

Science and Technical Advisory Committee  
WebEx Meeting  
December 9th 2020  
9:00 am

**Attending STAC Members:** Dr. Steven Yergeau (Chair, RCE-Ocean), Dr. Elizabeth Lacey (Vice-Chair, Stockton University), Alena Baldwin-Brown (NJDEP), Linda Brennen (MCPD), Barbara Spinweber (USEPA-R2), Charles Caruso (PPA), Christine Wieben (USGS), Gregg Sakowicz (JCNERR), Robert Karl (BTMUA), Robert Shertenlieb (OCUA), Dr. Swarna Muthukrishnan (COA), Dr. Peter Rowe (NJ Sea Grant), Keith Hanson (NOAA), Joseph Smith (USFWS), Christine Raabe (OCSCD), Vicki Pecchioli (OCPD), Dr. Jim Vasslides (BBP)

**Attending Guests:** Karen Argenti (SBB), Christy Kehoe (NOAA), Matt Czik, Rob Parr (BTMUA), Murray Rosenberg (Citizen Representative-Alt.), George Murnyak (Citizen Representative), Ed Wengrowski (Pinelands Commission), Colleen Keller (NJDEP), Craig McGee, Louise Wootton (George Court University), Dr. Rick Lathrop (Rutgers University), Mark Villinger (OCPD)

**Staff Members in Attendance:** Dr. Stan Hales, Martha Maxwell-Doyle, Karen Walzer, Emily Pirl, Shannon Vasquez

**Welcome and introductions–S. Yergeau**

The meeting convened at 9:04 AM. Dr. Yergeau welcomed everyone and the presenters.

**Review of October 14th Meeting Minutes and draft agenda–S. Yergeau**

Draft agenda passed with no revision. Barbara Spinweber requested a revision to part of the CCMP section. Rob Shertenlieb motioned to accept as amended, Alena Baldwin-Brown seconded.

**BBP Programmatic Update–S. Hales**

CCMP update: The CCMP was turned in to EPA Region 2 and Headquarters. Ms. Spinweber reported a conference call with Headquarters last week. She will follow up with the Program Office offline.

MOU development and CCMP tracking: The Program Office will be holding a meeting next week to discuss revisions to the MOU with interested parties. Copies of the current MOU with a number of items marked for revision were emailed to those who had indicated an interest in attending the meeting, including a number of related policy documents and committee charters.

Program Evaluation: BBP staff and US EPA held a conference call on Monday regarding the PE. EPA and BPP will talk further to determine next steps. The evaluation should wrap up in the new year.

**2021 STAC Meeting Calendar – S. Yergeau**

Objective: Brief discussion on proposed STAC meeting dates for 2021

The 2021 STAC meeting calendar starts in February with meetings the 2<sup>nd</sup> Wednesday of every other month, with a break in August. The AC meets on odd number months

Reminder that the June meeting will be the installation of the new chair, and the STAC is looking for nominations for the vice chair. Please contact Dr. Yergeau or Dr. Vasslides if interested.

The calendar covers BBP meetings and the JFY seminar series. Any committee members who have recurring meetings they would like to add to the calendar, let Dr. Vasslides know before the holiday break.

### **2021 State of the Bay Report – J. Vasslides**

Objective: Update status of the State of the Bay Report; request for photos.

The workgroup met 2 weeks ago to review the format and content of the report. The introductory contents of the 2021 report will be similar to 2016, with the director's report, executive summary, and introduction, but with additional description aligning the SOTB with the CCMP and ecosystem goals. The 8 targets from the CCMP would all have their own section, utilizing the same color-coding scheme from the CCMP to link them back to the major topic items (i.e. water quality, water supply, land use, etc.) The workgroup is also developing a "Take Action" section for each target, to point readers toward things they can do. After the targets, there will be a "Special Reports" section, including one on climate change and climate-related impacts on the bay since 2016. The workgroup has also proposed an "On the Horizon" section for broad-scale items that will impact the bay over the next 5 years, such as the plastic bag ban, and the NJDEP's Moving Science into Action projects. The workgroup has requested data for assessing targets, and Ocean County Planning Department may be able to fill the "Wetland and Riparian Buffer" target data gap pending the monitoring group's review. The working group has begun writing drafts for each section, with some people taking ownership of some targets. The full text draft should be ready by February.

### Questions

- Mr. Murnyak asked if there would be individual-scale actions for the various targets. Dr. Vasslides said there would be. Mr. Murnyak mentioned a list of actions he had been gathering.
- Dr. Yergeau asked if the "On the horizon" policy section would become incorporated into future targets or indicators. Dr. Vasslides replied that those policies were included due to their potential large impacts on the bay's condition, as large-scale changes and actions to be aware of.
- Dr. Vasslides reported that the college's graphic design person may be too busy with college related work to undertake a design project of this size. Dr. Hales has already begun discussions with the college about the potential use of an outside vendor.
- Dr. Yergeau asked about the SOTB's publishing timeline. Dr. Vasslides replied they were aiming for June. Dr. Yergeau also asked if the BBP would run presentations along with the report. Dr. Vasslides replied that there weren't any plans yet. The college did have a new conference center, which could be used once public gatherings were safe again. In the meantime, Dr. Vasslides would take feedback on the matter.

## **NJ CERAP–Ms. Elizabeth Semple, NJDEP; Dr. Richard Lathrop, Rutgers Univ**

Dr. Lathrop provided a presentation on a NJDEP/Rutgers University collaborative project currently underway. The NJDEP received an EPA grant to develop a coastal ecological restoration and adaptation plan. Dr. Lathrop was helping to design interactive mapping that would aid the NJDEP and other partners in prioritizing coastal restoration and adaptation projects. The map would focus on marshes, estuaries, and backbays, covering an area from the Meadowlands, through Raritan Bay, along the Atlantic coastal bays to Cape May, and then wrap around the Delaware Bay/tidal areas.

The project will identify areas most appropriate for future restoration and enhancement based on 8 issues of concern (IOC). The state was divided into 6 general regions, whose sites were then identified based on each region's specific IOC. These sites were assessed, characterized, and associated projects at each site were recorded.

BB-LEH was the pilot region. The project team ranked areas on a scale of vulnerability for each IOC and for composite vulnerability. The map was developed in discussion with state offices over the target issues, and with environmental justice organizations developing their own maps. The next step was to get local guidance to identify specific sites, projects that would suit the sites, and sponsors to manage projects when funding became available. The JCNERR served as the point of contact for this portion of the project, and fielded nominations for 40 sites in the initial round of feedback. Sites were mostly based around ecological condition and community resilience, favoring restoration as a tactic and focusing on degradation and shoreline erosion as primary IOC. Next steps for the project are to get better geographic data and solicit more information from local groups about their projects. Ms. Maxwell-Doyle also spoke about how this project could provide information needed for the Habitat Plan required as part of the CCMP revision.

### Questions

- Mr. Murnyak asked if Dr. Lathrop had any old aerial photos or remote sensing data from the 1920s/30s, in order to visualize changes over time. Dr. Lathrop replied that the earliest statewide aerial imagery dated to the early 1930s, and was accessible via the state. The project was looking into the possibility of incorporating historic data for comparison, as the current erosion visualization compared changes from 1977 to 2010.
- Mr. Murnyak also asked if private citizens could nominate a site for the project. Dr. Lathrop replied that nominations came mostly from groups who could plan and implement projects on the site. Some nominations came via NGOs working with municipalities or other landowners. Ms. Maxwell-Doyle also added that the wetlands workgroup would be working on ways to populate this map with projects.
- Ms. Maxwell-Doyle asked Dr. Vasslides how this tool fit into the BBP's restoration strategy. Dr. Vasslides replied that mapping for IOC was important to the habitat plan. Overlaying IOC with maps of habitat areas could help identify which sites were higher priority for restoration and enhancement.

- Ms. Maxwell-Doyle reiterated the importance of populating the map with projects, as this map would be used to inform future funding decisions from the state and from related partners.
- Dr. Yergeau asked if the map would include areas further upstream in the watershed as sources impacting water quality. Dr. Lathrop replied that while the map did go upstream to the Head of Tide, it wasn't intended to cover areas further up the watershed. Ms. Maxwell-Doyle added that this map would be incorporated as part of the state's 2021 coastal restoration plan.
- Mr. Caruso asked if the database would include internal DEP projects or outside projects like superfund sites. Dr. Lathrop replied that superfund sites were not considered with IOC in this map, outside of co-location. This may change for maps of other areas, like the Raritan and the Meadowlands. Some DEP projects were included if they participated in watershed efforts, but they weren't viewable. They might be included in the public viewer later, in association with projects around specific sensitive resources.
- Ms. Semple gave closing remarks that the NJDEP intended this project to be an integral part of the coastal resilience plan. This map would influence long-term decision making and resource prioritization, as well as help coordinate across state programs and local/regional partners to ensure projects were targeted to areas with the most return.

#### **NOAA Mid-Atlantic Marine Debris Action Planning – Ms. Christy Kehoe**

Ms. Kehoe gave a presentation on the NOAA Mid-Atlantic Marine Debris Program. The program was established in 2006 to investigate the impacts of marine debris. She outlined the various kinds of marine debris, their sources, and the pillars of the program (prevention, research, removal, response, and regional coordination). Each pillar consists of different actions and funding opportunities from the program. There are currently 11 active grants in the mid-Atlantic region.

Ms. Kehoe went on to describe the action plan. Community stakeholders are brought together to discuss and plan, while NOAA facilitates and publishes the result. The program aims to increase public awareness/education, promote networking, coordinate messaging, bring funding, and inform decision makers and the public. The Mid-Atlantic region has been conducting research since 2014 and in 2019 began coordinating and developing the regional action plan, in consultation with other regional offices. They held 75 individual calls with regional entities to include all states and sectors and incorporated regional data and feedback. The data visualization showed that the top debris types given were consumer debris, derelict gear, microplastics, and abandoned vessels. The top priorities given were prevention, policy, research, infrastructure, coordination, and removal.

The draft plan is currently structured by goals, strategies, objectives, and actions. The goals are centered around the top four debris types. The strategies focus on prevention/education/outreach, research and monitoring, proper disposal and infrastructure, removal, and policy and management. They are also identifying leads and partners for each action in the region.

Timeline for the plan is to gather feedback on the draft plan from Dec 2020-Jan 2021, with two review cycles in in early 2021. There have been 172 participants across 4 feedback workshops. After that, the plan will be published and implemented 2021-2026 with semi-monthly monitoring and a midpoint workshop in 2023.

Ms. Kehoe also shared the Mid-Atlantic Marine Debris Collaborative [website](#), which had updates on the program and an online database of projects. The website includes a section on [funding opportunities](#), with most of the announcements scheduled in the summer season with letters of intent due in the fall. There was also the [NOAA Marine Debris Clearinghouse](#), which could be sorted by debris type and location, and included all projects and final reports under the program since 2006.

### Questions

- Dr. Yergeau stated that several the action plan seemed to integrate well with the partnership's current planning and work. There could be funding opportunities for research on impacts for the plastic bag ban and other marine debris related projects.
- Ms. Baldwin-Brown asked if any NJDEP representatives are in the workgroup, including anyone from the emergency response team. Ms. Kehoe replied that Kevin Hassel and Emmalee Carr were both involved, with other people potentially at the workshops. She didn't know if they received any feedback from the NJ emergency response team, but could follow up on that later. Ms. Baldwin-Brown added that Ms. Carr was in her Division, and that the Division's Bureau of Marine Water Monitoring would also be worth contacting for workgroup participation.
- Mr. Murnyak asked if there was any entity that private citizens could contact to aid with removal of large debris like navigational hazards or refuse on a marsh. Ms. Kehoe replied that the Marine Debris Program mostly funded removal efforts instead of doing removal. Dr. Yergeau replied that the BBP, STAC, and Rutgers Cooperative Extension could put together resources such as a contact list for debris removal, as part of their involvement with the action plan. Mr. Murnyak would contact him later.
- Mr. Caruso asked about single-use shrinkwrap as a major form of boating waste, which would greatly increase boating debris as a source of pollution. Ms. Kehoe replied that shrinkwrap was a growing issue, and that there may have been a data gap from the people they surveyed. Shrinkwrap and fiberglass recycling is a priority, though states have been encountering issues developing a recycling program. Maryland had started a messaging campaign to use different materials and identifying haulers and recycling centers. Mr. Rowe replied that the market for fiberglass recycling had bottomed out and now it's all going into landfills. He suggested contacting Mike Danko of New Jersey SeaGrant Consortium for more information.
- Mr. Caruso suggested a return to canvas for covering boats. Ms. Kehoe mentioned the Maryland Clean Marina initiative, which was working on prevention via alternative materials and proper disposal. Once that initiative was underway, she could share lessons learned with the community.

- Ms. Raabe commented that Ocean County had a shrink wrap recycling program, which could be found at their [website](#).

### **Working Groups' Updates–S. Yergeau**

#### Shellfish – Dr. Vasslides

- The Nature Conservancy and Pew Charitable Trusts purchased market-sized/oversized oysters that aquaculture producers were not able to sell during the pandemic to put on restoration sites. The Tuckerton reef received almost 900 bushels (>260,000 individual oysters) from this program last Wednesday. More news to follow after meeting in the new year.

#### Pathogen – Ms. Shifren

- Ms. Shifren was unavailable to attend, so Ms. Baldwin-Brown gave the update instead. The grant agreement between Clean Ocean Action, SBB, and MATES has been finalized. Dr. Muthukrishnan added that there were some insurance certifications pending, but the deadlines and deliverables were all set. Dr. Hales asked that the BBP staff be added to the project contact list as there were many areas of overlap with the watershed management planning projects, and Dr. Muthukrishnan replied that COA would meet to formalize details later that day. She would have more information afterward.

#### Stormwater – Mr. Caruso

- The group met Oct 14<sup>th</sup> and would meet again later today. During the October meeting they received an update on stormwater utilities with Lee Clark from the League of Conservation Voters. The work group is also tracking developments around the state, including Camden and Newark's feasibility studies. The group will continue looking at Ocean County's developments toward meeting the new municipal standards, effective March 2021. There was also a follow up discussion regarding Gabe Mahon's presentation on the new regulations, mostly centered on having a ¼ acre threshold for "major developments" in the watershed. Finally, the group discussed Rutgers's green infrastructure program and how it interacts with the BBP's watershed management plans. Ms. Raabe indicated the soil conservation districts have additional stormwater standards, as well as a 1986 database of ordinances throughout the state. The upcoming meeting would discuss the interactions between these rules and the different programs.

#### Monitoring – Dr. Vasslides

- Dr. Vasslides reiterated on the update from the SOTB that the monitoring workgroup was discussing the wetlands and riparian buffers target. They are currently reviewing Ocean County Planning's mapping data to see if it's compatible with the target requirements. BBP staff are learning how to use ESRI Hub software to publish the plan and the draft pieces are being assembled. Dr. Vasslides will be reaching out to people for missing coordinates and other data. Ideally the plan will go up along with the SOTB, but it may be delayed, as one staff member (Teresa Lin) is leaving for graduate school and someone else needs to fill in.

### **Wetlands Workgroup – M. Maxwell-Doyle**

Ms. Maxwell-Doyle discussed setting up a workgroup specifically centered around wetlands and

climate resilience to better coordinate partnership efforts. A proposal was sent out to STAC members detailing the motivations behind this group, initial goals, and the importance of developing a collective vision for the future of the estuary. This workgroup could complement existing workgroups and the NJDEP's efforts. Ms. Maxwell-Doyle would be the BBP staff liaison, but the workgroup needed a STAC member as chair. A few people from the AC and other partners had already volunteered to join, and if any others are interested they can contact Ms. Maxwell-Doyle or Dr. Vasslides. After brief discussion, Dr. Yergeau called for a motion to formally vote in the workgroup. Ms. Raabe motioned and Mr. Rowe seconded. The group was voted in unanimously. Dr. Yergeau thanked Ms. Maxwell Doyle for putting together the proposal.

### **Partner Updates**

Mr. Joe Smith – Mr. Smith reported that the Good Luck Point beneficial use project had started at Forsythe Refuge and would continue through the end of the month. Dredge material from state channels would be used to buffer the shore and supplement the marsh.

Dr. Pete Rowe – Dr. Rowe thanked the partnership and Dr. Hales for their participation in developing resource priorities for the NJSGC RFP. The votes were in and the RFP was in final approval from the boards and national office. It could be published as soon as next week. He also reminded the partnership that the Knauss Fellowship and the SeaGrant National Marine Fisheries graduate fellowship were currently accepting applications, and any interested students should check the SeaGrant website for details.

Dr. Steve Yergeau – Dr. Yergeau reported on the JFY webinar series; both the upcoming “What’s Bugging Your Jersey-Friendly Yard” series in 2021, and the series that ran this fall. The upcoming series will cover beneficial and invasive insect species each month. The fall series had 800 participants across 6-7 webinars, including people tuning in from outside the state. The series will run again in 2021 as well.

### **Adjournment**

Dr. Yergeau wished attendees a happy Thanksgiving and happy holidays, thanking them for their participation in the STAC and the BBP. Dr. Hales also thanked Linda Brennen, who would be retiring after this meeting. Ms. Brennen thanked the partnership in return and reported that Amber Malm would represent Monmouth County on the STAC.

Meeting adjourned 11:21 AM.