



Virtual Joint Meeting of the
Estuary Implementation Committee and the
Science & Technical Advisory Committee

October 28, 2020, 9:30 AM – 12:15 PM

Zoom

Draft Meeting Minutes

Meeting Attendees:

EIC

Kelly Anderson (PWD)
Elizabeth Butler (EPA Region 2)
Kim Cole (DNREC)
Karen Crumlish (EPA Region 3)
Kathy Klein (PDE)
Megan Mackey (EPA Region 3)
Catherine Magliochetti (EPA Region 3)
Rhonda Manning (PADEP)
Chad Pindar (DRBC)
Irene Purdy (EPA Region 2)

STAC

Lance Butler (PWD)
Dorina Frizzera (GTR LLC)
Drew Greif (USGS)
Kevin Hess (PA DEP)
Ron Heun (Exelon)
Doug Janiec (SovCon)
Desmond Kahn (Fishery Investigations)
Danielle Kreeger (PDE)

STAC (continued)

Greg Lech (PA FBC)
Josh Moody (PDE)
Jason Morson (HSRL)
Daphne Munroe (HSRL)
Kristin Regan (EPA Region 3)
Alison Rogerson (DNREC)
Dave Smith (USGS)
Kelly Somers (EPA Region 3)
Kari St. Laurent – DNREC
Namsoo Suk (DRBC)
Bart Wilson (FWS)
David Wolanski (DNREC)
Beth Watson (ANS Drexel)
Matthea Yepsen (NJDEP)

Others

Emily Baumbach (PDE)
LeeAnn Haaf (PDE)
Leah Morgan (PDE)
Marianne Walch (CIB)
Jennifer Volk (CIB)

Welcome & Introductions

- **K. Klein** (EIC Chair) began the meeting and welcomed meeting attendees.
- **K. Regan** (STAC Chair) welcomed attendees and identified 8 new members of STAC.
- **D. Kreeger** announced that the new charter for the STAC was finalized in May, and Dorina Frizzera is the new STAC vice-chair, lending assistance to K. Regan if needed.
- Everyone introduced themselves and stated their affiliations.
- **D. Kreeger** asked attendees to use the Zoom chat feature to note if PDE can count their time in this meeting as match.

- **K. Klein** made a motion to approve draft minutes from the May 2020 EIC meeting that were circulated. The minutes were approved.
- **K. Regan** made a motion to approve draft minutes from the April 2020 STAC meeting that were circulated. The minutes were approved.

Partnership for the Delaware Estuary (PDE) and NEPORT Updates

- **K. Klein** gave an update on work done at PDE within last 4-5 months.
 - PDE Events since summer – webinar series, photo contest, DE river fest, happy hour/auction. In-person events were cancelled or reformatted due to Covid.
 - Other active projects and programs have included: the Urban Waters Federal Partnership webinar series “Connecting Urban Youth to Waterways”, Urban Bird Treaty Program, planning for the 2021 Delaware Estuary Science & Environmental Summit, and Urban Waters Delaware River Location Survey.
 - PDE Strategic Planning Update: PDE hired Dynamic Associates to lead this effort. SWOT analysis survey was sent to PDE staff, board of directors, and key partners to identify strengths, weaknesses, opportunities, and threats. Goals in the strategic plan reflect the goals outlined in the Comprehensive Conservation & Management Plan (CCMP) for the Delaware Estuary.
 - The current plan is to identify critical actions within each CCMP strategy that are missing/present in the draft strategic plan, present to the EIC for review, and then present a revised draft to the DELEP Steering Committee. PDE will also need PDE Board of Directors approval on this document. Some time will probably be needed in 2021 to complete this effort.
 - The DELEP Memorandum of Agreement ends December 31, 2021. Roles and responsibilities of DELEP partners will be reviewed and possibly revised.
 - **K. Somers** asked **K. Klein** about the Urban Waters partnership and the different efforts occurring in different cities.
- **E. Baumbach** gave results from 2020 NEPORT.
 - Thanked partners that assisted with this effort.
 - There were 6,775 acres submitted across 42 projects; 18 from NJ, 15 from PA, 9 from DE. Agriculture/ranch land had the highest acreage followed by forest/woodland and tidal wetlands. The top restoration technique in units of acres was land acquisition, followed by nutrient management. The greatest project activity (in acres) was highest in enhancement and protection. Dollars leveraged by source were highest in state, followed by federal, local, and

private sectors. The report assessed the total to be \$7.84 million across 51 projects.

CCMP Strategies and Tracking Update

- **E. Baumbach** summarized the 2020 CCMP tracking results.
 - The Google form was simplified from 20 questions to 10 questions.
 - The information collected included general project information, spatial data, project metrics, funding, and partners.
 - Prize incentive was included to encourage more involvement from outside partners.
 - Eighteen organizations submitted, and over 70 organizations were conducting this work during the reporting year.
 - About 370 activities were reported – Clean Waters (108 activities), Strong Communities (127 activities), Healthy Habitats (130 activities).
 - The Excel database and [online Google Sheets link](#) for CCMP tracking was circulated as an attachment with the agenda for this meeting.
 - Clean waters: nutrient pollution, other pollutants, flow
 - Strong communities: resilience and access, engagement
 - Healthy habitats: prevent wetland loss, stem forest loss, fish and shellfish
 - An interactive map was also posted on [PDE's Our Plan page](#) and on [Carto](#) to show CCMP tracking, and users can click on locations on the map to find more info.
 - What's next?
 - Review performance measures and key deliverables for the 39 CCMP strategies.
 - Assistance requested in selection for Estuary News voting (<https://drive.google.com/file/d/1cWbK-4AS91uPOKAsT8XP-fdxKSfJZL4B/view?usp=sharing>). Cast votes by Friday, November 13 to vote in Google Sheets – or, download the Excel spreadsheet from **E. Baumbach's** email sent on 10/28/20 and return it to her with your vote.

2021 Delaware Estuary Science & Environmental Summit

- **D. Kreeger** mentioned that PDE fieldwork was still being completed in 2020, especially science projects being coordinated by **J. Moody**, **L. Haaf**, and **K. Cheng**. Mussel hatchery work has been slowed by Covid and difficulties sorting out the lease arrangements with the City of Philadelphia. The PENNVEST agreement is being modified to adjust the project timeline.

- The decision to have the summit (remotely) was difficult, with many pros and cons identified – thank you to everyone who gave suggestions/input.
 - The dates were moved back about a month from the typical scheduled weekend and will take place March 1-3, 2021. There is no formal theme, but informally we are planning concepts aligned with “Celebrating Successes & Evolving for the Future.”
 - We want to commemorate the 25th Anniversary of DELEP, reflecting on progress. But we also want to look forward and engage young professionals to lend their voice to help address future challenges and opportunities.
 - Ideas are being discussed for up to 3 invited speakers: DELEP at 25, an established big name, and a voice of the next generation. We still need help arranging these speakers.
- Current plan: the budget is much smaller. Therefore, the program will be smaller but is subject to change if we get greater abstracts or funding. To avoid Zoom fatigue we are currently limiting programming to during the day with frequent breaks. With the pared down format, we will focus on the long-standing core meeting goal of contributed science presentations, retaining a few signature elements (e.g., Hot Topics). A special climate session is being scheduled to help kick off the new DRBC-led Advisory Committee on Climate Change (ACCC).
- Ideas on engaging more students and underserved communities are welcome.
- Sponsorship is still needed.
- Abstracts are due on November 16, 2021.
- **K. Somers** is participating in SETAC where she will be recording her presentation and uploading it for participation, which could be worth exploring as an option for presenters at the summit. Each poster in the poster session with SETAC also has associated pre-recorded blurbs done by presenters.
 - **D. Janiec** also contributed that pre-recorded talks will make it easier to maintain schedule albeit personal interactions are lost and there is more work and time involved. **D. Kahn** said AFS’s virtual meeting had Q&A where speakers could get back to those who had asked questions.
 - **D. Kreeger** noted that pre-recorded talks are being considered, and asked that ideas like these continue to be sent. We will know more once we see what types of abstracts come in.

Technical Report for the Estuary and River Basin (TREB)

- **D. Kreeger** reported that PDE plans to coordinate with DRBC and other partners to produce an update of the 2017 TREB in 2002.
- Advance planning is beginning now, and we expect data gathering and analysis in 2021, and the writing and reviewing in the first half of 2022.
- PDE will then produce a public-friendly State of the Estuary Report in 2022, using the updated TREB.

- Now is the time to consider which chapters and indicators in TREB 2017 have sufficient new data to update. Additional questions include:
 - Are the 8 chapters still the right topics?
 - Should any of the 60 indicators be dropped?
 - Are there ideas for new indicators to be developed?
 - Who is willing and able to serve as lead authors (chapters) or contributing authors (specific indicators)?
 - What resources are needed and available?
- There is about \$23K of contractual in the FY 2021 DELEP budget to support TREB, and as we did in 2017 there is the potential to include TREB contractual in the FY 2022 DELEP budget, if needed. In 2017, three contracts were issued that spanned two DELEP funding years.
- At PDE, **D. Kreeger** will steer the effort, **L. Haaf** will coordinate contributions, and **L. Morgan** and **E. Baumbach** will assist. As before, some other staff will also serve as contributing authors, report formatters, and/or reviewers and proofers.
- Discussion:
 - **K. Somers** offered to contribute toward the 2022 report similar to how she contributed to the 2017 report. She can serve on the review team and provide input regarding SAV and/or microplastics. She can also assist with Chapter 1 which in the past was led by UDel.
 - **N. Suk** agreed that the 2017 report can be updated, but there is no need to fully revamp or revise TREB at this time.
 - **K. Regan** suggested asking new STAC members to work with past members. She also volunteered to assist with habitat section updates.
 - **J. Morson, D. Munroe** offered to lead or assist with the oyster indicator, and potentially develop a new indicator related to aquaculture. **J. Morson** will send suggestions for other authors that might be able to help with Chapter 6.
 - **B. Wilson, D. Janeic** offered to help with the Restoration chapter.
 - **D. Smith** offered to also help and will look at the report more to consider which sections.
- **D. Kreeger** asked that any additional suggestions be emailed to her and **L. Haaf**.

Roundtable Updates

- DRBC: reported out by **N. Suk**.
 - Monitoring such as the Boat Run has been postponed until next year. DNREC staff injuries and other issues are limiting boat work in the coming months.
 - The work on dissolved oxygen and designated uses is still ongoing, but the schedule has been extended out to be 18 months later.

- DRBC continues to work on the water quality assessment report, but it is behind schedule. A draft has been finished and shared, and all comments have been returned except from NJ. Revisions and publication are forthcoming.
- The PCB MDO report has been re-drafted. Three states gave responses, and the process is ongoing with how to handle comments.
- The Monitoring Advisory Coordinating Committee will have its annual joint meeting with the STAC on November 18th.
- The eutrophication model expert panel meeting is scheduled for October 29th.
- The Water Quality Advisory Committee plans to meet on December 3rd, where bacteria and recreation use will be discussed.
- On January 28th, there will be a meeting to discuss PFAS monitoring in fish, water, and sediment.
- The new Advisory Committee on Climate Change was formed under DRBC, and the first meeting was convened on August 4th.
- The Water Resources Program 3-year plan will be published sometime in March of next year.
- PWD: reported out by **K. Anderson**.
 - The public report summarizing the PFAS monitoring program is being finished, and should be shared within the next few weeks.
 - PFAS monitoring is continuing near drinking water intakes, and 1,4-dioxin monitoring still taking place as well.
 - Water supply planning
 - In May, the salinity validation report was shared. The three dimensional model should simulate hydrodynamics of the estuary and will be used for infrastructure, and capital investment planning. Production runs to occur in the next few months.
 - Other things happening too, but these are the highlights.
- PA DEP: reported out by **R. Manning**.
 - The state Climate Action Plan and stormwater guidance document are both being updated.
 - The state is looking to strengthen environmental justice initiatives, and an EJ areas viewer mapping tool is being used.
 - Water resource planning has been discussed since July, and the current round of that is to finish this week.
 - PFAS reporting had a 6 month delay due to COVID. That work is expected to be completed by the end of this year with the report to be made available.

Sampling took place across 170 water network stations, and this year, 18 sites will be focused on for further analysis.

- **NJ DEP:** reported out by **J. Springer, M. Yepsen.**
 - **J. Springer:** The NJ Climate Pact was formed to enhance protection against climate threats. DEP was given two years to move forward with the executive order put forth by Gov. Murphy.
 - A series of stakeholder meetings took place this summer.
 - Internally, there has been a reorganization and reimagining process on changes within the department, with the common goal of achieving climate resilience.
 - Please check out the NJDEP Bureau of Climate Resiliency Planning: <https://www.nj.gov/dep/bcrp/>
 - **M. Yepsen:** DEP convened a scientific advisory board to prepare a paper on threats to tidal marshes in NJ in the face of SLR, climate change and associated links to other water resources, citizen science, etc.
 - NJ is also working on a Coastal Resilience Plan: <https://www.nj.gov/dep/climatechange/resilience-strategy.html#resilient-coast>
 - A 2050 Global Warming Response Act plan has objectives on how to meet carbon emission reduction goals, info about a carbon sequestration initiative, etc.
 - NJDEP is also looking to strengthen environmental justice work.
 - NJDEP will participate in tidal wetlands conditions assessment.
 - NJDEP is planning effort with Rutgers on a coastal restoration and ecological adaptation plan. They will be reaching out to different regions to ask how they can help.
- **DNREC:** reported out by **K. St. Laurent, K. Cole, A. Rogerson.**
 - **K. St. Laurent:** MAYCAM, a coastal acidification monitoring program was accepted for funding and there are plans to establish a monitoring site. The focus is on shellfish resource areas, and so far there are two sites in Barnegat Bay and another in Delaware. Email Kari for more info.
 - NERRS is working on developing an SAV Sentinel Site Application Module. This is very new, but they hope to create a 3-tiered standard monitoring approach.
 - Check out the coastal vulnerability and blue carbon effort being led by Duke: <https://nicholasinstitute.duke.edu/project/carbon-sequestration-and-resiliency-coastal-habitats>
 - **K. Cole:** DNREC is working on a Climate Action Plan, which is expected to be released in winter 2021. Cleanup operations continue for the recent oil spill in

southern DE. The USCG, DNREC, and MD Department of the Environment are working together to remove tar balls and oil from Bowers Beach, DE to Ocean City, MD.

- The Delaware Resilient and Sustainable Communities League (RASCL) Summit is scheduled for December 9-10, 2020 - <https://www.derascl.org/summit>
- **A. Rogerson:** the 2017 statewide wetland maps have been released for public use on Delaware First Map and on NWI web mapper.
- DNREC is updating the Wetland Management Plan this fall/winter.
- DNREC is starting construction on a beneficial use project in Millsboro next month.
- The Living Shoreline Committee is still meeting and being productive. Some training efforts had to be converted to a virtual format this summer, but they are still hosting living shoreline webinars every other month.
- **EPA:** reported out by **C. Magliocchioti, E. Butler, K. Regan.**
 - **C. Magliocchioti:** Grants are proceeding as planned; M. Mackey, K. Somers to provide support on grants if needed
 - E. Butler reminded of social media presence of EPA, which can be used as a resource for other partners to engage different audiences, etc.
 - K. Regan: SAV mapping project being wrapped up and will be shared within the next few months.
- **Rutgers:** reported out by **D. Munroe, J. Morson.**
 - The Rutgers HSRL hatchery had to shut down due to the pandemic. Commercial seed was not produced this year, but HSRL is on track to produce next year in 2021.
 - NJ Sea Grant set up a buyback program for oysters that were moving to larger size classes and thus became unmarketable. HSRL bought a number of large oysters and planted them on restoration sites, and TNC has acquired a donation to continue this activity elsewhere.
 - Rutgers prioritized grad student research during pandemic. A nitrogen removal project is being completed with PDE and the Milton Lab. This work will begin this week and continue into 2021.
 - A project concerning interactions between horseshoe crabs, red knots, and farms in the lower Delaware Bay was pushed back to 2021 due to pandemic.
 - Core oyster monitoring programs and Dermo monitoring programs have continued through the pandemic, and only offshore research has been affected from the pandemic.
- **PDE:** reported out by **K. Klein:**

- USFWS has put out a notice of funding opportunity (NOFO) for the Delaware River watershed posted in grants.gov. The purpose of the award is for a third party cooperator to coordinate and empanel Basin partners to assist in the development of a science-based, landscape scale strategy that builds upon the existing strategic and conservation plans of partners throughout the Basin, and a coordination mechanism that reflects and balances the preferences and views of the partners. Application materials should be uploaded into grants.gov by 11/23. Opportunity: F20AS00217

Other Business

- Other events and meetings
 - **D. Kreeger** mentioned the fall meeting of AERS, joint with SEERS, is scheduled for November 2-6, 2020.
 - **M. Yepsen** mentioned the Society of Wetland Scientists. Registration is \$15-\$25 for students. See website for more information.
- DELEP meeting
 - DELEP Steering Committee meeting is set for on November 9, 2020.
 - STAC/MACC meeting is set for November 18, 2020.
 - Quarterly EIC meeting, joint with PDE board is set for December 10, 2020.
- **D. Kahn** mentioned that the STAC has been mainly focused on DELEP projects with minimal other scientific work recently, compared to what used to be. Does DELEP still need the STAC?
 - **D. Kreeger** offered her opinion that the STAC has necessarily focused on DELEP products in recent years simply because there have been many large DELEP products and the STAC is voluntary, with limited capacity to do more. However, the “STAC Futures” discussion that K. Regan is leading aims to explore other things the STAC might tackle (e.g. STAC briefs, possibly proposals and projects). Since other advisory committees are focused on more specific subject matter, the STAC continues to fill a vital ecosystem-wide, peer review role for the watershed.
 - **D. Janeic**: Having a diverse STAC is useful and pulls more weight.
 - **K. Somers**: Sharing more publications, scientific journals, etc., with one another would help with this. Setting up a listserv to make those connections would be a good starting place.

Adjourn

- Meeting adjourned at 12:15 PM.