

SCIENTIFIC & TECHNICAL ADVISORY COMMITTEE



Meeting Notes
March 26, 2020, 9:00 a.m. to 12:00 p.m.
Virtual meeting held via Zoom

Attendees:

STAC MEMBERS

Jennifer Volk, Chair
Ben Anderson
Scott Andres
Steve Britz
Kathy Coyne
Judy Denver
Ellen Dickey
Ed Hale
Rob Gano
Andrew Homsey
Doug Janiec
Holly Michael
Ram Mohan
Tyler Monteith
Ashley Norton
Bhanu Paudel
Jack Puleo
Roger Shepherd

Claire Simmers
Steve Smailer
Kelly Somers
Kari St. Laurent
Ashley Tabibian
Bill Ullman
Rich Watson
Ed Whereat

CIB STAFF

Marianne Walch
Zach Garmoe
Andrew McGowan
Michelle Schmidt

OTHER

Alina Ebling
Olivia Devereux
M. Dough
Kate Fleming
Chris Flood
Aaron Givens
Brittany Haywood
Ed Lewandowski
Miling Li
Caitlyn Mitchell
Mark Nardi
Leah Palm-Forster
Gulnihal Ozbay
Chris Petrone
A.G. Robbins
Alison Rogerson
Christian Schwartz
Kenny Smith
Suni Shah Walter
Nancy Steckel
Korey Tiedemann
Andrew Wozniak

Copies of meeting agenda, notes, and presentations can be found on the CIB website (<https://www.inlandbays.org/about/committees/stac/>).

Meeting was called to order by Jenn Volk at 9:02 a.m. Jenn welcomed participants, indicated that the meeting would be recorded for the purpose of note taking. STAC roll was called, and other attendees introduced themselves.

Announcements (Mairanne Walch)

Jack Puleo (Univ. of DE Center for Applied Coastal Research) has been approved as a new STAC member.

Jenn Volk has been officially voted in as new STAC Chair.

First meeting of the State of the Bays Subcommittee will be held via Zoom on April 6th.

Next full STAC meeting is July 24th.

Old Business

Jenn gave an update on status of the hydrodynamic/water quality model project. The STAC's white paper was reviewed and finalized. STAC membership approved the report. It was presented to the Board and approved. Next steps: Frank Piorko assisting with developing a Request for Information from model providers. Goal is to issue the RFI by May and convene an ad hoc subcommittee to draft a funding strategy. Results will be discussed at the July 27th STAC meeting.

New Business

STAC presiding officers: Need to elect a Vice Chair and appoint a Secretary. Looking for nominations – send to Jenn.

Presentation: Project WiCCED (*video recording available on CIB website*)

Dr. Holly Michael and Dr. Leah Palm-Forster (Univ. of DE) shared information about Project WiCCED (Water in the Changing Coastal Environment of Delaware), a multi-institution project funded by the National Science Foundation and the State of Delaware. This project aims to assess major threats to Delaware's water quality and develop viable technological and policy solutions for meeting the challenges imposed by them. Focus is nutrient over-enrichment and salinization. Partner institutions include the University of Delaware, Delaware State University, Delaware Technical Community College, and Wesley College.

Info at <https://projectwicced.org>. Key ideas and points --

Cores: Sensors (Next generation WQ detection), Microbiome, Data

Threat Assessment/Ongoing Projects:

- Salinization
 - Field program and salinity monitoring (greater Dover area)
 - Modeling of salinization and competing water use in Dover area
- Salinity-associated nutrient mobilization and cycling
 - Soil sediment characterization
 - Study of the coupling of FE, P, and N biogeochemical cycles
- Estuarine nutrient sources and loading, eutrophication and acidification
 - Monitoring at Coursey Pond
 - Fingerprinting P sources, DOM (Murderkill)
- Ecological stresses from nutrients and salinization
 - Impacts of oyster aquaculture on ecosystem health
 - Wetland forest salinity stress
 - Marsh grass adaptation to salinity and its ability to act as coastal filters

Social Dimensions: Evidence from interdisciplinary research to inform cost-effective policies, programs, and stakeholder engagement to improve water security

Data Core:

- Data ingestion, access, and visualization testing
- Water quantity in DE study
- APG interactions
- Evolving LULC patterns
- DE irrigation management system
- Coastal observer app – citizen science

Social Dimensions:

- Behavior – quantifying how behavioral and policy interventions influence adoption of land management practices for WQ improvement
- Informing policy and markets – valuation of WQ improvement for human use/nonuse to inform decision making
- Workforce development and diversity
- Economic development

Funding for projects at this point is allocated, but researchers are quite open to new ideas, collaborations, and partnerships. WiCCED projects lead to and leverage new work and new faculty.

Bill Ullman mentioned that he is trying to track down old datasets from retired DNREC staff and others. Opportunities for data mining. Inland Bays was identified as one of the target watersheds. Data Core work may expand opportunities to store and analyze this data. Gulni mentioned that she has sonde data for Inland Bays from past couple of years that she will make available. She also envisions sondes staying in the Bays after the five years is up. Bill said that cataloging the data is key so that it can be retrieved and used. Bill also discussed ideas for new strategies that Proect WiCCED can offer for developing a continuous monitoring network in the Inland Bays.

Draft Revised CCMP Discussion

Michelle Schmidt, CIB Watershed Coordinator, led a discussion of the status of the CCMP revision and timeline. The discussion focused on proposed actions on which STAC is listed as Lead or Supporting role, and specifics of how the STAC thinks it can (or cannot) contribute to implementation of the actions.

Environmental Monitoring Plan Update

Deferred to next meeting.

Meeting was adjourned at 12:01 p.m.

Next Meeting July 24, 2020, 9:00 a.m. to noon