



## ***Science and Technical Advisory Committee***

Thursday, June 16<sup>th</sup>, 2010 9:30am to 3:00pm  
Marcus Hook Community Center, Marcus Hook, PA

*Minutes from the Summer meeting of STAC*

STAC Attendees:

Allison Allen-NOAA  
Alan Everett – PADEP  
Tom Fikslin – DRBC  
Desmond Kahn – DNREC  
Jerry Kauffman-UDEL  
John Kraeuter-Rutgers  
Sue Kilham (Chair) – Drexel  
Steven Hughes-Cheyney  
Bob Hoke-Dupont  
Jerre Mohler – USFWS  
Jessica Sanches-DRBC  
Eric Vowinkel-USGS

**David Wolanski-DNREC**

Additional Attendees:

Barry Baker-URS  
Gerald Bright – PWD  
Priscilla Cole-PDE  
Andrew Homsey-UDEL  
Tom El - Dupont  
Greg Murphy-URS  
Angela Padeletti- PDE  
Laura Whalen-PDE

Minutes (action items are shown in bold italics)

- 1) **Call to Order & Introductions** **9:40-9:50**
  - a. Sue Kilham
  
- 2) **STAC Updates** **9:50-10:10**
  - a. No outstanding action items other than team work.
  - b. No additions or changes to the agenda
  
- 3) **Science Conference** **10:10-10:30**
  - a. Speakers are set, yet remember that Des and others have suggested some speakers
  - b. A suggestion was made to bring people from outside the estuary with things such as restoration projects that have worked else where
  - c. PDE is looking for people “from the front line” to include in the conference

- i. PDE asks the chairs to start thinking of these types of people to invite to their session
  - ii. Suggestions include the chairs preparing a one page summary of the session to give to the “front-liners”
  - iii. There is a commercial fisherman at Mispillion that works with the Dupont nature center that we could maybe get
  - iv. “Frontline” people may not know how to use power point and might need instruction or help
  - v. Ask NJN for people who they’ve worked with, possibly also a person who does dredging
- d. Deadline for abstracts is June 30<sup>th</sup>
- i. June is 30<sup>th</sup> is too soon, will most likely cause a decrease in abstract submission. In past 3 conferences, which were very successful, the deadline was 7-8 weeks beforehand. The new deadline is more than 28 weeks beforehand. Since the STAC led preparations for this meeting in the past and the meeting has been successful, why wasn’t the STAC consulted on this major change? Even if the date is extended, this might tarnish this meeting and affect its success.
  - ii. **Resolution for EIC:** The PDE needs to reconsider its conference planning process to re-engage the STAC, and that the current abstract deadline of June 30<sup>th</sup> is too early and may reduce abstract submission and this should be reconsidered. Motion passed by unanimous vote (Kreeger abstained).
  - iii. **Resolution for EIC:** Recommend the adoption of August 15<sup>th</sup> as a second due date. This is still an increase from 8 to 22 weeks ahead of the meeting. Motion passed by unanimous vote (Kreeger abstained).

**4) Introduction of new STAC members**

**10:25-10:30**

- a. Jerry Kauffman from University of Delaware, Director of Water Resource Agency. Has worked on the State of the Estuary in 2008 and looks forward to adding to the group
- b. Steven Hughes from Cheyney University, Director of Aquaculture Research and Education Center. Currently working on developing an urban ecology program. Looks forward to being part of the group.

**5) State of the Delaware Estuary and River Basin Technical Report**

**10:30-12:30**

- a. STAC needs to finalize the budget for the report
- b. Updates on sections
  - i. Section 1: Landuse & Watersheds. Jessica S.
    1. NOAA has closed “donut hole” problem with land use data
    2. None of the metrics have changed since last meeting
    3. Census data should be on track, will use 2005 data to start change analysis
    4. Other metrics will be started soon
    5. Budget: Originally asked for \$7500, but could combine with other sections and get a full time UDEL student to increase efficiency and create consistent graphics

- ii. Section 2: Water Quantity. Jessica S.
  - 1. Data requests are out
  - 2. Some data are currently in hand
  - 3. Looking to use some of the Climate Ready data and graphics
  - 4. MS4 data will need some work
  - 5. Budget: Is the USGS money for this year or not till next fiscal year? It needs to be decided who needs the money first.
- iii. Section 3; Water Quality. Tom F.
  - 1. A partial assessment of the metrics will be started and the 2010 data will be inserted later
  - 2. Most data are straight forward
  - 3. There are some problems with the reference codes, but working on it
  - 4. Trends can be presented but not all criteria are made yet
  - 5. There is 3 years of emergent contaminant data that is interesting
  - 6. TSS is still not going to be a metric
  - 7. Budget: is included in section2
- iv. Section 4: Sediment: Jeff G.
  - 1. Jeff could not attend
- v. Section 5A: Aquatic Habitats: Subtidal: Angela P.
  - 1. Doug Miller could not attend
  - 2. DEBI data are currently being worked on with an eye towards the report
  - 3. **USGS will look into FGDC metadata issues**
  - 4. DRBC is looking to extend sampling south of Trenton next year
  - 5. DRBC is taking samples this year to add to the DEBI data base
  - 6. PDE and ANSP found multiple species of freshwater mussels along the main stem Delaware
- vi. Section 5B: Aquatic Habitats:Inter tidal. Danielle K.
  - 1. PDE and the states have many wetlands projects currently on the ground and look to analyze those data later this year
  - 2. The Climate Ready report will also be used, the report includes a case study on wetlands.
  - 3. Industrial Economics has worked on the SLAMM model that has resulted in some interesting data
  - 4. Looking for someone to get on top of the NWI data, probably the UDel student
  - 5. Shoreline structure and hardening, not sure how to get to this but will discuss with the ACOE
- vii. Section 5C: Aquatic Habitats: Non Tidal; Bob T.
  - 1. Bob could not attend
  - 2. Will work with UDEL on the analysis
  - 3. TNC has data that could be useful
- viii. Section 6: Living Resources; Greg B.

1. Have been working on getting all fish data
  2. Many data are not very comparable between states
  3. Horseshoe crab data are needed
  4. John K has oyster data just need to be given what form of data is needed
- ix. **Section 7: Climate Change. Ray N.**
1. Budget will help work up another model to a finer scale and updating the model
  2. Models will include 2070 projections
  3. Metrics on storms are still under development; looking for barometric data. NOAA may have some.
  4. STAC should get the word out that there are flood plain mapping efforts out there in case hurricane come into the region.
    - a. ***PDE should make a website to reference all the different state maps***
  5. Budget: A student is already trained and ready to start
- x. **Section 8: Function: Danielle K.**
1. This section looks for the connections among indicators
  2. Other section groups will provide key indicators and this section will weave these together with a narrative to showcase physical-chemical-biological linkages
  3. Des K, Tom F, David S, can all help get fish data together
  4. John K, and Bob T can help with shell budget estimates
- xi. **Section 9: Restoration: Laura W.**
1. Working on collecting data, not much progress yet
  2. July 20<sup>th</sup> will have a meeting about metrics
  3. Will be drafting a Regional Restoration Initiative Report very soon and will work with data from that report
  4. Mid-July will have a website up and running for groups to input more projects as well as search through the existing projects
  5. September will have 5 years of acres restored data
  6. PADEP and PDE are working on a white paper about restoration in the region
- xii. Reminder: all groups are strongly encouraged to have a poster presented at the PDE Summit to give updates on their progress, abstracts due 6/30/10

## 6) Climate Ready Report

12:30-12:45

- a. The report and its sections are on the website. Most have seen the second version.
- b. There is now a “next steps” section in the report that is very helpful
- c. Please note the appendices – there is a lot of good information in them
- d. Industrial Economics has produced good data for the report and it will be helpful for the SOE as well

*Lunch*

**12:45-1:30**

**7) Gulf of Mexico Oil Spill**

**1:30-2:00**

- a. Two of our sister NEP's are dealing with the spill, and possibly more
- b. Is the oil likely to come to us? No, it is likely to turn at the Carolinas and head out to sea
- c. How could we help?
  - i. Letters of support?
- d. USGS has been working in the gulf. It has shown that a proper chain of custody has been very important.
- e. What if it were to happen here?
  - i. Can dispersants be used? No, not inshore
  - ii. Should we be taking baseline monitoring of our area? Oil and it's other forms?
  - iii. There is a resource guide that could be used
- f. The Delaware River and Bay Oil Spill Advisory Committee has finished their report detailing recommended improvements to protection, response, recovery and mitigation from oil spills here. But the report was never adopted because the committee's official charter lapsed during the transition to the Obama administration, and the committee had a sunset provision before the group could get enough members together to formally vote on the final draft.
  - i. Letters should be sent to the USCG and congress that this report should be adopted as per the intent of the Delaware River and Bay Oil Spill Protection Act from 2008.
    - 1. Possibly connect with other groups in the area
    - 2. Think regionally
  - ii. Possibly prepare a press release to get into the public's eye
    - 1. Things that should be included; there are small oil spills in the DE every day, ~75% of oil comes through DE
    - 2. Could estimate how large an oil spill could be in DE; get data from Coast Guard?
    - 3. Possibly include a talk at the science conference with the title: "Athos revisited: DRBOSAC and its unfinished business." But who would give it? Could have a plenary talk or could be part of energy section at PDE Summit
    - 4. ***Within the next 2 weeks Sue K, John K, Tom F, and Danielle K will work up a draft memo for elevation via the EIC (similar to the channel deepening questions briefing from 2008.)***

**8) Marcellus Shale Natural Gas Drilling – Tom F. 2:00-2:20**

- a. Horizontal fracturing has become more economical
- b. It has been done in the Susquehanna basin and is now moving over into DE
- c. DRBC now has authority over the drilling because of the water use
  - i. ~7-8 million gallons are used per fracture
- d. Water quality, quantity, forestation and methane are just some of the issues with fracturing
- e. There is significant public interest on both sides
- f. DRBC is waiting for the states to get their own regulations in order
- g. Questions about the stability of casings have come up
- h. There could be toxicity problems, DRBC is looking into this specifically chloride
- i. What is the carbon foot print of a well? It would be interesting to know
- j. Gerald B. saw a talk at ANSP that was well done, ask David V. what it was**
- k. How much “contaminated” water could come down into the estuary?
- l. What are the impacts of water withdrawals to the fisheries?

**9) Section 5c Non-Tidal Living Resources - Gerald B 2:20-2:30**

- a. Working on getting data from the state
- b. State data are not really comparable
- c. Because data are not comparable, may have to do as in 2008, show historic range vs current range
- d. Basin wide data are limited; but some fish latter data could be used
- e. Coordination with the tidal group will happen because of the overlap

**10) Delaware RiverSutdy Relative Risk Model and Database – Greg Murphy 2:30-3:35**

- a. Project started 5 years ago, 2 phases: 1) historical data 2) conglomeration of available digital data
- b. Dupont is looking for a group to take over the database; PDE? DRBC?
- c. Data could be used for State of Estuary/Basin, but questions need to be defined before running the model
- d. To put historical data into the database would talk a lot of time and money
- e. How does the STAC feel about taking it over?
  - i. DRBC already puts their data into STORET
  - ii. Danielle – besides State of estuary, other applications for regional restoration and climate adaptation planning; Could also possibly look at affects of natural resources on water quality (reverse of stressor effects of resources)
  - iii. Who will update?
  - iv. Tom F- this will take a lot of work. Also need someone who understands the data
  - v. It might be useful because there may be data that are not readily found in other places

- f. Database currently ~12GB in size
- g. PDE will continue to explore options for basic maintenance of the database, and if it is taken on by the program, then others can use it for various purposes. But cost is the issue – will need to determine how much staff time would be needed, and if we can afford it.

#### 11) STAC Business

3:35-3:40

- a. Minutes of last meeting were passed
- b. SOE groups are reminded to continue work
  - i. **Groups need to get an abstract in for PDE Summit for a poster.** Ideally, these should be similar in content, including the following 3 elements: 1) status on development of indicators/metrics, 2) preliminary data analyses, and 3) preliminary status and trends info.
  - ii. **Groups need to prepare an update for the next STAC meeting**
- c. The fall STAC meeting will be the annual joint meeting with the EIC

Adjourn

3:40

DRAFT