

**Delaware Center for the Inland Bays  
Scientific and Technical Advisory Committee  
February 16, 2022, 9:00 a.m. to noon - Zoom Meeting**



DELAWARE CENTER FOR THE  
**INLAND BAYS**  
Research. Educate. Restore.

**Attendees:**

STAC Members

Jennifer Volk, Chair  
Doug Janiec, Vice Chair  
Mike Bott, DNREC  
Kristen Covaleski, Inter-Fluve  
Judy Denver, USGS (ret.)  
Ed Hale, DESG  
Andrew Homsey, UD  
Bhanu Paudel, DNREC  
Claire Simmers, CAC  
Kelly Somers, USEPA  
Kari St. Laurent, DNREC  
Rich Watson

CIB Staff

Marianne Walch, STAC Liaison  
Caitlin Chaney  
Bob Collins  
Nivette Pérez-Pérez  
Michelle Schmidt  
Aviah Stillman  
Lisa Swanger

Others

Ben Anderson, DNREC  
David Bacher, NRG  
Taylor Beck, DNREC  
Lori Brown, DNREC  
Mark Biddle, DNREC  
Olivia Devereux, Devereux Consulting  
Patti Drago, CIB Board  
Aaron Givens, DDA  
Dennis McIntosh, DSU  
Rachael Philos, DNREC  
A.G. Robbins, Citizen Monitoring Program  
Alison Rogerson, DNREC  
Kenneth Smith, DNREC  
Duncan Simpson, Princeton Hydro  
Brittany Sturgis, DNREC  
Larry Trout, Straughan Environmental  
Ping Wang, DNREC  
Steve Williams, DNREC

The meeting was called to order by Jenn Volk at 9:00 a.m. with roll call and introductions.

**Announcements**

- We may be able to have in-person meetings soon. We are looking into potential spaces.
- CIB will be putting out a call to members for interest in continuing membership. Also, information on becoming an officer in STAC and what to expect as duties. Expect a call for nominations soon.
- Marianne introduced the new Communications Specialist at CIB, Caitlin Chaney.

**Old Business**

Wastewater Subcommittee

[Link to presentation](#)

Aviah Stillman, CIB Watershed Assistant, provided an update on the work of the CIB staff and STAC subcommittee to develop a wastewater nutrient budget for the Inland Bays. We currently are obtaining actual monitoring data facilities to calculate nutrient loads, rather than using the permitted loads. First, a case study of one site will be completed. If you have information to share, please contact her ([astillman@inlandbays.org](mailto:astillman@inlandbays.org)).

Olivia Devereux suggested using EPA's Enforcement and Compliance History Online (ECHO) site to obtain data (<https://echo.epa.gov/>). Kelly Somers offered to assist in finding this information.

### State of the Bays Report Update

Marianne provided an update on report progress. The timeline has been pushed slightly to allow time for some different, hopefully more meaningful, trend analyses. STAC reviews of specific parts of the report in next couple of months are being set up. STAC's role is to review indicators and reach consensus using data and best professional judgement on results of data trends. After STAC approval, the report results will be presented to the Board at their June meeting.

### **New Business**

#### New member presentation: – Kristen Covaleski, Inter-Fluve

##### [Link to presentation](#)

Kristen is the newest member of STAC. Her firm, Inter-Fluve, specializes in studying and understanding the effects of dam removals, river and restoration projects from all aspects—physical and ecological. She presented an overview of her background and experience, and then discussed results from several recent restoration projects. These include a water waterfront revitalization effort in downtown Toronto Ontario, a fish bypass at the Howland Dam on the Penobscott River in Maine, and a cranberry bog restoration at Tidmarsh Farms on Cape Cod. The latter is the largest wetland restoration ever undertaken in Massachusetts.

Q: Claire Simmers: Where would you look at restoration in Inland Bays region? A: Looking into dam removal, culvert replacement, or other things that limit fish passage would be useful. Also tax ditch improvements. Email: [kcoveleski@interfluve.com](mailto:kcoveleski@interfluve.com)

#### DTAP Data Sources and Model Development Status – Olivia Devereux, Devereux Consulting, Inc.

##### [Link to presentation](#)

Olivia is working with the DNREC Div. of Watershed Stewardship to develop the Delaware Targeting and Planning Tool (DTAP). DNREC will use the tool in areas of the state outside of the Chesapeake watershed to identify practices that will help meet TMDL/WIP/PCS goals, determine BMPs with best cost:nutrient reduction ratio, and examine trends in impacts of BMPs. They are now in year two of model development, with second year deliverables due September 30, 2022.

The model will run load scenarios for different areas using existing data on loadings from BMPS, or anticipated BMPs along with hydrogeography and land use. Inputs to the model were explained in detail. Climate change conditions, and other information are currently outside of the scope of work, but could be added later. DTAP outputs are edge-of-stream loads. The Inland Bays would need a hydrodynamic water-quality model to complete the picture of what actually gets to the Bays.

Q: Jenn Volk: What timeframe is being used in model. A: 1990-2001

Q: Jenn Volk: What is intended scale of use for the tool? A: HUC 12 or the Delaware 45 scale watershed for accommodate larger scale data for many factors.

Q: Andrew Homsey: Will it be available to everyone? A: Steve Williams: not sure who it will be open to yet. Have to look at some security issues. Reach out to Lori Brown for more information.

Q: Marianne Walch: Do the hydrologic conditions used in the model match those used in DURMM, and is that important? A: Based on literature values, not DURMM. Brittany Sturgis: Chesapeake BMP efficiencies were reviewed for DURMM updates.

*Update on CIB Strategic Planning Efforts, STAC Input on Proposed CIB Workplan, STAC Goals for FY23 -- Marianne Walch, CIB*

[Link to presentation](#)

The CIB is currently working with a consultant, Dr. Devona Williams, to develop a new Strategic Plan for the Center for FY 23-25. The STAC is represented in planning meetings by Jenn and Doug.

CIB staff working on FY23 workplan and are in need of input from the various committees of the Board, including STAC. Looking for comments and suggestions on workplan elements. Marianne presented an overview of the workplanning process. Then projects to be completed in 2022 were presented along with multi-year projects under different management areas.

Comments from STAC:

- Taylor Beck: Is there a way to include a shellfish restoration component in the baygrass restoration projects?
- Kelly Somers: With respect to the Inland Bays Cleanup, there may be an opportunity to collaborate with Maryland Coastal Bays Program on a marine debris workgroup they are starting. Perhaps leverage their work with similar resort towns/communities and include more prevention and land-based strategies. Lisa Swanger: She did connect with MCBP.
- Kelly Somers: Also curious if the topic of microplastics has been discussed in-house? Marianne responded that microplastics are on our radar, and especially interest in the potential for a citizen science component, but we probably don't have the capacity to do it at this time. Should be considered for the next environmental monitoring plan update.
- Kelly Somers: Chesapeake Program just put out a guide for SAV restoration that could be useful; she will send to Andrew M. and Mike B.
- Ben Anderson: Why was eelgrass dropped from the SAV restoration project? Marianne: It's not been dropped, but no eelgrass beds were found in the Bays, and we are not convinced that water quality is yet sufficient to support eelgrass. We do know that we can be more successful with widgeon grass. Also wondering about long-term survival of eelgrass with climate change.
- Kelly Somers: Are baygrasses being incorporated in any of the living shoreline designs? Doug Janiec: Certainly possible. Many of the living shorelines are near marinas, and there are often navigation concerns expressed. Probably would have to take designs farther out into the channel to provide protection. Permitting and lease fees challenges exist.

Discussion of goals for STAC in the coming year:

- Jenn Volk: Need to continue to look for economical ways to make progress on the HD/WQ model. Other things that STAC will need to be involved in and provide support. environmental monitoring plan, model work, water quality modeling, shellfish enhancement planning.
- Doug Janiec: Should re-energize some of the initiatives we were working on last year that fizzled out for a variety of reasons – e.g., dredging/WQ paper.

**Open Discussion:** None

The meeting was adjourned at 11:55 a.m. The next full STAC meeting is on April 13, 2022 (which is WEDNESDAY).

Draft meeting notes submitted by Judy Denver, STAC Secretary. Edited and approved by Marianne Walch and the STAC Chair and Vice Chair.