



Science and Technical Advisory Committee

Partnership for the Delaware Estuary:
A National Estuary Program
www.DelawareEstuary.org

STAC Meeting Minutes (Number 30)

Thursday, December 5th, 2013

10:00 A.M. to 2:30 P.M.

Partnership for the Delaware Estuary - Wilmington, DE

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

Out on a limb – new book on rehabilitating black bears by Sue Kilham's brother in law.

Introductions around the table

Announcements: Des Kahn is retiring from DNREC, Tracy Quirk is taking a job at LSU and moving soon. This will add openings for spring elections. Think about balance of expertise on STAC. Losing wetlands expertise with Tracy. Jerry Mohler was also lost recently due to retirement. Also some retirements at DRBC coming up this year.

Minutes were sent around for approval and comment. Voting to happen after lunch. No changes to the agenda.

2) STAC Updates – Sue Kilham

10:10 – 10:20

Agenda review, updates, minutes from 9/5/13¹

3) Goals and CCMP Updates – Priscilla Cole

10:20 – 10:40

Goals-Had multiple meetings, Sept EIC/STAC meeting had final changes, went to EIC in October. Final draft is passed around. Front page is new, a pre-amble. At the EIC the goals were accepted at October meeting and EPA later approved as well. Goals are now accepted and complete. **Put date on goals when accepted.** Next steps- roll out of goals and updates. In spring ACES/Alliance annual meeting might add these goals to that, for a larger push.

CCMP updates- Discussed in Sept mtg. Are on website:

www.delawareestuary.org/node/207

This website is not “active” so public cannot get to at the moment. Phase 1 is what progress had already been going on since it was written; reports, programs, projects. Not attempting to re-write a full CCMP, the website will be a “living” CCMP. **Please look at list and see if we are missing anything and tell Priscilla.**

Phase 2 is actual CCMP updates. Priscilla is working on, would like STAC to review.

Will a report background (how and why ccmp changes occurred) be provided online? -Various ppts that have summarized the progress could be put online. Perhaps add a “findings from the STAC meetings/surveys”. Still need to figure out

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

² Final draft of STAC DO Brief was circulated by email with 11/27 deadline for last material comments

³ 2008 DEWOOS Report can be found here:

<http://acwi.gov/monitoring/network/pilots/dlr bay/index.html>

design of Phase 2. When update language will have to provide justification anyway so just need to figure out how to do that, sysinctly. Change “update” to “progress”
Priscilla will send out link of CCMP, and in advance of next STAC meeting will send out email with any updates that have been accomplished between now and then.

Event will likely be around EarthDay. Last sentence of the goals document says “Steering Committee endorsement of these goals is a recommitment to working together, through PDE, to continue improving the Delaware Estuary.”

Mid-February – aim to have Phase 2 done. Fairly aggressive timeline to get STAC input.

Goals and CCMP belong to all of DELEP, so all of the organizations represented in the STAC, EIC, and other partners in the estuary. We all need to work together to achieve them.

4) DOI-NFWF RFP for Resilience Projects – all

10:40 – 11:10

Sharing of potential submissions, coordination, match

NFWF RFP due January 31st. Sandy resilience projects being administered through NFWF. \$100 Million including 12 states and the District of Columbia. There’s an additional \$20 Million that was designated for the Delaware Estuary coastal region. NFWF has strict rules on how many sections you can apply for. Projects have to be completed within 2 years. If a project is for design, some money might be able to be applied for later for implementation. There’s a 25% match requirement, and can be tabulated starting in December. PDE is putting in proposals and are partners on a few others. Sharing time in STAC to make sure that everyone is involved and connected with no redundancies. This funding is a once in a lifetime opportunity. Sharing of priorities: Maurice River.

Dorina presented on NJDEP’s effort in the Maurice. NJ created a giant project list right after Sandy. That list has been weeded out several times to come out with \$100 Million worth of projects, or about 25 projects. Seven projects are Delaware river bayshore focused: living shorelines, restorations, waterquality, wildlife management ares. They want you to tie in clearly how you were affected to Sandy, what is the gain in resiliency, who are you partnering with and leveraging funds. How do you begin and end your project in 2 years? Many of the projects are not NJDEP projects, but being led by partners. DEP can contract with state academic institutions, but not with NGO’s or design firms. Work around is people partnering with NJ Sea Grant. Indirect is held at 15%. DEP has prepared an RFQ (request for qualification) and Dorina encouraged everyone to put in for that to get on the list. RFQ is considering who is the most qualified to do projects, so people should be careful who you partner with and who is the lead. Dorina is in charge of 2 projects: 1) Mouth of the Maurice \$250K and now they’re looking for a design team, hopefully pre-approved treasury groups. Solutions project – green and grey solutions to restoring wetlands and oxbow. There are several different modules that have been visioned out. DEP is looking for an actual design for this

area. 2) Statewide impact of open marsh water management on the integrity of tidal wetlands. Looking for better accountability of tidal wetlands in the state. What the shoreline is, wetlands calculation, datum calculation. More than \$250K funding available (Drexel, PDE, Rutgers/Stockton). We have a good chance to change policies.

Sandy funding was used to remove the last dam on the Brandywine for fish passage. This came in one of the first waves of funding. Prime Hook cape, shore meadows in NJ, Forsythe were also funded already for restoration funding. This second wave is focused on resilience building by expanding the model of sand dune building and moving into wetlands.

Dorina is looking for project regarding coastal community index assessment in the Delaware Bayshore.

Delaware updates: Prime Hook, Mispillion, Delaware clean water.

PDE updates: 3 NEP joint submission (\$3 Million) with other partners. BBP, PDE, Center for Inland Bays – just outlined. Living shorelines and marsh futures (DE & NJ). Need for standardization and coordination for living shorelines between DE and NJ of implementation techniques. Potential sites: Fortesque, Maurice, Mispillion, Prime Hook, Inland Bays. Contractor training and management with workshops, training, and outreach. Monitoring will be done by MACWA program. SET maintenance of 30 stations. BMPs, predictions, looking for best potential applications. TNC and Rutgers will probably be involved.

Larry Niles was partially funded by DuPont money, and could be involved with marsh replenishment and beneficial use projects in the future.

RSM had two meetings after the release of the RSM plan. Working on an annual report to establish goals and implementation efforts that tie into RSM actions.

Rutgers Climate Institute – Putting in with NJDEP.

NJDEP is calculating investment in the DE Bayshore area that wouldn't be coming into state if not for these areas. This is competing with calculations that populations in NJ are not in the Bayshore, so why should money be invested there. Budgets are being cut, and people are asking why it's worth investing here in the Delaware Estuary. There's a lot more scrutiny now, and it's a good time to educate people about why these resources are important. Carbon sequestration is a currency. And now we have the ability to say that any habitat restoration can be used in a damage assessment. Kauffman's group has looked at ecosystem services. Restoration upfront might be dusted off to address. Bill Mates work too.

Fortunately, PDE has a lot of experience with NFWF. NFWF cares a lot about partnering. We should all be working with each other and offer letters of support. State match might be available in partnering situations.

5) Red Knot Listing by USFWS – Greg Breese

Red Knot listing did come out. It's just the one species that migrates through Delaware Bay, travels between arctic and south America. Horseshoe crab habitat are at the top of the list for addressing the problem along with south American wintering grounds. HSC take several years to mature, so it takes a while to see effects of management actions. ASFMC have come up with an adaptive management process to set harvest regulations. Over time we'll learn which model is the best for predicting HSC management practices. Snow cover, predator interactions, climate change in breeding grounds are all being considered. Many factors affecting the birds point to climate change. It will likely be listed as Threatened. Beach replenishing projects will probably stay the same because they're already done with protections in place. Won't change too much as far as horseshoe crab management. There is some evidence that grain size is important, but DE and NJ are aware of this and take note of this. Larry Niles shared future beach replenishment projects. Final listing of red knots will be completed in 2014.

6) 2015 Science & Environmental Summit – Danielle Kreeger

Initial ideas for theme, session, speakers

In 2013, we completed the 5th Summit, and it's time to look ahead to the next Summit in 2015. PDE would like to get ideas for theme, speakers, dates, and sessions. At the very first conference in 2005, we sought to assess needs which turned into the White Paper of the top needs for the Delaware Estuary. 200 words of the abstracts were dedicated to this discussion of the top needs. This is the 10 year point from the first conference. PCB's are also doing a 10 year progress report in this year. Benthic inventory, oil spill response, sediment, and wetlands monitoring were all identified in 2005, and turned into major efforts. William Penn is talking about an annual conference of some sort, which so far has not changed the Summit agenda.

Impacts from Sandy – special session, changes from the storm, responses to changes, could overlap into 2017 to share results from projects.

USGS work on the history of storms – how does sandy stack up? 1962 and 1993 Nor'easters – suggested as a possible speaker. "Storms I have known and loved". Sandy was the first storm where we valued the damages to natural resources added to the traditional human infrastructure damages. Help to frame the considerations of natural resources – potential to educate, carbon sequestration is a currency, nutrient removal services, resilience capital.

Nutrients and ecological benefits. AMMOX – takes ammonia directly into nitrogen gas.

Anniversary: 10 years for Summit and 20 years for the partnership

Importance collaboration and partnerships – similar to theme of a previous conference, but the timing is good to renew this conversation.

Networking session in addition to the poster session. Speed networking event. Progressive lunch with tables assigned to topics? AWRA did a “speed-dating” event at their conference.

Retirements are opportunities for mentoring. Can we find funds to bring retired experts to the Summit? Laying foundation for next generation with networking.

Webinar options?

Polling event – language a bit bureaucratic. Is this a fun event? Are you trying to get data? Wasn't very effective at the last event.

Get a drink ticket if you visit 10 posters. Give posters a stamp/star?

Poster session – At CERF meetings, posters got 1 slide at the end of the session they were associated with and one minute to speak.

Speakers – former head of NJDEP office of science and is now public health for FEMA, governor, vice president, Sam Waterson from Law&Order – spoke at Marco (Oceania), Ben Horton – world's longest record of sea level rise, Penn State climate assessment for the state,

Table of books where a portion of proceeds went to the Delaware Estuary. Photography table? Bring in local authors. Shad and Pine barrens books - John McFee, Cape May bird observatory (Peter Dunn), book on black bears

MARCO and regional planning body

Danielle encouraged STAC to consider sponsorships on behalf of their organizations.

Break for lunch with continued Summit conversation.

7) Dissolved Oxygen² – all

Final chance to suggest minor edits on STAC Brief

EIC meeting on Dec 12th, and the EIC wants to get this report soon.

Move recommendations to the front. Des took some time to edit and change sections in the fall. Des since found a 1989 dissolved oxygen report that should be cited in the report. Danielle added a line saying that many STAC members would like to see a DO criteria of no less than 5mg/L. 1989 report recommended a 5mg/L to attain fishable waters, which was tied to use and economic feasibility with technology at 1989. The DRBC is the group to establish the criteria. STAC previously made a resolution not to set a number for DO, because there isn't agreement or hard numbers to back up a number. Could use the 1979 and 1989 report recommendations as a starting point, because that was the last time the DO issue was looked into in depth. Des worked on a draft yesterday to help word-smith.

The STAC supports a starting point criteria according to recommendations in 1979 and 1989 reports. Tom, Des, and Greg volunteered to work on these changes to be able to send out the EIC by Monday.

8) Monitoring Infrastructure - Danielle Kreeger

Past inventories and needs (NWQMN, DEWOOS³, TREB)

Current monitoring coordination and inventorying - sharing

Future – 2014 Monitoring Conference?

NEP has implementation review every 3-4 years, and we're supposed to be a coordinator of monitoring. Historically, the MAC and DRBC have taken the lead with regards to water monitoring. EPA is challenging PDE in how we are helping to coordinate monitoring. PDE has been involved in a pilot gap analysis for monitoring infrastructure. National water quality monitoring – Delaware pilot. Price tag put on monitoring in the pilot report. But funding is always a challenge.

DEWOOS – ocean to the tribs monitoring network. MACWA & DEOS came out of this report. USGS got \$100K and was allocated to data management. William Penn conversations have come back to some of these efforts.

In spring 2014 – PDE would like to host a monitoring conference. Update DEWOOS – prioritize, consider post Sandy, climate change. Spring might be too early? Do we want to keep the same scope and structure of DEWOOS? WQDE – is a NJDEP effort to collect water quality data and some wetlands. DEWOOS was 2008. MAC meeting is also meeting this month. Monitoring conference added to the end or beginning of the Summit? DRBC has been hearing that MAC doesn't work for other partners who are doing monitoring. DRBC is content with MAC process. Can we make the MAC have a shared vision of all its partners for monitoring.

THEME: Measuring what we need to be able to obtain the PDE goals?

Who is managing the estuary? DEWOOS was great in identifying the monitoring gaps. After the State of the Estuary, this would be a good time to look at monitoring gaps for collection indicator information. We need to link the gaps back to priorities. DEWOOS had a water quality focus, but tried to pull in living resources and data management. What are the gaps in DEWOOS, since it's now a few years old? Citizen monitoring is a growing area. **DEWOOS doesn't consider biological monitoring.**

Delaware estuary is so much larger than other estuary programs. EPA is challenging PDE to come up with an inventory, prioritize, and highlight major needs. We want to make sure that our goals and recommendations are in line so that we're in a good place if William Penn funding comes online. Monitoring is mostly driven by management requirements.

We need a good **description of existing monitoring**, and where the major needs are. We need a **statement of the monitoring we really want**. Consider the **wish-list metrics that didn't make it into TREB**, and which **metrics in TREB didn't have high confidence**. We can just use the TREB. Comb through chapter by chapter. **DEWOOS could help us to think through how to monitor** for what you need.

Invite list to workshop : STAC, MAC, Fisheries Coop, and William Pen

Action item for MAC meeting : John Y. present this action item of a Monitoring spring workshop.

9) Workgroup Updates

Regional Sediment Management Work Group – had a meeting 2 weeks ago. Report finished up in August. Corps had funding for sediment, but many Corps funding has been cut because other programs didn't have implementation, but Delaware Estuary has demonstrated implementation already, so on track. Danielle gave RSM brief to the steering committee and it was very well received, and SC is supportive. Corps is back on board with committing staff to RSM implementation.

Water Quality Advisory Committee – Meeting in November. Went through comments on nutrient plan, and sent to EPA. Identified near and long term nutrient criteria towards DO end points. Recommends that within 1 year, DRBC will prepare a statement of existing aquatic live uses to be reported to commissioners. How to lock in DO improvements.

Toxics, Monitoring Advisory Committees – Adopt a revised more stringent criteria, which has become the new standard. EPA is issuing TMDLs in 2014. Implementation strategy will accompany the TMDL.

pH criterias were not consistent with the state, and new criteria were adopted (6.5-8.5) EPA passed a national ammonia criteria, driven by freshwater mussels.

Regional Restoration Work Group – Typically meet annually in December, but there's a new game plan for the Alliance project selection this year. RRWG needs to meet before Alliance meets in April. We are interested in boosting the Project Registry – UWFP, post-Sandy, Delaware is looking at a registry.

MACWA Wetland Group – March 19th annual meeting.

DE River F&W Coop – meeting in December. Methods for monitoring shad stock. Looking to form a freshwater mussel technical workgroup.

10) Upcoming Events and Notices

Meetings announcements, sharing – all

DelMarva Meeting

RAE Meeting

AERS meeting – March 27-29 Ocean City Maryland

Fisheries Society Next year in Delaware

NJDEP is doing a workshop for how to apply for Sandy funding – Monmouth, webinar too

EIC & Board Meeting Dec 12th

Loss of fisheries in the estuary – conversation stirring about this topic

Reduction long term in fisheries

Some fishing regulations have curtailed what people can do

Ecological shifts in dominant fish
Marine councils and lots of other groups that are looking at fisheries

11) STAC Business – S. Kilham

- New business, review action items
- Next meeting – 2 weeks ahead of earth day April 16th
- Next sequestration? Summit sponsorship probably won't come through from EPA

Adjourn

2:30

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
Moses Katkowski – The Nature Conservancy
Jerry Kauffman - Univ of Delaware
Danielle Kreeger – PDE
Adrian Leary - Army Corps of Engineers
Doug Miller - Univ of Delaware
Jerre Mohler – USFWS (open seat)
Tracy Quirk – Academy Nat. Sci./Drexel
Renee Searfoss – EPA Region 3
Ken Strait - PSEG
David Velinsky – Academy Nat. Sci.
Jeff Fischer – USGS (pending)
David Wolanski - DNREC