

Delaware Center for the Inland Bays STAC meeting

October 16, 2020

Roll Call

STAC: Jenn Volk, Chair; Doug Janiec, Vice-Chair; Judy Denver, Secretary; Marianne Walch, Scott Andres. Kari St. Laurent, Chris Brosch, Kelly Sommers, Susie Ball, Andrew Homsey, Miling Wei, Tyler Monteith, Ashley Norton, Bhanu Paudel, Ashley Tabibian, Richard Watson, Ed Whereat, Andrew Wozniak, Kathy Coyne

Others: AG Robbins, Bob Collins, Jen Walls, Art Trembanis, Kate Fleming, Mike Duffy, Lisa Swanger, Fred Parham, Thaddeus Fisher, Jeff Warner; Wei-Jun Cai, Jenn Rep, Megan Mackey, Shelley Cohen, Drexel Siok, Karen Beck, Kristen Wakefield

Announcements:

Jenn: Please complete survey sent to members to fill areas of interest and expertise to ensure we have a well-rounded membership, covering all important parts of CCMP

Marianne Walch: CCMP update: final version available for public comment; comments due Nov 15th; <https://www.inlandbays.org/get-involved/ccmp-public-comments/>

Doug Janiec: Partnership for the Delaware Estuary (PDE) summit conference was cancelled last year. Will have virtual summit March 1-3, 2021. Abstract submission is now open. The link to submit abstracts is: https://link.edgepilot.com/s/a03ba1ba/aiPXwSn0RUOyoUJoEDAn9w?u=https://cts.vresp.com/c/?PartnershipfortheDel/63df28dd78/3b815a1deb/52f5ff6017/usp=sf_link.

Jenn Volk: Funding strategy for nutrient modeling projects update: Richard Watson has developed a spreadsheet of potential funding sources. Brought to modelling subcommittee for review. Will be pursuing several grant opportunities and looking for future ones. Trying to decide which have greatest potential for funding

Kelly Somers: Has reached out to colleagues in other sections of EPA. Only smaller local grants are available at this time, but she is passing on the CIB plan. Technical assistance may also be available.

New business:

Kate Fleming, Delaware Sea Grant, —Derelict crab pot presentation (recorded presentation and discussion)

Using side-scan sonar by Art Trembanis to find pots. Funded by Delaware Coastal Program to do more comprehensive survey in Rehoboth Bay. Pilot removal effort to remove pots and test removal methods. Now funded from NOAA to expand project into Indian River Bay for next two years. Work will be volunteer-based. COVID limits volunteers mostly to those who have personal boats and can go out in January, with some other opportunities.

Questions: Ferry Akbar Buchan: Is there a way to trace them back to owner? Kate: no; only way is through buoy, which in the case of derelict pots, they are almost always separated. Jenn: Could that be changed by policy to require identification on the pot itself to identify them? Kate: Possibly.

Jenn: Why are volunteer days in Jan and Feb? Kate: Has to be done in closed crab season and it is clear they are not somebodies active pots.

Discussion of many significant opportunities for volunteer help with boats, sonar, and other parts of this project.

Dr. Andrew Wozniak, University of Delaware: Organic matter geochemistry in Delaware coastal estuaries (recorded presentation and discussion)

Relatively new Lab at UD does detailed studies of OM molecular composition to link OM Source/Processing with Environmental Fate/Impact. Overview of several ongoing projects was presented. Studying OM (bio)geochemistry in DE Coastal Ecosystems using source tracking of Organic Matter with WiCCED project; Sampling in Inland Bays begins Summer of 2021; Another project on deposition of nitrogen, in particular response of DON in atmosphere after implementation of the clean air act.

Questions:

Banhu Paudel: Are you planning to look at oceanic inputs in your studies? **Andrew:** Yes, at outlet of tidal cycle at Murderkill Beach sampling site.

Jenn: Are there management actions that you can think of that can control leaching from soils? **Andrew:** not thinking about next steps now, more identifying cycling and issues now. Hopefully in the future we can link things.

Dr. Wei-Jun Cai; Scott Andres, UD, High Frequency monitoring of water quality in the Delaware Inland bays. (recorded presentation and discussion)

Scott: Tidal tributaries are continuing to be problem segments for nutrient inputs and drive eutrophication and diel DO cycles. Previous monitoring not adequate to understand processes over time. Expressed need for greater hi-frequency monitoring network/program to address linked, long-term WQ problems. High-frequency monitoring results at Pepper Creek and Indian River collection beginning in September 2020. CIB running the field work for sensors; working with UD for data management as part of WiCCED project.

Wei-Jun: Discussion of Coastal Ocean Acidification (COA). Described processes affecting carbon and oxygen cycling and acidification in estuarine watersheds. Plans to spend next 10 years doing research in the Inland Bays. Has new sensors and is searching for funding to deploy and implement sampling.

Questions:

Banhu for Wei-Jun: What are major sources of sulfide in Chesapeake Bay—mineralization or atmospheric sources? **Wei-Jun:** Mainly from sulfate reduction from respiration. I think storms may mix hydrogen sulfide in sediments into water column.

Marianne for Scott: Goal of CCMP to establish network of high-frequency monitoring. How should we go about establishing sites for that network? Scott: should be guided by Inland Bays plan itself, targeting big issues—especially tidal tributary effects. Logistics for maintaining open-water sites are very difficult. Right now, looking for docks in tidal tributaries for deployment sites with adequate water that are located near DNREC monitoring sites. Wei-Jun added that it is very important to find multiple sites to add all types of instruments. AG Robbins offered his dock on Guinea Creek.

Meet New CIB Staff and Review Center's FY21 Work Plan (recorded)

Marianne Walch gave brief introduction to operation of CIB and staff

Lisa Swanger gave brief introduction to outreach team.

Marianne Walch gave an overview of the CIB workplan. Will post workplan on the website. Reach out to Marianne to become involved.

Dredging and Water -Quality Workgroup, update by **Doug Janiec**. Just started workgroup and building membership and begin to focus on issues and goals.