



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

20th STAC Meeting Minutes

Tuesday, February 22th, 2011

9:30 A.M. to 2:00 P.M.

Partnership for the Delaware Estuary - Wilmington, DE

Attendees:

Sue Kilham (Chair) – Drexel University
Gerald Bright – PWD
Jeff Gebert – Army Corps of Engineers
Desmond Kahn - DNREC
John Kraeuter – Rutgers University
Danielle Kreeger – PDE
Doug Miller- UDEL
Irene Purdy- EPA R2 (phone)
Renee Searfoss- EPA R3 (phone)

Ken Strait – PSEG (phone)
Eric Vowinkel – USGS (phone)

Non STAC:

Jennifer Adkins- PDE
Priscilla Cole – PDE
Angela Padeletti - PDE
Sari Rothrock - PDE
John Yagecic- DRBC

1) Call to Order & Introductions - Sue Kilham

- Minutes from 12/15/10 were sent around for edits and minor corrects were made.
- A new STAC meeting calendar can be found at http://www.delawareestuary.org/science_stac_meetings.asp
 - Will add if meeting is open or not

2) Science Conference Wrap Up – Danielle Kreeger

- Update on Participation, Awards, Proceedings, Next Steps
- STAC feedback
 - Enjoyable, good detail, good food, thanks to PDE staff
 - ~270-280 participated
 - Lunch speakers were excellent speakers
 - Lisa Wool did an excellent job, Jen did all high level panels and polling
 - For next time (Jan. 2013) look into going back to 2.5 days, possibly creating a third track
 - Posters and talks can be found on the PDE website http://www.delawareestuary.org/news_pde_science_conference_presentation_s.asp
 - STAC agreed to change the name of the award (next time we give it) to the: “Jonathan Sharp Award” for Distinguished Lifetime Contributions to Delaware

Estuary Science and Management

- Continue to get people together, and cross pollinate
- Next year, work on getting more students to attend

3) PDE Goals Update – Jen Adkins

- Steering Committee Guidance (from 2/18/11 meeting)
 - SC has approved draft goals/framework developed by PDE
 - Minor comments have been incorporated
 - Next decade vs next century goals are now incorporated as per STACs suggestions
 - Steering Committee did not get into details of living resources which are complicated
 - Next step : work with STAC to fill in numbers and more detail
 - Bob Connell has offered to be a project manager to help propel this forward
- STAC Input
 - For some groups of living resources (predator fish), a multi-species index might serve better for goal-setting rather than any one species specific goal, due to the complex interactions where one species might be improved but to the detriment of another
 - Goal setting exercise is NOT the same as indicator reporting (SOE) or monitoring
 - Need to include things like more miles of open river, etc which can fit into the composite scheme
 - Look at quality (e.g., wetland health, function) as well as quantity (acres) in establishing the goals
 - In healthy communities stretch goals: possibly take out “brownfield” or better define
 - Be careful not to set counteracting goals, such as by setting habitat targets that could be tradeoffs; e.g. goals for one habitat (wetland migration) might jeopardize another goal (maintaining forests)
- Next step: Bob will start compiling data and questions regarding goals, while at same time TREB work is ongoing; goals won't be finalized until TREB is finished so that it can help inform goals
- Next STAC meeting - Bob can come and talk about progress and get STAC input
- **ACTION ITEM** : PDE will work on a conceptual diagram that simply explains the differences and interrelationships among goals versus indicators versus monitoring

4) Marcellus Shale STAC Brief - Danielle Kreeger

- Comment period for DRBC ends March 16th
- Danielle will head up brief, then send around to comment
- DRBC is working on putting together what monitoring exists currently
- Air pollution, noise pollution? not known, currently focused on water
- Capture forest issues as well

- Gerald expressed possible PWD concerns: waste water disposed below salt line, improperly cased wells, cumulative impacts of spills/accidents, transportation pathways, does EIS address public health and safety, federal/local violations, holistic assessments ?
- PA is currently looking into evaporative instead of reverse osmosis methods for treating wastewater, no transportation restrictions exist currently, no EIS in place, above NYC res. an EIS could be mandated
- PA has a water quality monitoring network, but has only stepped up in the last 6 months, many organizations are looking to do a cumulative project, but are in the funding stage
- At DRBC, there are proposed regulations for radioactive monitoring; STAC brief can back up the need for these regulations
- EPA's Wheeling lab has been looking at the golden algae issue, internally. R3 has not taken a stance yet but can provide info to STAC
- DRBC has regulations for currently monitoring within the sight range of the drill pad, plus water withdrawal, waste water monitoring
- A point source is actually easier to assess, and we'll have to find some way to examine cumulative effects on the Delaware Estuary. For example, salinity could be difficult to differentiate but metals impacts may be easier to pick up
- **Action Item** - Draft will be done by next week (Kreeger)

5) Workgroup Updates – Various

- Regional Restoration Work Group/ACES – Laura Whalen
 - Recently reviewed candidate ACES projects for 2011
 - Presented a poster at the Science Conference
 - Project Registry is up at <http://www.delawareestuary.org/Registry>
 - Project bank in the Registry does not yet reflect the whole estuary, but should soon
 - Urban Waterfront Subgroup – PEC finished their report, and additional funding is being sought to further develop ecosystem restoration
 - Need STAC to help PDE market the Project Registry and ensure research, monitoring, and education projects are contributed along with restoration
 - **Action Item:** PDE needs to market registry better, post cards, fact sheets, advertisements
- Benthic Workgroup – Angela Padeletti
 - Data can now be found at: http://www.delawareestuary.org/science_projects_baybottom_data.asp
 - DEBI RARE grant is almost done, but there are some specific projects that we would like to continue under the DEBI/benthic umbrella, Sabalaria, SAV, fw mussels, for instance
 - We will also watch for future rfp options for RARE; maybe develop a joint proposal to develop a B-IBI for Delaware Estuary benthos, should coordinate

- with DRBC because could roll into regs
- Need to note that a B-IBI does not include intertidal or marshes
- A paper is in review on research policy of benthics, lead by EPA ORD
- Regional Sediment Management Team – Danielle Kreeger
 - White papers are to be out soon
- Fish and Wildlife Co-Op - Desmond Kahn
 - nothing to report
- Toxics Advisory Committee – John Yagecic
 - Toxic criteria for Zone 6 (Delaware Bay) now exists
 - TAC meeting March 1st
- Climate Group – Danielle Kreeger
 - Using last year’s report for guidance, PDE is now working with Rutgers on implementation of discrete adaptation recommendations
 - One of these is to further develop estuary-wide living shoreline planning, and mobile workshops will also be held over the next year to gauge local issues and interests
 - Steering committee heard about the report and wants PDE to go talk to states

6) Technical Report for the Estuary and Basin – Various

- No size restrictions
- Need to set stage of a take home message
- A section is needed for unmet needs
- Outline
 - Posters were presented at the science summit to get feedback on TREB report
 - Need a timeline for milestones
 - Need outline – reviewed contents listings from the agenda
 - Need general page guidelines, template
 - There can be links, or appendix
 - Timeline
 - End of march common template- Priscilla Cole
 - STAC feedback by mid-march on template
 - **June 30th first draft due**
 - Review period June 30th through summer STAC meeting
 - August 30/early Sept – review of 1st draft completed
 - October through December polishing
- Essential content elements for all sections: description of indicator, maps (GIS), present status, past trends, future predictions, actions and needs, summary paragraph
- Definitions in narrative sometimes and glossary at end
- **Action Items:**
 - PDE will send formatting needs/outline/guidelines as “instructions for authors”
 - Contributors should adhere to these instructions. Include river kilometers, metric units throughout, head of tide on left, 0 at mouth of bay; Trenton on

left, mouth at right). Feature boxes can be developed when we have no or insufficient data, and in cases where we either have next generation indicators or topics of widespread interest but which don't serve as good indicators (e.g. striped bass/weakfish).

- Watershed and Landscapes
 - No report
- Water Quality and Hydrology
 - No report
 - Erik V. is going to follow up on work with David
- Water Quality
 - USGS has signed contract to work up data
 - USGS Working with John Y
 - Hand out was passed out, progress has been made
 - ANSP has old paper in fresh water about metal toxins in algae maybe from sediment
- Sediments
 - RSM is working on their white papers, due March 1
 - Not sure how to turn into indicators, will need help
 - Could we know sediment supply to wetlands? Over time and space?
 - High flow events could be due to development
 - Historically have problem with agriculture input so what is "restoration"
 - There have been TMDLs for TSS for benthic impacts but they are problematic
 - Wait until white papers come out, review, and look if indicators fall out
 - If indicators do not fall out then possibly put sediment in function
 - Could restate major components of sediment budget
- Aquatic Habitats
 - Subtidal
 - Poster was presented at science conference
 - MD Coastal Bays and others had some benthic and often highlighted specific species often bivalve
 - **Action Item:** John. K will work on shell budget
 - Started to crunch data
 - Intertidal
 - PDE gave poster, thanks to Andrew H.
 - Still cannot get updated NWI for all estuary
 - Emergent estuary data was shown in poster
 - NOAA has env. sensitivity layer that has shoreline metrics in it, will check into, ESI map, characterizing shoreline type across whole estuary is a need, who has data layers?
 - ACOE has snap shots of shoreline, but not characterized as hard or not, was not done with intent to code different shorelines, derived from NOS vector shorelines
 - Non-tidal
 - No report, passed around PWD data for Philly work
- Living Resources
 - Tidal
 - No formal report

- **Action Item:** John K will get salinity/temp data from Des
 - Non Tidal
 - Waiting on DE data, working with DRBC, and waiting to see about TNC data
 - Eagles might be a feature box
 - PDE is working on freshwater mussel by HUC but having difficulty getting DE and NJ heritage data via a data sharing agreement – so, possible feature box
 - 303d listings could use DEBI data
 - DRBC has an integrated assessment report that could be useful
 - **Action Item:** Gerald and John will talk
 - TNC prioritization project outcomes could tie into this also
- Climate Change
 - Ray has his contract signed, and has sent prelim data
 - Increases in fall precipitation
 - 1 degree C increase in temp over last 100 years
 - If anyone has a connection in NJ to get barometric pressure please let Danielle know, Erik V can talk to NJ
- Function
 - Will wait until other chapters are more fleshed out to see what falls out
- Restoration
 - Some data available, e.g., NEPORT (NEP) data, NOAA restoration database
 - What is the definition of restoration? Specifically what is the time frame? The chapter group needs to thoroughly define
 - NRDA and immediate damage vs historical damages?
 - SEP- maintaining (keeping from developments in natural state) vs restoring, not the same, focus on true restoration not specific to a short-term injury repair
 - Preservation vs restoration vs mitigation
 - Restoration- uplift of services
 - DEFINE restoration and any other topics that fall under this chapter, this will drive what data to use
 - Have pulled other groups that have been doing restoration indicators
 - Possible connections between previous chapters and this chapter

7) Upcoming Events – all

- Check calendar previously mentioned

8) STAC Business – S. Kilham

- Next Meeting: May 17th or 18th
 - **Action Item:** Need to have initial TREB section examples in hand, draft reports to PDE by 6/30
- Spring elections by email around next meeting time
- Minutes from previous meeting were passed
- PDE can arrange Conference Call(s) for chapter authors as needed, Priscilla Cole will coordinate on request

Adjourn

2:00