



Peconic Estuary Program

Technical Advisory Committee Meeting Summary

May 25, 10:00am

Cornell Cooperative Extension of Suffolk County

423 Griffing Avenue

Riverhead, NY 11901

Attendees: Sarah Schaefer, Alison Branco, Julie Nace, Matt Sclafani, Holly Sanford, Edward Bausman, Soren Dahl, Ron Paulson, John Sepenoski, William Wise, Brian Frank, George Kay, Sean O'Neill, Dan Gulizio, Cathy Haas, Laura McBride, Mike Jensen, Sherryll Jones, Camilo Salazar, Chris Clapp, Ray Huntington, Charlie deQuillfeldt, Chris Schubert, Barley Dunne (phone), Lisa Liqouri (phone)

1. Welcome & Introductions – **Matthew Sclafani** (Chair, TAC)
2. Meetings Summaries – **Alison Branco** (PEP Director)
 - Previous TAC Presentation- N Cycling in Muddy Sediments of Great Peconic Bay- Stuart Waugh
 - Draft PEP 2015 Environmental Indicators Report: Part I: Habitats and wildlife- Presentation/ Open discussion- Discussion of Living Resources chapters- seagrass, wetlands, scallops, river herring, finfish and piping plover chapters. Many helpful comments were suggested to improve the document and additional feedback from the TAC was welcomed via email. Water Quality and Pathogen chapters will be discussed at future TAC meetings.
 - Targets for measuring Living Resources Environmental Indicators in the Peconic Estuary still need to be decided and the same is true for the Water Quality and Pathogen Environmental Indicators.
3. Draft PEP 2015 Environmental Indicators Report: Part II: Water Quality Chapters- Presentation/ Open discussion- **Julie Nace** (PEP State Coordinator) and **Sarah Schaefer** (PEP Program Coordinator)
 - Discussion of Water Quality and Pathogen chapters- Shellfish bed closures, bathing beach closures, water clarity, chlorophyll-a, dissolved oxygen, nitrogen and harmful algal blooms. Many helpful comments were suggested to improve the document and additional feedback from the TAC was welcomed via email. Following this TAC meeting

the final revisions will be made to the 2015 Environmental Indicators Report and the document will be finalized.

- Draft PEP 2015 Environmental Indicators Report is available here:
<http://www.peconicestuary.org/reports/1b77069e03343a5fde4dd72d94d51de21fddb631.pdf>

a) Pathogen Chapters:

i) Shellfish bed closures:

- John Sepenoski - Administrative closures need to be clearly delineated separate of water quality closures. The Town of Southold has shellfish bed closures classified as administrative closures and water quality closures. Suggests that mapping where there is a lack of shellfish bed monitoring would be a better indicator of estuary health.
- Sean O'Neill- Does lack of monitoring cause closures?
 - Southold Town staff has completed SRS training to collect shellfish sanitation water samples.
 - Mike Jensen- Suffolk County Department of Health Services is completing shellfish sanitation sampling to augment NYSDEC shellfish sanitation sampling capacity.
 - Alison Branco- PE Protection Committee is taking steps to create a monitoring program in the East End towns that will be compliant with EPA and NYSDEC Shellfish Sanitation and are developing a water quality monitoring QAPP to be approved by the EPA that will enable the PEPC and partners to quantify water quality parameters (specifically nitrogen, dissolved oxygen, and pathogens.) An EPA-approved protocol allows the regulatory agencies to review and consider the collected data for subsequent decisions affecting water quality designation, water body uses and restoration priorities on Long Island.
- George Kay-Is there a correlation between boat discharge and shellfish bed closures?
 - A: Charlie deQuillfeldt- Generally administrative closures are made in areas with common vessel presence.

ii) Bathing Beach Closures:

- Mike Jensen-
 - Lake Montauk, Easthampton is labeled in the report as a high risk beach, but it is no longer a public bathing beach and no longer sampled.
 - Update the table for bathing beach closures in the report.
 - High risk bathing beaches are sampled more than 1 time/week

b) Water Quality Chapters:

- John Sepenoski- Water temperature should be included as parameter alongside other representations of USGS water quality parameters graphed.
- Ray Huntington- Show connections between nitrogen and other water quality parameters
- Include an explanation of TN, DN, DIN, DON, etc. in nitrogen chapter.

- A goal of the report will be to distill what water quality data means and in what ways we have an influence on that data.

- i) Chlorophyll-a:
 - A statistical analysis should be done to show the relationship between chlorophyll-a and nitrogen.
 - Fractionated chlorophyll-a is no longer an analyzed parameter by the SCDHS.
 - The USGS most recent instantaneous value for each parameter is the most recent data value collected; data collected since the last data transmission (routinely once every hour) is transmitted via satellite in a packet for updates to the USGS website. A useful overview of the USGS data is available by accessing the Daily Data for each parameter which provides a daily maximum, a daily minimum and a daily mean (or median).
 - It is important to note that the USGS monitoring sampling depth does not change with the water depth during tidal flow. The photic zone does change, but that is not reflected in the USGS data; therefore some of the fluctuations in chlorophyll-a may not be captured in the data. Seasonal water quality profile should be done to show variability to understand variability in upper water column and bottom of the water column.
 - Light sensors could be added on to the USGS monitoring sites to show photic zone change.

- ii) Dissolved Oxygen:
 - The amount of time below the DO water quality standard could be a useful indicator to show health of the estuary.
 - Dissolved Oxygen Sondes may be a moderately cheap (\$1,000-\$5,000 each Sonde) way to get continuous DO data across the estuary- data upload manually every 2 weeks.
 - Suffolk County has consistently put DO meters in a few locations during the summer: North Sea, Sag Harbor, Hashamomuck Pond and others.

- iii) Nitrogen:
 - Water Quality Protection and Restoration Project (WQPRP) funding could be a funding source to pursue improved Water Quality (WQ) sensor data- economic development connection between WQ and shellfish industry.
 - Ray Huntington- Should there be more stormwater management to include in nitrogen monitoring?

- iv) Harmful Algal Blooms:
 - Charlie deQuillfeldt- HAB maps should not show Diarrhetic Shellfish Poisoning (DSP) and Paralytic Shellfish Poisoning (PSP) as a HAB that occurred. DSP and PSP are medical conditions that are associated with the presence of Red Tide and the plankton, *Dinophysis acuminata*.
 - Map is limited by where monitoring has been done and where people have spotted an HAB, hypoxia locations are limited by where there is a DO sensor.
 - William Wise- PEP TAC should have a liaison that will be involved in HAB workgroup.

4. Next Steps and Meeting: Matt Sclafani- Next discussion is to fine tune what environmental indicators we should be using, what data we should be looking at, and work with other National Estuary Programs to learn what environmental indicators they are using.

5. Adjourn