

Meeting Notes

Science Advisory Committee Meeting

February 19, 2020 10:00a-12:30p

RIDEM Offices – 235 Promenade St., Rm 280C, Providence, RI 02908

ATTENDEES

NBEP Staff: Mike Gerel, Courtney Schmidt, Julia Bancroft, Julia Twichell

SAC Committee Members: Sue Kiernan, Jamie Vaudrey, Warren Prell, Candace Oviatt, Rob Johnston, Anne Kuhn

Guests: Emily Shumchenia

OUTCOMES

all met

1. Staff shared kick-off topics for the year
2. Staff shared progress on 4 indicator topic updates with timelines including SAC review.
3. Emily Shumchenia presented an update on benthic habitat.

ACTION ITEMS

1. Create nomination process for new members with co-chairs
 - a. Include SAC/SC membership spreadsheet ahead of next meeting
2. Create space at the May/June SAC meeting for the SAC to dive into the CCMP process
 - a. SAC members are currently invited to join all CCMP meetings to provide their expertise
3. Science updates for 2020
 - a. Keep moving forward with a SAC review tentatively scheduled for July/August 2020

NBEP STAFF RAPID KICKOFF TOPICS

NBEP's Program Director, Mike Gerel, opened our first meeting 2020 with a review of the SAC's responsibilities according to the [Guiding Principles](#):

“The Science Advisory Committee shall operate as a standing advisory committee to provide a forum for the Estuary Program and its partners to examine, discuss, and exchange scientific findings and technical information to facilitate the integration of science into the effective management of the study area. The Science Advisory Committee shall:

- Provide for the exchange and synthesis of existing and emerging scientific issues.
- Support the development of conceptual frameworks that integrate physical, chemical, biological, geological, ecological, economic, and policy dimensions of the study area.
- Provide a mechanism to integrate science with management decision-making and strengthen the science focus of the Estuary Program.
- Develop recommendations for research, monitoring, and assessment priorities and identify funding opportunities for these priorities.

- Make recommendations to the Executive Committee to develop and prioritize the content of the Estuary Program’s annual work plan.
- Ensure the peer review of scientific and technical products generated by the Estuary Program.
- Assist in the development of requests for proposals as needed; and support selected report generation.
- Aid the development of science conferences.
- Assist in the development or publishing of science proceedings.
- Present the Steering Committee with technical information to be used for decision-making.
- Advise the Steering Committee about emerging management issues and recommend research or action to address those issues.
- Evaluate and advise the technical aspects of implementation projects.
- Review and interpret water quality monitoring program results and other technical information to help determine success or redirection of NBEP projects or bay management actions.
- Provide a coordinated research focus and networking support to the NBEP.
- Assist in the completion of a status and trends report, including development of scope, providing technical input, and reviewing the draft and final reports.
- Advise the Steering Committee and Executive Committee on scientific merit of proposals received.”

The SAC provides a forum to examine, discuss, and exchange scientific findings and technical information. As such, the SAC needs to have the expertise among its member to fulfill that obligation. At the upcoming May meeting, the SAC will discuss a nomination process. We will provide the process, short biographies on the expertise of potential candidates, and include a spreadsheet of SAC and Steering Committee members with information on expertise. This spreadsheet will help the current SAC decide if the proposed members fill needed gaps in knowledge.

Courtney will work with Sue and Jamie to construct a draft nomination process for new members ahead of the May meeting.

CCMP PREVIEW

NBEP has begun the process for updating its Comprehensive Conservation and Management Plan (CCMP), titled *Vision 2032*. Julia Twichell led a short discussion on the framework the staff have proposed for *Vision 2032* including a timeline with an end date of 2022. The idea of the CCMP is to be comprehensive but narrow, and include inclusive, broad, and directed outreach throughout the entire process. The SAC proposed that the staff and CCMP subcommittee ensure to address threats to the watershed, and figure out what we, as NBEP, need to focus on during the implementation of this process. To do that, the SAC proposed linking the CCMP to the science NBEP is generating through the status and trends process by strengthening the resiliency of the watershed and integrating benefits.

The SAC will be invited to all future CCMP development meetings. At these meetings, the SAC will be able to provide comment throughout the process and engage with the stakeholders and other committee members. Additionally, the NBEP will provide a short period at the next SAC meeting (tentative in May) to discuss the CCMP and for the committee to provide any comments.

SCIENCE UPDATE

The NBEP staff updated the SAC on three of the science updates discussed at the previous meeting: Land Use, Social Science, and Water Clarity. Emily Shumchenia updated the group on the Benthic Community indicator in a separate presentation (see below).

The land use science update is a good internship opportunity with freedom to explore new and interesting questions that come up during the data analysis. One such avenue is to compare impervious cover from the NLCD (National Land Cover Dataset) to what RI and MA have. Additionally, NLCD is creating an impervious cover change tool that will enable further calculations based on that dataset.

NBEP is developing a social science working group. This is very much under development and will start with a meeting to discussing the best way to integrate social science into Narragansett Bay management. This meeting will tackle our regional ability to measure and track social indicators as well as develop questions that management and researchers would like answered. This set up will create a miniature strategic plan to get partners to stay with the project.

Finally, the staff updated the SAC on the conversations they have had regarding water clarity. The NBEP will host a meeting of those who collect water clarity data used for the *State of Narragansett Bay and Its Watershed* and new partners to explore options for this indicator. The working group will begin to tackle questions regarding the type of water clarity data used as the indicator, the resolution needed to discuss trends, how to expand coverage into embayments and coves, etc. The SAC provided very thoughtful suggestions at this stage, including to focus on PAR (photosynthetically active radiation) rather than Secchi depth, careful consideration on where to place new sensors, and how to address concerns that the water is “too clear.” Courtney plans on scheduling the initial meeting in April or May to begin these discussions.

BENTHIC HABITAT COMMUNITIES SCIENCE UPDATE

Emily Shumchenia, E&C Enviroscape, updated the SAC on the benthic habitat indicator. She gave an overview of the benthic community indicator, highlighting the Sediment Profile Imaging (SPI) tool, and how repeating this technique at the same stations over time may show organism-sediment relationships over time. SPI is limited to soft sediments, and 38 out of 54 sampled stations are directly comparable across all three efforts (1988, 2008, and 2018). The 2018 survey showed that Narragansett Bay is moving towards a healthier environment. This is similar to Boston Harbor, where poor water quality allowed tube-building *Ampelisca* to be more prevalent. Then *Ampelisca* became rarer as diversity increased. These are good signs of recovery that we are seeing in Narragansett Bay. Emily did note that stressed sites continue to be stressed. Of interesting note is the emergence of a new biotope not previously seen in the 1988 and 2008 surveys, further indicating an improved ecosystem.

Emily also presented ideas to sharing this science update through a series of interactive maps with images with narrative/context to guide a user through the maps and understand why we care about the benthic communities. NBEP will have a draft product at the end of the summer and will be looking for feedback on how to present the data. The SAC suggested to use focus groups, or get feedback from others to see what audiences are interested in and how we can best present our more informed-public facing material.

UPCOMING OPPORTUNITIES

NBEP is pleased to announce the upcoming opportunities for staff and our partners to present their work:

- Massachusetts Association of Conservation Commissions (MACC), February 29, 2020
- Land and Water Summit, March 7, 2020
- New England Estuarine Research Society (NEERS), June 4-6, 2020
- Restore America’s Estuaries (RAE) and Association of National Estuary Programs (ANEP), October 2020
- New England Estuarine Research Society (NEERS), October 2020

As you find out more opportunities, please share them with NBEP.