



Science and Technical Advisory Committee
Partnership for the Delaware Estuary:
A National Estuary Program
www.DelawareEstuary.org

Meeting minutes of the STAC
Partnership for the Delaware Estuary, Wilmington, DE
July 17, 2008

Note: acronym definitions are provided at the end of these minutes

STAC Members Attending:

Gregory Breese- USFWS
Gary Buchanan- NJDEP
David Burke- PA DEP (alternate for A. Everett)
Lance H. Butler- PWD
Jack Gallagher- University of Delaware
Jeff Gebert- US Army Corps
Amy Jacobs-DE DNREC
Susan Kilham- Drexel University
John Kraeuter- Rutgers University
Danielle Kreeger- PDE
Doug Miller- University of Delaware

Jonathan Sharp- University of Delaware
Dan Soeder- USGS

Also Attending:

Jen Adkins- PDE
Amy Broadhurst- UDEL
Mike Haberland- NJ DEP
Simeon Hahn- NOAA
John Kennel- DNREC
Angela Padeletti- PDE

I. Welcome & Introductions (Danielle Kreeger, PDE)

1. Welcome, and introductions, brief overview of agenda
2. Brief overview and explanation of Delaware Estuary Living Shoreline Initiative (DELSI)
3. Minutes- John Kraeuter's name was spelled wrong in the April 2008 meeting minutes. Those minutes were later voted on and approved.

II. Election of STAC Chairperson 2008-2009 (Danielle Kreeger, PDE)

1. Dan Soeder was not present when discussion of the chairperson commenced.
2. No one self nominated.
3. The committee agreed that Dan's work for the committee is commendable and that a letter should be written in support of all the work he has done.
4. It was suggested that Dan serve one more year but that this would be his last.
5. The chair should rotate among sectors (e.g., academia, managers). Although elections will occur every year, it was suggested that terms be limited to three years max.
6. John Kraeuter nominated Dan Soeder to serve as STAC Chair for another year (i.e., his third) for the 2008-2009 term; Sue Kilham seconded, and this was unanimously approved.

III. Scientific Conference Planning (all)

1. A recap of the 2007 conference was provided by Danielle.
2. The theme for this year will be “Science and planning for a changing world.”
3. Keynote speakers - keep these general to be of interest for all audiences. Suggestions included Oppenheimer from Princeton, Erica Springer, Tom Armstrong, Kristine Eden, Dave Robinson, Peter Mitchell.
4. Breakout groups- It was suggested that we have fewer concurrent sessions to encourage more to listen to each other across groups.
5. Posters Sessions- The group felt that there should be fewer talks and more posters. One means might be to include more poster sessions, possibly having some in the morning. Possibly also ask people to change from oral to poster format. If we have less speakers, then we can have fewer breakout groups and get everyone listening and talking together. Other ideas to elevate posters include possibly “highlighting” senior scientists to get them to do a poster. Another option is to set up “talk times” at posters so people will know exactly when presenters will be there to hear. Lots of societies are striving to elevate posters and we may take some cues from them.
6. Scheduling- Full days Monday and Tuesday, breaking Wednesday by 4pm so that people can catch the ferry. For Sunday, we plan to have an evening reception as a mixer. Scheduling ideas included having no concurrent talks on Monday, Tuesday- Concurrent talks, Wednesday- half and half. The first day, schedule talks that are broad in appeal, selecting such general topics from the contributed abstracts as well as invited speakers.
7. Graduate Students- It was suggested that we consider having one session with just graduate students. Students would give brief talks and then at the end we would ask senior scientists to discuss their work and help connect it to big picture. This would promote generational mixing. Some constraints for this might include more advance planning since senior scientists would need to be given papers beforehand to prepare. Another downside is the risk of isolating the graduate students and having poor attendance. The group generally felt that the current approach that promotes intermixing with general talks is preferable because some of the most interesting talks have been student presentations at past meetings. We must reach out to universities and faculty to either sponsor or otherwise encourage their grad students to come.
8. Managers- How do we get more managers to come? Contact schools with management training programs? Possibly have a panel of managers? Danielle noted that the attendance statistics for 2005 and 2007 showed that about 1/3 to half of the attendees were managers, and so the idea that managers do not attend is a misconception. By continuing to include topics of interest to managers and pairing managers as moderators with scientists from other sectors, we should continue to see healthy participation from resource managers.
9. Industry- Jonathan Sharp suggested that we include a session that showcases industry science, perhaps also highlighting research outcomes from the Dupont Scholars program from regional universities. The program should speak to industry’s interests and direct outreach to Dupont, PSEG and others should happen to encourage them to not only attend but also give presentations. Danielle noted that scientists from DuPont, PSEG and other companies did give presentations in 2007 in general sessions, but that this idea might demonstrate our commitment to engaging industry. Perhaps we could focus on how industry uses science. The group agreed to include an industry session on the program and look into ways to further highlight industry science. *[Note: subsequently, this idea was floated with industry partners and they asked that we stay with a mixed format rather than a specific industry focus.]*

10. Session Leaders- STAC members should moderate and lead sessions whenever possible. Of the STAC members present, the following individuals volunteered to lead some example prospective sessions:

- Poster Session: Dan Soeder
- Climate Change Session (Danielle Kreeger, possibly with David Velinsky)
- Industry session (Jon Sharp, and he will reach out to Bob Hoke)
- Horseshoe Crabs (Greg Breese and Mark Botton)

Danielle Kreeger will work with Lisa Wool (PDE) to draft a program outline and run it by the STAC by email. Danielle and Lisa will try to better weave together education and science. By the end of July, we will have a draft sessions lineup and begin work on a Call for Papers to be mailed in September.

11. Goal of Conference: One goal will be to discuss indicators and monitoring, building on the lessons learned and stated actions and needs in the State of the Estuary (SOE) Report. How will we work to address key indicator needs and monitoring gaps? Doing less with less, how can we actually monitor more of the estuary. Some thoughts on how to structure the program to help address this goal were to: was to. Additional thoughts were to integrate more

- a. Engage industry in this dialogue, possibly including a breakout session to discuss indicators between academic and industry scientists,
- b. Discuss monitoring program expansion as exemplified by the DE River and Bay Pilot for the National Water Quality Monitoring Network,
- c. Directly discuss the SOE at the conference,
- d. Directly contrast existing monitoring with our best indicators, and don't ignore biology simply because it is harder to measure than water quality,
- e. Discuss programs from other areas – are there any that have successfully integrated biology? At the conference, perhaps we could have a session on this, with the challenge question being “How do we link indicators and monitoring? We could then invite managers and researchers to focus on example indicators,
- f. Perhaps ask presenters to reference indicators and/or monitoring in their abstracts and presentations, if it fits their topic,
- g. One suggestion was to forego separating evening programming; rather, keep the sessions flowing as normal as possible; others felt the evenings should be less structured allowing for more free-form interactions,
- h. Possibly convene an evening panel to address the challenge question – Why are we not monitoring needed metrics to report on all key indicators?”
- i. Include more blending of science and education program elements, possibly avoiding concurrent sessions at least part of each day,
- j. Discuss ways to build “citizen monitoring” programs, perhaps through Sea Grants and watershed groups. The STAC discussed the pros (more crucial data at low cost) and cons (risk of poor quality, unusable data) of citizen monitoring, but everyone agreed this was a relevant topic,

12. *Additional Invited Speakers*- Consider Erika Spanger-Siegfried (NE Climate Change Program), Tom Armstrong (USGS), Kristine Eden, Dave Robinson (Rutgers), not Randy Olson , Peter Mitchel-film guy, Jerry Schobel-Pres of Aquarium of Pacific **Jonathan Sharp will Call Jerry Schubel**. Robert Openhimer-Princeton.

13. *Sponsors*- Budget is \$100,000. Increase rate for registration to \$225. Karen Johnson of PDE is leading the effort sending out letters for sponsorship. We need to entice corporations to give more this year. 10K from Phila Water Dept already this year. **Dan will contact folks in USGS and NOAA, and Greg will check into USFW support.**

Science Conference Program Development Volunteers from STAC (will assist PDE staff in finalizing moderators and session lineups): Susan Kilham, Lance Butler, Dan Soeder, Dave Velinsky

IV. Lunch

V. Planning for the next State of the Estuary (SOE) Report

1. The SOE is due every 3-5 years, try to shoot for every **3 or 4 years**, that will give us some buffer time.
2. Better STAC engagement and planning for the next SOE, with STAC involved beginning now.
3. The STAC will have tangible responsibilities related to SOE sections and data analysis.
4. Following the science conference in January 09, determine what resources are needed to produce a better SOE, identifying time and staff needed.
5. Clarify the level of detail sought in future SOE's and whether a different structure might be needed to reach goals. Some attendees felt that a fuller story needed to be told. The STAC suggested possibly following the Puget Sound approach whereby two documents are produced - a public version and a supporting technical report.
 - a. What would be the purpose of the technical report? Who would need it? Who would use it?
 - b. If we were to do two reports, the scientific report would be data heavy with graphics, non-glossy. Public version: distilled with more graphics.
 - c. Publish scientific report in 3-3.5 years, and then at year 4 publish the public piece.
6. To be efficient, REVISE each time rather than rewriting from scratch.
7. A challenge for the next SOE is collecting data from various states
 - a. An EMAP approach might be needed
 - b. Goal is ecosystem-based monitoring that links to core indicators
 - c. Monitoring actions and needs are identified in the 2008 SOE – how to address them?
 - d. MAC should be engaged if they are amenable, perhaps with some hybridization or collaboration of the MAC and STAC
 - e. If MAC approach doesn't work, consider asking for a commitment from the EIC to reformat the MAC.
8. Form a SOE subcommittee of the STAC
 - a. Subcommittee would be given resources and charge to do data analysis, go back and forth between the subcommittee and STAC, STAC interprets outcomes for PDE
9. Could contract out new data collection if needed and if resources are obtained
- 10. A PDE charge is for STAC to provide a recommended plan for how much money is needed to address actions and needs for the next SOE, and to prioritize indicators and gaps if funding is limited**
11. The Science Conference could have a panel or workgroup in the evening talking about the SOE, then have challenge questions. Possibly get Lisa Jackson (NJDEP Commissioner) to moderate or present? Get input from the public and managers. What kind of info would they like to see? How do they think we can address top actions and needs? Could we send out the SOE with the registration stuff?
 - a. At registration table, provide a means for attendees to provide SOE report feedback, or ask registrants to provide feedback before the conference so we can craft challenge questions for the panel.
 - b. Seed discussion/talks with indicator topics throughout the days of the conference.

VI. PDE Updates (Jennifer Adkins, PDE Executive Director)

1. The Annual Dinner is coming up on the 2nd of October, a Thursday.
2. Sponsorship forms for the conference were handed out
3. July 21st is the deadline for the new PDE position, Director of Finance and Operations
4. the first joint Board/EIC meeting is July 29th at the Brandywine Conservancy
5. Our Climate Change Ready Pilot funding and work plan are being developed
6. Reformation of the Regional Restoration Workgroup should occur after funding starts on 10/1
7. An ad hoc Climate Ready Workgroup will also be formed soon
8. PDE is looking for advice and input on the Climate Ready Pilot Initiative
9. PDE is looking for more funding and moving forward with the “PDE Alliance for Comprehensive Ecosystem Solutions (ACES) group, which will include representatives from industry and management. This will be discussed at the Board/EIC meeting
10. Doug Miller gave a presentation on plans and early results from hard-bottom DEBI sampling
11. PDE provided updates on the Freshwater Mussel Recovery Program and living shorelines (DELSI) projects
12. Simeon Hahn talked about riparian, intertidal, and subtidal habitats. The STAC can provide input as to what layers are important for restoration as per the PDE Regional Restoration Blueprint report. This should be another topic for the conference.

Danielle solicited STAC volunteers to participate in the following planned workgroups. The following individuals signed up (or had offered to participate earlier):

Climate Ready Workgroup:

Sue Kilham	Amy Jacobs	Dave Velinsky
Jack Gallagher	Lance Butler	Jeff Gebert
Dan Soeder	John Kraeuter	Allison Allen

Regional Restoration Workgroup:

Simeon Hahn	Jeff Gebert	Allison Allen
David Burke		

VII. STAC Business – Dan Soeder

1. **The next STAC/EIC meeting will be the 16th of September in Lewes, DE.** University of Delaware’s Cannon Lab.
2. Minutes from the April 16th meeting were approved
3. EIC
 - a. Needs a science gaps and projects priority list from the STAC, with the gaps list every 2-3 years and the projects list every year
 - b. The STAC needs a plan on how to develop the annual list
 - c. How to solicit ideas? How to rank?
 - d. When soliciting ideas for money, do not think small, assume \$\$ not a big constraint
 - e. Ask for proposal concepts in the fall - one paragraph to one page each
 - f. Send out information about what projects have been supported so far and give example outcomes

- g. PDE will ask the STAC to comment on project ideas received and highlight those that the STAC feels we should get more information about. This pre-solicitation would be helpful to PDE so that when money comes in quickly we have a list of candidate projects
- h. Even if they don't get directly supported by PDE, this provides an opportunity to elevate them for potential funding by others, which has worked well so far.
- i. An annual Statement of Need from the STAC is important for PDE and the EIC, helping to champion the need for more general resources for the watershed's science community. If we don't show a need, we can be assured of getting nothing much. The greater the need we show, the more chance we can get something.
- j. Dan Soeder will send out an email requesting projects with a due date**

VIII. Meeting Adjourned by Dan at 4:30pm

Acronym List and Definitions

ACES: Alliance for Comprehensive Ecosystem Solutions
 CCMP: Comprehensive Conservation Management Plan
 CMES: College of Marine and Earth Sciences (University of Delaware)
 DEBI: Delaware Estuary Benthic Inventory
 DEWOOS: Delaware Estuary Watershed to Ocean Observing System
 DEWWG: Delaware Estuary Wetland Work Group
 DNREC: Department of Natural Resources and Environmental Control (Delaware)
 DRBC: Delaware River Basin Commission
 EPA: Environmental Protection Agency (US)
 EIC; Estuary Implementation Committee
 NEP: National Estuary Program
 NJDEP: New Jersey Department of the Environment
 NOAA: National Oceanic and Atmospheric Administration
 NPS: National Park Service
 NVCS: Natural Vegetation Classification System
 NWQMN: National Water Quality Monitoring Network
 PADEP: Pennsylvania Department of the Environment
 PA CZM: Pennsylvania Coastal Zone Management program
 PDE: Partnership for the Delaware Estuary
 PSEG: Public Service Electric & Gas (New Jersey)
 PWD: Philadelphia Water Department
 RARE: Regional Applied Research Effort
 RRI: Regional Restoration Initiative
 RRWG: Regional Restoration Work Group
 SOE: State of the Estuary
 STAC: Scientific and Technical Advisory Committee
 USFWS: U.S. Fish and Wildlife Service
 USGS: U.S. Geological Survey
