



# Science and Technical Advisory Committee

Partnership for the Delaware Estuary:

A National Estuary Program

[www.DelawareEstuary.org](http://www.DelawareEstuary.org)

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## 28<sup>th</sup> STAC Meeting

Wednesday, May 1<sup>st</sup>, 2013

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

Partnership for the Delaware Estuary - Wilmington, DE

**Sue Kilham** (Chair) – Drexel University

Gregory Breese – USFWS

Lance Butler – PWD

Dave Bushek – Rutgers HSRL

Tom Fikslin – DRBC

Jeff Gebert – Army Corps of Engineers

Desmond Kahn - DNREC

John Kraeuter – Rutgers HSRL

Jerry Kauffman - Univ of Delaware

Danielle Kreeger – PDE

Jerre Mohler – USFWS

Renee Searfoss – EPA Region 3

Ken Strait - PSEG

### 1) Call to Order & Introductions – Sue Kilham, Chair

**9:30 – 9:40**

- Sent around minutes from last meeting
  - If you have typo's from last meeting please turn into PDE by end of week
- Introductions
- No change to agenda

### 2) STAC Updates – Sue Kilham

**9:40 – 9:50**

- Congrats to John Kraeuter for his award at the Summit
- Thanks to everyone for helping out at the Science Summit

### 3) STAC Election Results – Danielle Kreeger

**9:50 – 10:00**

- Each spring is election time
- Up to 21 slots on STAC; but does not need to be full at all times
- Goal is to have multi-disciplinary representation; and balance of agencies, academia and profit
- Sue Kilham, Greg Breese and Ken Strait were retained for new terms
- New member Moses Katkowski from TNC.
- New member: Adrian from ACOE; works on CAP programs such as stream restoration
- Sue is the chair of STAC currently; she will let Danielle know by Mid-June if want to continue to chair
- John Kraeuter will be stepping down from STAC due to moving to Maine, will continue to work around the area, still wishes to be sent papers for comments and will still supply input

<sup>1</sup> Meeting minutes were circulated for preview and hardcopy will be passed around for edits at the meeting

<sup>2</sup> 2008 DEWOOS Report can be found here: <http://acwi.gov/monitoring/network/pilots/dlr bay/index.html>

<sup>3</sup> Current draft of STAC DO Brief was sent with the agenda by email (includes recent edits by JM and GB)

<sup>4</sup> The draft FMRP Strategy was sent by email for preview

- John has always been very involved with STAC especially for peer reviewing papers when others have not; and the STAC greatly appreciates all his hard work and long hours dedicated to the Delaware Estuary program
- Perhaps the STAC will look into creating emeritus position
- John's seat will stay open for this cycle

**4) 2013 Science & Environmental Summit – Angela Padeletti 10:00 - 10:30**

- Just under 300 participants; 130 presentations; 20 student presentations
- Jonathan Sharp Lifetime Achievement Award given to John Kraeuter
- New technologies included: Storm Stories board; WeTable
- Lots of great press, not only for PDE but for other scientists as well
- Proceedings are available online; Website is up to date and can now get most talks and posters as well
- Ideas for 2015; needs assessment? 10 years since last needs paper?
  - 2016 white paper? Would we have a different top ten list?
  - PDE just went through Strategic planning; could be repetitive?
    - PDE and Delaware Estuary Program are different; PDE's strategic plan is for just PDE but DELEP Goals are for all DELEP partners
      - CCMP/DELEP Goals may fit better into a needs paper
  - Building upon former CCMP and white paper is valuable instead of "starting from scratch", things don't change that much in many fields on a 10 yr time scale
  - Climate change is something that has significantly changed in 10yrs
    - Synthesis is important for STAC as well as managers
  - Conference attendees don't usually include the many "user groups" that rely on the estuary" (power companies, shipping); it would be helpful to also engage them
  - Ocean Planning effort that is just started planning
  - 2 yrs ago tried to do something similar; "From the Front Lines" people, but they weren't interested
  - Estuary is an energy export now; natural gas. This is a big change.
  - The NOAA PORTS monitors are in jeopardy of being shut down. NJ put in some post sandy funding for PORTS
  - To attract diff user groups, maybe focus on what are the common needs? Ocean planning is a good venue for this.
    - How do you plan for a diverse uses with conflicting interests.
    - How do you use the estuary?
  - Engage the users, don't preach to them
  - Focus on; what can users teach scientists? not teach the users, but how can we as scientists change, avoid getting overly academic at conference
  - DRBOSAC committee might be useful, a good example. Having Gerry Conrad

- attend and present a nice example of another participant, another sector
- Maybe also consider ways to connect fiscal management to environmental management and science; how would you run the estuary as a business? Exercise?
  - No one pays for groundwater; some laws since 1973
    - This could be a hot topic
    - Resource recovery; PWD
    - Around water you can pick up many industries and other “users” as well as weave in economic issues
- Also, consider in 2015 an emphasis on monitoring infrastructure, return to DEWOOS gap analysis, and work toward a new action plan for strategic monitoring
- Consider a themed session on one particular issue that cuts across many disciplines; perhaps DO or impingement and entrainment
- Topics to bring to EIC: bringing in users and talk about shared needs; economics of the Delaware Estuary’s water resources

## 5) Goals and CCMP Updates – Priscilla Cole

**10:30 – 11:45**

- STAC committee participation on PDE goals
- 13 goals accepted by Steering committee out of 39
- 26 goals went back to STAC committees; PC has been working on webinars as well as conference calls to get next round of goals done (focusing on those not yet accepted by Steering Committee)
- June 5<sup>th</sup> TAC meeting will address toxic goals
- At October Steering Committee meeting, next round of goals to be presented; therefore, next round needed before fall EIC-STAC meeting, for SC setup
- Update on how goals have changed:
  - Healthy Waters: none accepted
  - Nutrient and DO: revisions; added SAV, benthic communities, changed interim year period, ect.
    - “Actions” goal could be good place to add Des K’s comments add “fish” to #6, #6- once you make a list you exclude, don’t make lists use “resources” so not excluding any one. Move examples to “actions”
    - NBOD needed? Need to be put in goals?
    - In actions/needs for #6 add- “and contribution to NBOD”
    - Typo in #9 2040/2030
  - If you have further ideas you can contact Priscilla to add comments
  - Flow: CH3D- typo; could move model to “action needs” so not as specific and time sensitive; Supreme court set flows- should acknowledge that flow is set through “decree parties”
    - Brief of eco flow needs for the estuary in front of the “decree parties” – STAC brief?
  - Water action needs: could add DO for fish?
  - Healthy Communities:

- Public access point: could include boating or visual access, to and from the water
- #15- move prioritization by 2015 and clean up by 2020; “take advantage...” move to “action”
  - Might need clarification to this goal; “aggressively prioritize Brownfield’s and prioritize as ACES projects”
- 16 and 17 are not the same but sequential, so if combine change timing to meet goal
- 18-19: look at Sea Grant and what they do/how they work
- Actions and Needs: add NOAA to list of agencies
- Habitats:
  - Forests; state is looking at harvesting so not sure how that works into the goal; #21 add “implement goals” into new amendment not just new goals
  - #23 put stuff in () into actions column
  - #24-loose the action with new wording; re-word\*
  - PC-Add Dorina to Habitat group
  - Actions Needs: change “boat” to “ship”, change “agency” to “entity”
- PC will re-connect with subgroups
- July 15<sup>th</sup> will have next version
- STAC changes needed to Priscilla by July15th

**6) State of Estuary Reporting and Interim STAC Tasks - Danielle Kreeger 11:45 - 12:00**

- Discuss long-term plan, timeline for next SOE/TREB
  - Move into the TREB process starting in 2014
  - New indicators? Advocate for monitoring funding?
    - Inventory monitoring needs
      - Monitoring needs in DEWOOS vision have been partially filled now for coastal wetlands, benthic communities (but maybe not being sustained)
      - DRBC does monitoring for water, so they will continue gap analysis for that area
      - Chicken or egg: difficult to work toward expanded monitoring for next gen indicators while just trying to sustain existing monitoring, which is always being cut
      - But, we want to make progress on actions and needs so the next SOE Report doesn’t just repeat same needs statements
      - What are the niches that we want to improve on most?
      - Problems with grants is that they are not set up for sustaining monitoring, just creating new monitoring - should we reach out to users instead?
      - There are actions and needs in the TREB
        - Perhaps summarize and prioritize starting with TREB

- Add next-gen to list
- Come back to this at next STAC
- Think about 2018 needs just not for 2014
- **Action: PDE summarize actions and needs from TREB to give to STAC, and then STAC helps to prioritize those needs**
- **Work towards: Summary of which monitoring systems are threatened. Revisit DEWOOS and update gap analysis/inventory**
- **This monitoring analysis will be good for 2013-2014 workplan action, set in between rounds of SOE reporting.**

**7) STAC Photo - all**

**12:10 – 12:15**

**8) Hurricane Sandy Updates – all**

**12:15 - 12:40**

- NJ office of Science
  - Wetland, riparian, forests, sav
  - Assess pre-post Sandy
  - Using NOAA flight photography, only covers high impact areas
  - Findings: marshes are holding more water
  - Will put boots-on-the-ground this summer
  - Wetlands : Seeing edge loss, some debris, more water on wetlands
  - Concern about mosquitoes with debris on marsh
  - In Barnegat Bay ; data showing the deposits of sand in creeks and ditches post Sandy which could be causing water on marsh
  - NJ has no disposal sites where dredge material can go
  - Working on meeting with ACOE from Baltimore, meeting at Forsythe to discuss beneficial use
  - Possible follow up on Reedy Creek in BB where there is MACWA work already has been put on the table as possible sites (also possible Forsythe)
- Delaware Bay starts from a weak position because we don't have the time/funding to have projects on the ground ready to go
- Think of Philadelphia ACOE district not NY ACOE. Philly just got money recently for previous storms. Good to have ideas on list so when money comes could be suggested
- Fortescue could be brought back to Pre-Sandy, but there is issues with spoils material being "too far" to be taken; There is more of a need than there is material
- Bart Wilson at CIB is reaching out to see if STAC wants to see thin material placement that they are doing. Could open up areas and materials that were not useful before- NJ is looking into this currently
- Jerre M- removal of West Street Dam in Delaware, the project is funded \$2.2m, waiting on final OK, possibly in middle of May that funds will be available
  - Munonkan dam removal might also be funded
  - A small brook trout stream in NJ might also get the go ahead

## 9) Dissolved Oxygen<sup>3</sup> – all

12:50 - 1:20

- **Tom F- will add to draft within 3 weeks**
- Page 3-“while most of the causes are well known” first sentence “although the causes of SOME contemporary low....”
- At Page 3- Start new paragraph at “there have been may episods..” and merge that paragraph with the one below
- Not clear which recommendation we are making 24 average?
- Page 11- STAC recommendations- at end of “be no less than 5mgL1” add....
- Summarize data? In tabular form? John K
- Jerre M. broke out recommendation by zone;
- Could just say that the levels need to be raised; STAC does not need to say a number, but point towards DRBC for regulations
- Cut out 2 sentence on page 11 that says “there has been much discussion”
- **Des K. is going to flesh out his thoughts in 2 weeks and help finalize edits before next STAC-EIC Meeting**

## 10) Freshwater Mussel Recovery Strategy<sup>4</sup> – Danielle Kreeger

1:20 – 2:00

- Headwaters to ocean bivalve strategy- PDE
- As a component of the watershed-wide shellfish restoration plan, PDE recently framed out a 9-step Freshwater Mussel Recovery Strategy for the Delaware Estuary and River Basin (doc shared)
- Freshwater Mussels (FWM) are excellence indicators due to being long lived and sensitive; they need riparian cover, fish passage, good water quality
- FWM recovery goals are good for “driving” ecosystem restoration because they need all these good conditions over long time scales; forces lots of other issues to be addressed
- Steering Committee asked for pricing for propagation module in fall 2012
- The 9 activity areas in the FWM Strategy are described on PDE website
- A separate companion piece to the Strategy is a Hatchery Module
- Jerre M- on habitat section: fish impingement (316B reports), tessellated darters are getting hammered, someone should look into this data. Jerre can pull out some extrapolated darter impacts. Eddie Stone power point has a large impact on fish.  
**Jerre will email data**
- PDE is hosting 3 volunteer mussel workshops this month, plus PWD is hosting 1
- Hatchery in Harrison Lake is also working on freshwater mussels- Jerre M.
- There currently is a demand for seed; states (including MD), plus toxic testing and even local groups,
- Suggestion: separate propagation piece a good plan so that it doesn’t potentially sink the whole program
- John K- might want to add disease work into the program
- If not using USGS “critical habitat” need a different wording because of legal

definition

- Make a “package” list of what you would need to make 1 stream healthy, maybe make different “packages” availability to funders; slow and steady vs big pay off vs outreach vs research
- Think of way to show “measurable increase” especially for funders; so little research has been done on ecosystem services that it is hard to convince investors

### **11) Workgroup Updates**

**2:00 – 2:25**

- Regional Sediment Management Work Group- Renee new lead, met 2 months ago, plan might be almost done, will transition to implementation; RSMP to be finalized in time for next STAC-EIC meeting, then shared with Steering Committee in October
- Regional Restoration Work Group- Laura W. is no longer lead, see Angela P from now on. Current ACES project can be found on PDE website
  - Project Registry still needs work to make it more user friendly and incentivized.
- MACWA Wetland Group- will have workshop this fall. Society of Wetland Scientists meets June, Starting field work now.
- F&W Coop- ASMSC deemed need for sustainable fishing plan, benchmarks for shad are put in place, working on habitat plan currently (open for comment currently); Policy committee agreed to write letter to PADEP with disapproval to Trainer Facility due to impingement and entrainment; 2002 EPA report on D. River case study on cumulative impacts on fish for impingement and entrainment ~\$24-50million per year due to impacts, are exploring ways to get mitigation due to this I and E. Working on DO draft to send to DRBC.
- TAC- Mtg in early June, Superfund site on Red Lion creek (working with DNREC), presentation at TAC meeting by NJDEP on pfc’s
- MAC- meeting in January, meeting once per year now
- WQAC- meeting in June, talking about nutrient criteria and DO, request for upgrade of designated uses is already in

### **10) Upcoming Events and Notices**

**2:25 – 2:30**

- Fracking- 2014 will have health study results; PWD is testing for strontium and barium for fracking (for baseline); DRBC has 3 years of monitoring data at many sites,
- June 8<sup>th</sup> is World Ocean day, Honorjourney.org, a paddle occurring at Cape May, NJ
- June 1<sup>st</sup>- Bay Day’s Port Norris, NJ
- Harbor Fest in Cape May June 15<sup>th</sup>
- Megan Wren is doing open water swim on Delaware to increase awareness

### **11) STAC Business – S. Kilham**

**2:30 – 2:35**

- Annual STAC/EIC end of August/September; set date as **Sept. 5**
- Review minutes from January- Dorina moved to accept, Dave B seconded. Minutes from last meeting were accepted
- DRBC looking for mussel surveyor for summer intern

- Dorina to reach out to MARCO and get list (coastal programs)

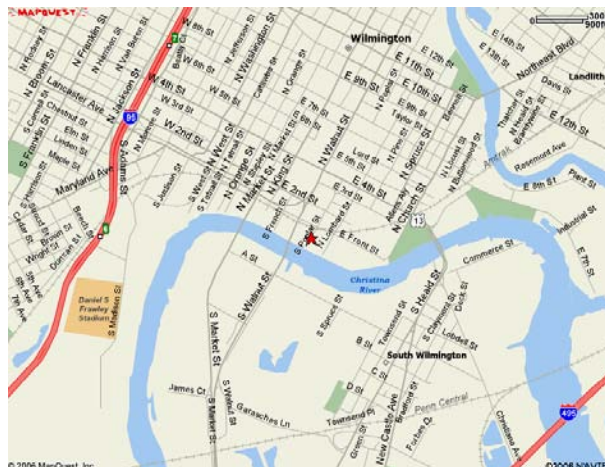
Adjourn

2:30

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For additional information, please contact **Danielle Kreeger**, Phone: 302-655-4990 x104, email: [DKreeger@DelawareEstuary.org](mailto:DKreeger@DelawareEstuary.org)

A map and the STAC membership follows below. If you have any travel or parking problems the day of the meeting, please call Danielle's cell phone at 610-329-0055.



**Location:** The meeting will be held in the conference room at the office of Partnership for the Delaware Estuary, One Riverwalk Plaza, 110 South Poplar Street, Wilmington, DE 19801 The PDE office is on the second floor.



**Current STAC Members:**

**Sue Kilham** (Chair) – Drexel University  
Gregory Breese – USFWS  
David Burke/Alan Everett – PADEP  
Lance Butler – PWD  
Dave Bushek – Rutgers HSRL  
William Eldridge – Stroud Water Res.  
Tom Fikslin – DRBC  
Dorina Frizzera – NJDEP  
Jeff Gebert – Army Corps of Engineers  
Desmond Kahn - DNREC  
Jerry Kauffman - Univ of Delaware  
John Kraueter – Rutgers University  
Danielle Kreeger – PDE  
Doug Miller - Univ of Delaware  
Jerre Mohler – USFWS  
Tracy Quirk – Academy Nat. Sci./Drexel  
Renee Searfoss – EPA Region 3  
Ken Strait - PSEG  
David Velinsky – Academy Nat. Sci.  
Eric Vowinkel/Jeff Fischer - USGS  
David Wolanski - DNREC