

Science and Technical Advisory Committee Spring Meeting (Number 55)

April 5, 2021, 1:00 – 3:30 PM Remote Meeting Format (Zoom) – Hosted by the Partnership for the Delaware Estuary

Draft Meeting Minutes

Meeting Attendees

STAC **David Bushek** Lance Butler Laura Craig Sheila Eyler Dorina Frizzera **Drew Grief Kevin Hess** Doug Janeic Des Kahn Sue Kilham Greg Lech Megan Mackey Jason Morson Daphne Munroe **Drew Reif**

STAC (ctd)
Kari St. Laurent
Ken Strait
Kelly Somers
Namsoo Suk
Roger Thomas
Beth Watson
Metthea Yepsen

Other Participants
Akilah Chatman
Emily Baumbach (PDE)
Sarah Bouboulis (PDE)
Kurt Cheng (PDE)
Leah Morgan (PDE)
Kathy Klein (PDE)

Call to Order and Introductions

• 1:02: D. Frizzera called the meeting to order.

STAC Business

Dave Smith

- D. Frizzera called for edits/approval of the draft STAC minutes from November 2020.
 - K. Strait mentioned that his name needed to be added to the attendee list
 - The motion to accept the minutes was approved, contingent on this edit.
 - Note: N. Suk joined the meeting late and conveyed a few additional edits to the minutes; and the minutes were revisited and accepted at the end of the meeting, contingent on these additional corrections.
- D. Kreeger asked STAC members to indicate (via the chat function) whether their time in this meeting could be counted as match for PDE technical grants.

 Via chat, the following acknowledged their time as potential match: Laura Craig, Beth Watson, Jason Morson, Ken Strait, Doug Janiec, Dorina Frizzera, Daphne Munroe, Dave Bushek, Des Kahn, Lance Butler,

STAC Chair and Elections

- **D. Kreeger** indicated that Kristen Regan stepped down from the STAC chair position due to a new position at EPA.
 - o **D. Frizzera** who is the vice chair is standing in as chair for this meeting.
 - K. Somers will now serve as the sole standing rep for EPA on the STAC.
- D. Kreeger summarized 2021 elections
 - Elections are May/June. Terms end/begin June 30/July 1, respectively.
 - o Annual elections are for regular members, Vice-Chair and Chair.
 - Five people on the STAC are up for re-election this year: Dorina Frizzera, Sue Kilham, Daphne Munroe, Ken Strait, and Beth Watson.
 - DK will ask these current members whether they are interested in being on the ballot for re-election to a 2-year term.
 - Nominations for new members are due to DK by April 30th.
 - o The STAC is currently at its cap of 25 members.
 - o Nominations for Vice-Chair and Chair are also due to DK by April 30th.
 - DK: nominated Dorina Frizzera for the open chair position, and asked for others to volunteer to be on the ballot for either Chair or Vice Chair, noting that the responsibilities are listed in the STAC Charter (available on the website).
 - D. Janiec: is a 2 year period long enough, or should we expand to 3 years?
 - DK: 2 year term has always worked well given people's job responsibilities. Three years might also work well, but would require a another change to the Charter.
 - The STAC agreed to revisit this idea at a future date.
 - Self nominations and voting for yourself for chair and vice chair is highly encouraged for members.
 - Contingent on receiving sufficient nominations to warrant an election, DK will send out a ballot by the end of May, with voting by email.

Summit

- S. Bouboulis gave summit updates
 - Over 400 attendees, 88 abstracts submitted, 28 sessions, 4 featured speakers, 2 special speaker panels, 13 posters, 9 pre-recorded presentations
 - o 38 students in attendance, 18 student presentations
 - 15 graduates, 3 undergraduates

- Best oral: Janine barr from Rutgers, honorable mentions: Firas Gerges
 NJIT, best poster: Elizabeth Bouchard from Rutgers.
- Feedback form data suggested that people would be open to having a portion of future summits to still be virtual, a hybrid. Many pluses and minuses.
- Generally, feedback was very positive. The mixture of presentation options, quality of the invited and contributed talks, and the day-long Climate Forum were seen as high points. The poster session format got the most negative feedback, as well as the limited Q&A options/time.
- New platforms now exist now to facilitate greater virtual networking, should we
 do this again in the future.
- 20 teachers attended, as well as more graduate students than usual. A positive of the virtual format is broader participation.
- Keynote speakers and climate forum were most highly praised aspects of the summit as well as the fresh perspectives
- Sponsorship and attendance goals were both achieved. The budget has not yet been reconciled, but appears to be reasonably balanced.
- D. Kreeger: in 2023, we hope to do an in-person meeting but it's likely that we include a hybrid in person/virtual meeting.

• Discussion:

- D. Bushek: PDE Summit vs NSA: NSA had Discord which helped to some degree but not everyone used it or knew how to use it; if we do it in 2023 as a hybrid it will still be a learning experience versus all in person or all virtual – attention is drawn in different directions
- D. Janiec: it's much harder to stay committed/focused on a conference with a virtual platform, especially with the prerecorded talks. It's even more difficult to stay engaged with a nonskilled speaker at the beginning of a session
 - M. Yepsen: it's distracting to be attentive at a virtual conference especially with pre-recorded talks
 - D. Bushek: if you found a presentation was not of interest, you could skip through those that were not as engaging with an entirely prerecorded; on the contrary, if you're focused on a talk you enjoyed, you may miss other talks in other sessions. In a virtual setting to a conference, move to "attend" the conference elsewhere so distractions are minimal.
 - D. Kreeger: enjoyed being able to watch presentations on her own time.
 - K. Somers: agreed with Bushek, blocked out time to be attentive to the conference; easier to cover the ground of the concurrent sessions in a virtual setting.

- K. St. Laurent: non-benefit to being virtual home duties overtake given timing, etc. Technical difficulties can be present in any situation.
- D. Bushek: social events were a "bust".
- S. Bouboulis: TED talks were very well received. Most speakers chose the live presentation when offered the option of a prerecorded talk.
- D. Kreeger: would like to keep the virtual/hybrid option on the table, and it will be interesting to see how other societies and conferences adapt once Covid abates.
- View the website for the most up to date info, recordings, proceedings, etc. from the 2021 summit: www.delawareestuary.org/summit

Delaware Estuary Program MOU

- EIC is updating the DELEP partnering agreement
- The draft revision was sent out for review with STAC request to review the section on STAC roles and responsibilities. Any comments/suggested edits to this part of the agreement to take back to the EIC?
 - o Can receive feedback through the end of next week.
 - o Current STAC charter date should be updated to May 2020.
 - K. Somers: in CCMP and other DELEP documents, boundaries are referred to as the Delaware Estuary study area; should this be updated to expand the Delaware Estuary Focus to be the Delaware Estuary watershed, consistent with TREB and other initiatives?
 - DK: we are evolving to be more basin-wide, but we still have some emphasis on the lower half.
 - Dorina: leaning toward "its watershed" because the focus area limits that area and excludes those areas outside the boundary.
 - K. Klein: CCMP says "full extent of Delaware River and Basin"
 - DK: science should be leading this rather than politics fish don't stop at political boundaries.
 - Updated language: Delaware River and Bay with a focus on the Delaware Estuary
 - D. Kahn: this should be referred to with the same language as the CCMP rather than us thinking of the most appropriate language; it's all DE river basin, but how does the CCMP refer to the upper basin?
 - Emily to outline focus at the top of the document.
 - K. Strait suggested referencing the charter rather than explaining definition within the document.
 - STAC members always produce/review the TREB.

- M. Yepsen: agreed to include the link to the charter in the document rather than including redundancies to explain definitions, etc.
- D. Janiec: any group that has a large group of experienced individuals; we are
 on a decrease in general knowledge in the environmental field given people
 retiring one way to combat that is having mentorship with these groups
 (STAC, MACC, EIC) younger staff within/outside of PDE should be interacted
 with more.
 - Dorina: this could be added to the charter later if the STAC took it on.
- E. Baumbach: next steps: reviewing the STAC section on the June call results from that meeting can be circulated to the STAC at that time – email opinions to Emily by next Friday April 16, 2021.

TREB 2022

- **D. Kreeger:** LeeAnn and Leah coordinating with DK guidance.
 - o Goal is to produce TREB by June 30, 2022.
 - We'd like to have all STAC involved in the roles of the TREB.
 - Money is limited for these efforts.
 - New indicator to be added regarding SAV in Chapter 5 by Kelly Somers.
 - HSRL may include aquaculture addition for chapter 6, PDE to cover mussels
 - Lance Butler indicated his willingness to help with mussel section and also willing to help Des with shad and striped bass indicators.
 - New DEIJ addition: E. Baumbach, Beth Watson, Lin Perez to decide where indicators/stories best fit.
 - Contracts are being worked on for UDEL, DRBC, and PSU 3 main lead entities, but with possible additional smaller agreements for others.
- Unresolved: sediments (ch. 4), "mish mash" of fish, birds, etc.
 - Add name to the list for folks to include info on species or habitats they know about, or any questions you may have.
- Dave Smith can lead the horseshoe crab indicator.
- DK: can Des do blue crabs?
 - Des: someone from DE fish/wildlife did it last and Des overlooked it he could probably do one species.
- Lance Butler: can anyone access the sediment database from PWD?
 - DRBC has access to the sediment database.
 - N. Suk: DRBC will look into the dataset to incorporate into DRBC's model given time, unsure of how much we can write off.
 - o LB: what are key indicators we could use to assess the sediment?

- DK: sediment is quantity and quality issue what's the question and what's the issue?
 - Quantitatively, there is less sediment coming down the river leads to a decrease in turbidity – "story" on sediment needs to be told.
 - DK suggests further sediment discussion on another call in the future.

STAC Futures

- D. Frizzera: wants to engage expanded STAC membership to take fresh look at what more the STAC might do, building on "STAC Futures" dialogue initiated by D. Kreeger and K. Regan.
 - Called on PDE staff to reflect on the 2006 white paper on top science and management needs - briefly summarize successes and remaining gaps. If the top ten list were refreshed today, what would it look like?
 - What needs have been addressed? What still needs to be done? What programs need continued maintenance? What are the current gaps?

Discussion:

- The STAC should look at the White Paper, CCMP and TREB, and see what needs have gained or lessoned in priority, etc.
- Via TREB and Science Summit, we can also identify emerging issues that might be added to the list.
- Three emerging issues: sediments/sediment management, plastics and the impact of micropalstics, and impact of energy development on resources of the DE Estuary.
 - Offshore wind power, ports in DE estuary and river are being retooled – what will be the effects of the re-tooling?
- Are there other white papers or STAC Briefs that we could develop, via STAC subcommittees, look at where there are indicators, more research needed, and partners that can do the research? How does that tie in with where we're going?
- Future microseminars for at STAC meetings.
- Dorina: STAC can look at needs assessment of new and emerging issues that should be addressed moving forward
 - Go back to 2006 White Paper list, summarize what's been done since then to address these issues, read summaries, reorder these, add new ones, and then decide how to move forward and whether there's enough info that's already been collected or if there's another partner that's already taking the lead on any given issues.

- Namsoo: current expertise of the STAC should be considered before deciding on this list
- DK: typically these teams are subsets of STAC, then results shared with all of STAC – volunteer driven
 - Larger effort that Dorina is proposing considers linkages, connections, etc – considered in past years reprioritizing 2005 needs assessment and lead to other projects
- Sue Kilham: mentioned plastics: plastics are "rearing its head" no expertise on STAC with plastics and we should include this with futures work – being discussed extensively these days
- o Kelly: Jon Cohen at UD is doing work on microplastics with his students
- Kari: upcoming grants from NOAA will focus on microplastics white paper would help push for those grants to be funded.
- Next steps: TREB help personnel should keep in mind what questions need to be answered to help the TREB; sediment section might need more help.
 - DK: welcomes input on any of the "top 10" list and have STAC members report back at next regular meeting.
 - What would members add to the list?
 - Kelly: Climate change adaptations should be on the list
 - Dorina: STAC members should suggest additions that they'd like to see if we redid the top 10 technical needs list; Dorina to assist in rollout of this; can report on this at the next regular meeting as a microseminar.

Roundtable Updates

- Revisited draft November minutes.
 - Addition of Ken's name to the attendee list
 - N. Suk: on page 2 under DRBC update, third bullet, Ron Macgillivray III, pilot study on bacteria – not a bacteria study, but a passive PCB samplber was carried out by DRBC and sample was sent to the contract lab not the USGS.
 - Motion to approve the minutes by Ken, Dorina called for objections or abstentions.
 - Laura Craig abstained as she was not at the meeting
 - o Otherwise, minutes from November 18th meeting were accepted
- M. Yepsen: https://www.nj.gov/dep/climatechange/#carousel CERAP workshop
- Delaware River Keeper Network: rescheduled from April 17th to April 27th
 - o More info included in the DE River Keeper Network newsletter
- K. St. Laurent: convening a CERF session on coastal acidification and hypoxia pass along if interested:
 - https://cerf.confex.com/cerf/2021/webprogrampreliminary/Session2484.html

- FMCS biennial meeting begins next week
- AERS is April 27-30th and meeting jointly with NEERS reprising CERF
- D. Janiec: RAE meeting on Science and Nature based methods, fall 2021: topics and sessions still not finalized – if anyone has interest or preferred topic areas let Doug know – don't spread info around but consider specific questions or topic areas
- N. Suk: DRBC's Water Quality Advisory Committee Meeting is scheduled on 4/15: https://www.nj.gov/drbc/meetings/advisory/index.html
- Next meeting will be joint with the MACC, most likely in June, to discuss monitoring
- D. Bushek: healthy harvest of 115,000 bushels from DE bay indicates healthy oyster population.
 - Lisa Calvo working with TNC and PEW supporting oyster aquaculture and restoration

Action Items

- Send DK nominations for STAC members who aren't currently members
- Current members please send nominations for vice chair and chair
- The next 2 STAC meetings will be joint with MACC and EIC, then another with STAC at the end of the year
- TREB Steering committee meetings to be set up soon by LeeAnn authors should know to be invited

Adjourn

 Doug Janiec motioned to adjourn the meeting, seconded by Metthea Yepsen, unanimous vote to adjorun at 3:35 PM.