

**Center for the Inland Bays
Science & Technical Advisory Committee Meeting**

April 8, 2016, 9:00 A.M.
DNREC Lewes Field Facility
Meeting Minutes

Attendees:

Scott Andres, DGS	Doug Janiec, Sovereign	A.G. Robbins, Cit Mon
Susie Ball, CIB CAC	Maddy Lauria, Cape Gaz	Bob Scarborough, DNREC
Sally Boswell, CIB	Chris Main, DNREC	John Schneider, DNREC
Michael Bott, DNREC	Jack Martin, Hall Assoc	Emily Seldomridge, CIB
Judy and Steve Britz	Andrew McGowan, CIB	Kari St. Laurent, DNREC
Sarah Cooksy, DNREC	Roy Miller, CIB	D. Torre, UD
Kathy Coyne, UD	Ram Mohan, Anchor QEA	Bill Ullman, UD
Judy Denver, USGS	Tye Pettay, UD	Jennifer Volk, UD
Sergio Huerta, DNREC	E. Anne Riley	Marianne Walch, CIB

9:10 Call to order, Scott Andres, Chair

Introductions

CIB announcements, Marianne Walch

- 4/16 7th Annual Dewey Beach Brew Fest
- 4/22 Earth Day Happy Hour at Hammerheads Dockside
- 4/30 Gardening for the Bays Native Plant Sale
- Thank you to those who donated to the Center!
- Updating State of the Bays Report this year
- Will be calling on some to review the State of the Bays Report and the monitoring plan over the summer

The Role of Watershed Coordinator at the CIB, Emily Seldomridge, CIB

See presentation

Presentation supports CCMP (2012) goals II-2, IV-2, VI-1, VIII-3,4,5

Dr. Emily Seldomridge, Watershed Coordinator for the Delaware Center for the Inland Bays discussed her role at the Center and her first year goals including assessment of implementation of the 2008 Inland Bays Pollution Control Strategies, updating the State of the Bays Report in 2016, and plans to update the Comprehensive Conservation and Management Plan (CCMP) in 2017. The CCMP will include a climate change vulnerability assessment.

Discussion:

- Ram Mohan, Anchor QEA, asked which end of spectrum of projections would Emily use in a climate change assessment
 - Following an EPA protocol from the Climate Ready Estuaries from National Estuaries Program (NEP)

- Bob Scarborough, DNREC Coastal Programs, had previously surveyed ospreys looking at contaminants in our area; finding a lot of pharmaceuticals; more results coming by September.
- Scarborough also commented on his programs focus on coastal resilience (which includes sea level rise); identifying adaptation measures; funding DGS to develop new SLR planning scenarios and new flood inundation maps from latest LiDAR; flood avoidance maps (FEMA + 3foot); DelDOT putting sensors on roads.
 - Bill Ullman, UD, questioned timing of SLR planning scenarios
 - Originally looked at through 2100 and going to still look at continuous lines out to that end point.
- Sarah Cooksey shared that the DNREC Coastal Programs group is also starting to look at microplastics and ocean acidification– additional monitoring is needed for both. Would love to collaborate on those emerging issues.
- Ullman mentioned the state of the art pH monitoring system deployed at Bowers Beach – 6 months of data available. Instrument deployment is temporary but we can continue to look at this over time. Instrument has trouble in low salinity waters and a Master's student is working on a calibration procedure to address the estuarine range.
- Sergio Huerta, DNREC Environmental Lab, said they have talked about emerging contaminants for years and one issue is that methods have been changing. Great to hear an effort is being coordinated and happy to assist; he has some funds to work with.
- Jenn Volk, UD Extension, is happy to help coordinate a symposium as that type of work is in her annual work plan and she too has some funding to support this.
- Robin Tyler, DNREC Environmental Laboratory, has looked at toxics in biota at very low concentrations – requires filtering large volumes of water
- Scott Andres, DGS, asked what kind of review is needed for these documents.
 - Walch replied that previously specific people were asked to review specific sections. They are also getting a focus group of concerned citizens together now (large part of target audience for State of Bays Report) to determine what they understand or don't and how it can be better presented, missing issues, etc. Would like similar feedback from STAC members and would like to know who uses the report now and how.
- Mohan added that there is a wealth of national knowledge and there is a conference planned for January 2017 in New Orleans that will look at this and source control. He will share information.
- Cooksey asked for someone to clarify the difference between DNRECs role in PCS assessment and the Center's responsibility.
 - John Schneider, DNREC Watershed Assessment and Management Section, replied that DNREC is responsible for the regulation, but appreciates the watershed organization to help assess the voluntary implementation.
- Cooksey noted that the Partnership for the Delaware Estuary is updating their CCMP now too.

Introduction of Andrew McGowan, Andrew McGowan, CIB

See presentation

Presentation supports CCMP (2012) goals VIII-4

Andrew McGowan, CIB's new Environmental Scientist, discussed his recent Master's thesis research on Delmarva bat populations, and how his background and experience will contribute to the goals of the Center. He is now the program manager for the inshore fish survey and horseshoe crab survey.

Discussion:

- Roy Miller, CIB Policy Coordinator, noted that the citizen surveys have been going on for 5 years – will this data be assimilated into the State of the Bays Report?
 - Yes
- Robin Tyler asked that since Andrew is already doing some survey work, would he consider adding a seaweed survey. Last one was done in 2012. It would require a couple of hours from May – September from a Carolina Skiff and the data can be worked up pretty quickly. Would love to see someone else pick it up and keep it going.
 - Interested, but need to look at staff time and resources. We can talk.

Molecular assessment of harmful algal species and their associations with Vibrio in Delaware's inland bays, Chris Main, DNREC

See presentation

Presentation supports CCMP (2012) goals V-5, VIII-4

There is little information on the dynamics between bacteria and phytoplankton within the marine environment. Associations between Vibrio and three algal classes that form frequent blooms were investigated in Delaware's inland bays. Results demonstrated a significant correlation between particle-associated Vibrio abundance and all three algal classes, with a closer relationship in particle-associated Vibrio abundance with H. akashiwo abundance.

Discussion:

- Roy Miller asked if there are implications of Chris' work for the folks who monitor for shellfish consumption – should they look at blooms and issue advisories?
 - They are starting to work together
 - Mike Bott, DNREC Watershed Assessment and Management Section, shared that they do monitor where there are large HAB blooms now
- Bott asked if they looked outside of canal systems, which are worst case scenarios. Blooms appear to be in those areas and not in active shellfish harvesting areas
 - No. They used canal systems because very easy to get to water. Will work with Love Creek initiative next.
- Bott asked if they looked at the DNA
 - No, but data is there for a future grad student if they want it

- Sergio Huerta commented that from this type of work, we are beginning to change the perspectives of programs and discuss how we monitor to look at the base of the food chain.
- Robin Tyler asked Chris' perspective on what kind of federal/state/local level programs are critical in being able to track Vibrio in shellfish? What kind of team of people can we assemble with different skills to connect the dots from land use, nutrients, blooms, and dynamics with the environmental system, up to public consumption.
 - Support citizen monitoring programs – this research would not have happened without their data.
 - Best way to reach people is have them actively involved.
 - Huerta said we have theoretical ideas of where this field is going and anyone with expertise can/should be involved with such a team.
- Bott added that fisheries are going to multispecies management. Baseline data is important for community association.
- Tyler emphasized that the presence of the organism, presence of the toxin, and toxicity don't always go hand in hand.
- Miller – said Ed Whereat's citizen monitoring program is mostly in tributaries and asked if they find high levels, what happens?
 - Bott says Whereat calls him and they follow up with shellfish monitoring nearby; for the most part, blooms have been confined with a few exceptions; fortunately DNREC has a great connection with the FDA lab who does the shellfish assessment and advises on if harvesting areas need to be closed or can be kept open.
- Marianne Walch commented that it's great to hear the citizen monitoring data is valued.
- John Schneider mentioned that Sea Grant is assessing if citizen monitoring is an important part of their future due to an impending retirement. This is a good time to reach out to Jim Falk to share your thoughts.

New Business, Scott Andres

- Anticipate being asked for help this summer on report reviews. Please consider helping!
- Walch reviewed Board of Directors changes – legislation was changed to allow 5 new members from the community to help expand fundraising capacity. Heidi Gilmore and Vicki York, local lawyer and realtor, have recently joined.
- Susie Ball shared that the Citizen Advisory Committee (CAC) is appreciative of Emily's help with the fertilizer issue
- Presentation ideas – volunteer yourself or someone else!
- Judy Denver, USGS, asked if we have the ability to remotely connect in through webinars to improve attendance and bring in speakers from further away
 - We can look into this – good idea!

Adjourn

Next meeting – October 28, 2016