flushing (SF)
6. Managing invasive species (IS)
7. Conducting education and outreach (E&O)

### ***Gather data on conditions and trends [DATA]***

- Upper North Shore
  - Eelgrass restoration: Eelgrass was harvested and planted in July and August at the Essex Bay Eelgrass Restoration site. Data were also collected from this site for Blue Carbon and biodiversity assessment at this site. In addition, eelgrass restoration was expanded to Plum Island Sound where harvested eelgrass was planted in July, August, and September.
- Lower North Shore
  - Salem Harbor Plankton and Nutrient Study: Study is underway with Salem State University Geology Department. MWRA shared their phytoplankton rapid response report from the Massachusetts Bay survey.
  - Lower North Shore Coastal Acidification Citizen Monitoring: With funding from Bruce J. Anderson Foundation, Cell Signaling and New England Biolabs Foundation, the RC has launched its Lower North Shore Coastal Acidification Citizen Monitoring program. This includes collection of pH, salinity, temperature data from nine mudflats in Salem, Beverly, Manchester, Gloucester, Essex by 5 trained volunteers.
  - Salt Marsh Monitoring for Climate Change Impacts: RC surveyed width and bank depth of Saratoga Creek, Good Harbor in Gloucester for third year.
  - Three-Year Monitoring Plan: The RC is currently researching the possibility of opening shellfish bed in Manchester and working with DMF on monitoring requirements and associated protocols
- Metro Boston
  - Boston Harbor Habitat Atlas: (1) SRI platform engineer retained to provide training and technical assistance as content is migrated to StoryMap. (2) A new agreement reached with NU Digital Scholarship Group on mapping needs for this fiscal year. Work completed so far includes: artistic renderings completed for 4 habitats; virtual tours almost completed for 4 habitats and sites being filmed for 4 additional habitats (fouling communities, seagrass beds, shellfish beds, tidal flats). Species lists for 4 new habitats are being finalized which will enable work to start on drawings. (3) Atlas content review committee convened on 11/20/17 for the first time. (4) Content for metro Boston watershed characteristics is being prepared; habitat content migrated from original Atlas is being reviewed and edited; production schedule completed for FY18 to result in 8 habitats being completed by end of June.

- South Shore
  - Anadromous Fish: RC conducted data QA/QC and analysis and wrote summary for e-news. RC also provided input on River Herring Network fall meeting
  - Shellfish Restoration: RC conducted Gulf shellfish mapping and coordinated divers for upcoming mussel survey.
  - Horseshoe crab spawning surveys in Duxbury Bay: RC conducted data QA/QC and submission. RC presented results in a public lecture, discussion with author to provide local crab information
  - Coastal acidification monitoring: Discussion of sampling plan, set up meeting with Island Creek Oysters.
- Cape Cod
  - Herring counts, 2017: Volunteers conducted visual counts at 19 runs, including 8 on Cape Cod Bay. Run size estimates are still being finalized but available results indicate numbers were generally low this year.
  - Video monitoring to count juvenile herring: APCC's Whitlock intern Chris George concluded his Master's research project to monitor and count juvenile herring using video. Permitting, camera installation and video monitoring were successful; counting of juveniles remains challenging and will require development of improved software. Dr. Rob Vincent (MIT Sea Grant) and his team are working on this. The Stony Brook Mill site proved ideal for this project.
  - Cyanobacteria monitoring and pilot test: Toxic cyanobacteria blooms pose a threat to water quality, human uses, pets, wildlife and health of ponds and coastal waters. APCC initiated this new program in response to public concerns about pond water quality. Most ponds on Cape Cod are eutrophic which increases the chance that cyanobacteria blooms will occur. With help from EPA Region I, APCC tested methods of monitoring cyanobacteria on three ponds in Brewster and Dennis. Two ponds had cyanobacteria blooms and one pond in the Stony Brook watershed was closed to the public as a result of this monitoring. The pilot test provided information on feasibility, costs, logistics and level of effort. Due to demand, APCC has applied for funding to expand the program to additional ponds.

***Reduce stormwater discharge volumes and pollutant loadings [SW]***

- Lower North Shore
  - Greenscapes: Deliverables presented to municipalities and 18 recruited.
  - Low-Impact Development: Adoption of Commercial Street rain gardens: weeding, planting, clean up with 9 volunteers, 9/16. Outreach: North River Walk & Talk - 45 people attended.
  - Adopt-a-Beach program: One training for 11 on 9/28. 6 Fall Coastsweeps, 2 clean ups were led by the RC
- Metro Boston
  - Expert-vetted educational fact sheet about water quality issues in the Lower Neponset River developed and distributed via stakeholder groups.
  - RC liaised with EPA about site being transferred to feds for superfund designation; briefing meeting set for late November.
  - Temporal and spatial expansion of open shellfish beds: Workplan for assessing clam die-off in Boston Harbor is in progress; planning meeting took place on 9/7/17 with DMF.
- South Shore
  - Riverwatch water quality program: Monitoring prep and data QA/QC.
- Cape Cod
  - Cape Cod Stormwater Coalition, grant-writing and survey development: RC worked with the Cape Cod Commission to begin work on the Commission's 604b grant to form a Cape Cod Stormwater Coalition to help towns meet their MS4 and 208 Plan needs. The project includes a needs assessment, gap analysis, cost assessments for towns, and development of tools and recommendations to form a cost-effective, environmentally effective stormwater coalition. The RC is working with the Commission to develop a survey to collect information on municipal needs

and regional resources. The RC also assisted the Commission with preparation of a proposal to the DEP MS4 Municipal Assistance Grant program.

### ***Reduce contamination from wastewater [WW]***

- Lower North Shore
  - Clean Beaches and Streams Program: Summer bacterial sampling was completed and biweekly reports provided to the network. Results are published on SSCW website but final report is still being drafted. Hot spots were reported in Village Street Marblehead (DPW found raccoons in drain) and in Wolf Trap marsh. Hot spot discussions were conducted with EPA about further identification using DNA and human indicators.

### ***Adapt to/mitigate impacts of climate change [CC]***

- Upper North Shore
  - A Drought Task Force was developed focusing on impacts of drought and management of impacts in wetlands on the north shore. Over the past months, planning for north shore wetlands was continued.
- Lower North Shore
  - Municipal Vulnerability Preparedness: RC participated in training as a Municipal Vulnerability Preparedness state-certified provider 10/4/17.
- Metro Boston
  - Boston Harbor protection stakeholder presentation/discussion with the Boston Harbor Ecosystem Network: Boston Harbor protection presentation scheduled for 11/2/17.
- South Shore
  - Vegetation response to sea level rise: RC coordinated the mailing and setting up of docks for salt marsh sentinel survey, datasheet for North River boat survey.
- Cape Cod
  - Resilient Cape Cod project, Cape Cod Commission: APCC has been assisting the Cape Cod Commission with this NOAA-funded project to develop coastal adaptation tools to help Cape Cod communities to adapt to sea level rise, storm surges and coastal erosion. The project involves development of an adaptation measures matrix, providing public outreach on coastal resilience, obtaining input on coastal values and ecosystem services, economic study and development of a tools matrix. APCC developed an inventory of adaptation methods and identified examples of successful adaptation measures for a StoryMap.

### ***Remove barriers to streamflow and tidal flushing [SF]***

- Upper North Shore
  - Marsh Impoundment project development – This effort is just beginning to be designed. Mosquito ditching has caused overdraining and underdraining of the marsh and the working group is still trying to understand its extent. Pilot projects are being developed. The first step is to get state and federal regulators on board to determine what permitting is needed to implement the pilot projects.
  - Hydrodynamic Salinity and Sediment Model: This project was funded by the Hurricane Sandy grant and wrapped up this quarter. Key results indicate that the Plum Island Turnpike Bridge does not have as significant an effect as suspected as a tidal restriction on the Plum Island Sound marsh and is not likely responsible for the proliferation of *Phragmites* in the northern section of this marsh. Future use of this model may include marsh impoundment assessment, Salisbury *Phragmites* management, and Upper Parker River hydrology.
- Metro Boston
  - Support local habitat restoration initiatives: RC met with DER on 7/6 to discuss priority sites in Metro Boston; attended grant scoping meeting for Nahant/Canoe Beach restoration project on 9/5

- South Shore
  - Dam removals and stream continuity: (1) Bound Brook: RC continues to provide support to studies for the dam removal process. (2) Third Herring Brook: RC continues to coordinate work with NOAA and provided support letter Norwell Jacobs Pond grant. (3) RC continues Mill Pond vegetation monitoring, Tack Factory vegetation monitoring, coordinating *Phragmites* treatment, documentary video meeting, Tack Factory site cleanup. (4) South River: RC conducted preparation for Temple Street bid requests, and vegetation management meeting and planning. (5) Town Brook: RC provided Holmes Dam support letter and helps conduct vegetation monitoring.
  - Green Harbor tide gate improvements and monitoring: RC coordinated the planning of the Green Harbor paddle.
  - Stream crossing prioritization: RC conducted PR for the Duxbury culvert project.
- Cape Cod
  - Implement coastal habitat restoration and protection projects: (1) Site visit to potential restoration projects for CCWRRP Phase II: In the event that federal funding becomes available for Phase II of the Cape Cod Water Resources Restoration Project (CCWRRP), staff from APCC and NRCS attended site visits to potential restoration sites on Cape Cod. These included fish runs, salt marshes and stormwater remediation sites; (2) APCC's three summer interns worked on projects that will support monitoring and restoration, including salt marsh monitoring, testing cyanobacteria monitoring methods, video monitoring of juvenile herring, mapping natural communities, and outreach.

### ***Manage invasive species [IS]***

- Upper North Shore
  - Great Marsh Pepperweed Monitoring and Control: The RC led the planning and treatment efforts along the banks of and on the islands of the Merrimack River.
  - Great Marsh *Phragmites* Monitoring and Control: After several years of chemical treatment to control *Phragmites* in the Great Marsh, the area was remapped over the summer to determine management success. Only the medium and high density stands were mapped which will allow determination for future control actions. Areas of concern include a tributary of Mill Creek and the Salisbury marsh behind Salisbury Beach State Reservation. Private funding was raised to treat 36 acres in the Salisbury marsh as no grant funding was obtained for treatments this year.
  - Green Crab Population Monitoring: Green crabs were monitored (24 sites) in both July and early October, with record high numbers in October for the period since the program was established. We have developed a research connection with the Nantucket Land Council which is also wrestling with the triad of green crabs, eelgrass loss, and a significant commercial fishery threatened.
  - MIMIC: Monitoring of marine invasive species for the 2017 season was completed and data will be submitted to CZM at the end of the season. Results will be made available on MORIS.
- Lower North Shore
  - Pepperweed Eradication: Pepperweed pulling was conducted in August in Marblehead Forest River Conservation, Collins Cove and Pickman Park in Salem. 12 volunteers participated.
  - Coastal Habitat Invasive Species Monitoring: Monitoring 8 sites across the Sound completed monthly June – August. Data were submitted to CZM for inclusion in the database and will be available on MORIS.
- South Shore
  - Marine Invasive Monitoring: Data collection completed and submitted to CZM and will be available through MORIS.
  - Purple loosestrife biocontrol: Mill Pond quadrat monitoring, *Galerucella* update for Norwell.

## ***Conduct education and outreach [E&O]***

- Upper North Shore
  - Green Crab Population monitoring: The culinary component of the green crab project is currently focusing in of green crab roe for the development of green crab “she crab” soup for commercial sale. A video documentary is being made for the NY Times for culinary development of invasive green crab.
  - The Support the Pink House effort (to repurpose the building into a local estuarine laboratory for area stakeholders and colleges) resulted in a real estate type document for soliciting potential property owners. Working with area legislators a list of potential entities was developed.
  - Science Field trips for Boston University students, NEAq Women Working for Oceans, and HS Science Teachers.
- Lower North Shore
  - Salem Maritime Festival 8/05-06; Trails & Sails North River walk & Talk 45 people 9/23.
- Metro Boston
  - Guiding principles/governance document for Boston Harbor Ecosystem Network: Steering committee met on 8/30; draft governance document circulated to BHEN steering committee in early October; Steering committee met on 10/5.
  - (1) Lecture series announced for fall winter includes several speakers with a MassBays connection (Grady/NSRWA, Sittenfeld/MOS, Albert/NPS, Hanley/Northeastern). (2) RC facilitated coastal erosion program for 10 high schoolers during Coastal Ocean Science Academy. This involved field visits to sites in Winthrop, Nahant, and Newbury. (3) Hosted networking meeting at NU with MWRA staff on 8/20 attended by 16 people.
- South Shore
  - Watershed stewardship certificate program: RC held meeting with NSRWA and CSCR.
- Cape Cod
  - APCC workshop on “Stormwater BMP Maintenance: Green Infrastructure Construction, Inspection and Maintenance”, October 31, 2017, Barnstable Town Hall, 367 Main Street, Barnstable, MA. This free APCC workshop is funded by a grant from EPA’s Southeast New England Program (SNEP) to APCC to assess, prioritize and remediate stormwater discharges in the Three Bays region.
  - 7th Annual River Herring Network Meeting, November 2, 2017, 9 AM to 3 PM, Sandwich Town Hall, 130 Water Street, Sandwich, MA. The River Herring Network was established with MassBays grants to enhance coordination and information exchange among local, state and federal river herring managers and partners. Topics for this meeting will include: update on diadromous fish management, statewide and regional status of river herring populations, video monitoring of adult herring, evaluating juvenile herring growth and survival, electronic counting and lessons learned, and a field trip to Upper Shawme Pond to see a fish run restoration project (supported by MassBays). For more information contact Abigail Archer at [aarcher@barnstablecounty.org](mailto:aarcher@barnstablecounty.org).
  - Resilient Cape Cod workshops: Public workshops will begin November 2017 and will continue through 2018. Workshops will include storymaps of successful examples of coastal adaptation, solicitation of public input on adaptation measures and presentation of the tools matrix. For more information, contact Erin Perry at [eperry@capecodcommission.org](mailto:eperry@capecodcommission.org).
  - 5th Annual Cape Cod Coastal Conference, December 5 and 6, 2017, Hyannis Resort and Conference Center, Hyannis, MA. This annual coastal conference is being planned by Tonna-Marie Rogers (WBNERR Coastal Training Program coordinator) assisted by the Steering Committee (APCC/MassBays, CZM, Cape Cod Chamber of Commerce, CCS, WHOI Sea Grant/Cape Cod Cooperative Extension, and DEP). Topics will include restoration, coastal resilience, water quality, and the coastal economy.
  - Restoration
    - \$10 million in funding for the Cape Cod Watershed Restoration Program (CCWRRP) announced: In October the NRCS announced that \$10 million in federal funding will be

- provided for Phase II of the CCWRRP through the NRCS Watershed Restoration and Flood Mitigation Program. The CCWRRP is a Congressionally-approved 10-year program to restore shellfish beds impacted by stormwater discharges and to restore impaired salt marshes and fish runs. Several APCC staff worked on advocating for funding, providing a list of possible projects, and assisting NRCS with planning and site visits with officials.
- Site assessment, Little Pamet River, Truro: This is a tidally-restricted watershed located north of Pamet River and Pamet Harbor. At the invitation of town staff, the RC and APCC staff met with abutters to hear their concerns and to conduct a site assessment of this stream valley. Concerns include growth of invasive species, disappearance of open water and diminished wildlife. This is a tidally-restricted watershed that used to be fresh but appears to be turning brackish.
  - Restoration Coordination Center: Activities included meetings of restoration partners; monitoring of salt marsh and tidal levels in Dennis, Yarmouth and Brewster; developing an inventory of possible projects for the CCWRRP (see above); conducting site assessments; managing the EPA SNEP Three Bays stormwater project in Barnstable; working with DER to explore cranberry bog restoration; and preparing proposals for restoration projects.

### **Staff Updates: Central Staff**

#### **Executive Director**

- Meetings and conferences
  - Attended Mass Rivers Alliance Members' Citizen Science workshop, presented on our Monitoring Network and facilitated a breakout session to identify needs and generate feedback for DEP (July 31, Westborough).
  - Participated in a national webinar hosted by EPA Office of Research and Development re: valuation of ecosystem goods and services (August 3).
  - Participated STAC meetings re: Biological Condition Gradient (August 10 & September 20, Boston), tidal flushing in embayments (September 18, Boston).
  - Attended APCC Annual Meeting (September 27, Brewster).
  - Presented current status of CCMP at the South Shore Local Governance Committee meeting (September 28, Norwell).
  - Attended training regarding the content of the new CZM-DEP [Coastal Manual](#) (October 2, Boston).
  - Participated in a webinar hosted by EPA NEP Office re: Public input to CCMPs (October 5).<sup>1</sup>
- Partnerships and Collaboration
  - Hosted two meetings with EPA and DEP representatives to develop a streamlined QAPP process for citizen monitoring groups (August 16, Acton; September 22, Marlborough).
  - Coordinated effort by the Citizen Science Association's Data Validation Working Group to assess existing resources for citizens' groups regarding data quality assurance.
  - Hosted meeting to coordinate statewide efforts to support citizen monitoring with representatives from Mass Rivers Alliance, DER, DEP, NEIWPC in attendance (September 6, Boston).
  - Led planning for the Fall 2017 [Technical Transfer Conference](#) of the National Estuary Program, to take place in Boston November 2-5. More than 60 attendees from across the country are expected. \*\*Please let Pam know if you'd like to include anything in the meeting packet, especially goodies like pens or pencils!
  - Participated in conference calls with Association of National Estuary Program colleagues (August 7, September 5, October 3).
  - Participated in the first planning call for the February 2018 NEP meeting in Washington DC (October 18).
- Program Management
  - Conducted performance evaluation and yearly planning with Staff Scientist and CZM supervisor in July.

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<sup>1</sup> 96-minute recording available at <http://www2.teleconferencingcenter.com/moderator/presentation/Playback?id=37e06c64-ba63-4316-bf26-dceffb6931ea.rpm>; enter name Nancy Laurson and email Laurson.Nancy@epa.gov



- Attended CZM offsite staff meeting and team-building event (September 26, Waquoit Bay NERR).
- Completed all Regional Service Provider Scopes of Work in August.
- Received EPA award for FFY2017 in September.
- CCMP Development
  - Converted public review draft CCMP content to match terminology utilized in EPA's 2016 CCMP Guidance. Goals-Actions-Activities depicted in this [Coggle](#).
  - Explored potential for partnership with the UMaryland Center for Environmental Science to produce [online visualization](#) of trends and conditions in MassBays.

### **Staff Scientist**

- EDA 2.0
  - NUMSC will conduct the assessment to identify embayment categories and targets which will be submitted in January 2018. EDA2.0 describes 69 assessment units that include estuarine embayments and "interembayments" that include rocky shores, headlands and (barrier) beaches.
- Science and Technology Advisory Subcommittee (STAC)
  - At the STAC meeting on August 10, EPA contractor Emily Shumchenia provided a comprehensive presentation of the Biological Condition Gradient (BCG), how it works and its benefits. STAC discussed this approach at length, in particular its the applicability to MassBays and made recommendations to the management committee. STAC believes that this is a proper approach for the MassBays to apply to its embayment categories and this will inform the state of the bays reporting as outlined in the CCMP goal 3.
- Research projects
  - Coastal Acidification Project: MassBays continues work with UMass Boston on the construction of the coastal acidification observing system. The plan is to deploy the system as soon as possible (lab testing should be underway).
- Grants
  - Almost all the grant projects have been wrapped up or are in the final stages. We anticipate putting out an RFR in December (fingers crossed)

### **Management Committee Member Updates**

Massachusetts Rivers Alliance: (1) MSA has concerns about the delisted waters under the 303d list, suspecting a lack of transparency around the data. (2) DEP is taking a serious look at external sources to collect water quality data as part of the water quality monitoring initiative. (3) DEP's final watershed meeting is scheduled for the end of November. Comments from meetings on water quality data and alternative TMDLs are invited. (4) MRA is still opposed to the delegation of the NPDES program to the state as proposed budget is insufficient and DEP lacks the staff resources needed to maintain water quality. Funds are provided under legislative appropriation and therefore vulnerable to cuts over time.

Massachusetts Water Resources Authority: (1) MWRA conducted a valve replacement project at the 20-year old Deer Island WWTP . (2) The 3-year assessment phase for CSO control plan construction was completed in 2016. AECOM is contracted to assess whether goals have been met, discharges decreased, and water quality improved. (3) monitoring overview (2016) and [Underwater video of outfall](#) (conducted every 3 yrs) are available on the [MWRA website](#). The 3-year report on Cape Cod Bay conducted by Center for Coastal Studies is also due shortly. An annual report on the Charles River, Mystic River, and Alewife Brook on CSOs is also pending.

Massachusetts Division of Ecological Restoration: (1) DER is still looking for a Director to replace Tim Purinton. (2) DER will also be posting a position for Stream Continuity person to fill vacancy. (3) Ongoing work: Impaired hydrology work on Ken's Island in Great Marsh; an MET grant was awarded to Manchester for work on the Sawmill Brook tide gate; Oak Island tide gate has a monitoring program in place; culvert replacement and environmental remediation in Bear Creek/Crescent Marsh (Saugus) on MassDOT property; 33 acres of Rumney Marsh subject to stormwater runoff and need ideas for restoration projects; federal funding was received by the town of Truro for removal of tidal restriction in Eagle Neck Creek.

Urban Harbors Institute: (1) Feasibility study of Boston Harbor SLR protection options to be concluded by end of January 2018. (2) UHI is conducting a study of houseboats, to understand the motivation in Newburyport, Ipswich and Annisquam River

North and South Rivers Watershed Association: (1) Streamflow monitoring on 3<sup>rd</sup> Herring Brook conducted since 2008 with DER. Data are being used to inform on management of water use by communities. 2015 data logger was deployed near wells/streams. Zero flow days show impacts: 50(2015), 100 (2016), 25 (2017). Public comments are accepted on DEP proposal to increase withdrawal by town of Norwell to counteract increase in population. SWMI regulations balance withdrawal with streamflow.

Merrimack Valley planning Commission: The Commonwealth is updating its Hazard Mitigation Plan which will incorporate climate change provisions (with data from the Northeast Climate Center at UMass Amherst) and Municipalities Vulnerability Preparedness Plan. AECOM is supporting this process and plan is due by September 2018. Joe suggested inviting EEA's Director of Climate and Global Warming Solutions Kathy Theoharides to the next Management Committee meeting to discuss progress.

U.S. Environmental Protection Agency: EPA Region 1 administrator has not yet been named [New administrator Alexandra Dunn appointed on 11/16/2017] (2) MassBays is hosting the fall 2017 NEP tech transfer meeting in Boston 11/2 through 11/5. (3) Matt Liebman will be acting as citizen science coordinator for 1 year. (4) The position of Executive Director for Narragansett Bay Estuary Program (NBEP) has been posted.

Division of Ecological Restoration: (1) Post of Director is still open and the post of Stream Continuity Program manager is vacant. (2) Ongoing projects: Ken's Island has 401 and Chapter 91 permits for impaired hydrology work in Great Marsh; Funds were awarded to the Town of Manchester for fork on a tide gate in Saw Mill Brook (MET grant); Tide gate on Oak Island has ongoing monitoring. In Crescent Marsh, MassDOT conducting restoration of 33 acres on Rumney Marsh, a big concern with stormwater runoff (need restoration project and ideas); Tide gate restoration on Eagle Neck Creek on Cape Cod.

The meeting adjourned at 12:30 PM.

### ***Upcoming Meetings***

**Wednesday, January 24<sup>th</sup>, 2018**  
***Management Committee meeting, 9:30am to 12:30pm***

## **Attachment 1**

### **Draft Charge to the**

### **Massachusetts Bays National Estuary Program Finance Subcommittee**

The Management Committee will organize an *ad hoc* Finance Subcommittee that will assume responsibility for carrying out the following:

1. Prepare a draft Fiscal Plan for discussion at the October 2018 Management Committee meeting that specifically addresses options and opportunities for diversified funding, including (1) potential partnership with Restore America's Estuaries, (2) strategies for securing directed state funding, and (3) establishing an affiliated fundraising non-profit. Supporting materials for Finance Subcommittee use include:
  - a. EPA Guidance for NEPs regarding components of a fiscal plan.
  - b. Fiscal plans approved by EPA Region 1 and Headquarters for other NEPs.
  - c. A 2017 draft Financial Approach prepared by MassBays' Executive Director.
  - d. Input from MassBays' EPA Region 1 Coordinator.
2. Advise MassBays' Executive Director in responding to comments from the Management Committee (and others as needed) regarding MassBays' Fiscal Plan.
3. Review and approve a final Fiscal Plan to be submitted as an Appendix to MassBays' Comprehensive Conservation and Management Plan by October 2019.