*Minutes to be accepted at next*
*Technical Advisory Committee Meeting*
*In May 2025*

**Peconic Estuary Partnership**
**Technical Advisory Committee Meeting Agenda**
**January 8th, 2025, 10:00 am – 12:00 pm**
*NOTE: This meeting will only have a virtual option*
**Youtube Link:**
https://youtu.be/rRI6djQcCHQ

**10:00 -** Welcome and sign in

**10:05** – Roll call : Marissa Velasquez-Rosante (*Natural Resources Program Manager, PEP*)

*The role of the TAC was readdressed, as well as the reminder of the core voting organizations. Each voting organization gets one member vote.*

**10:20** - Committee discussion and vote to move TAC elections to October 2025

*Committee voted to move TAC elections to October 2025. Nominations for TAC Co-Chairs to be sent to Marissa or PEP Program Office (marissa.velasquez@stonybrook.edu) before the joint August TAC/NRSC Meeting. During this meeting, nominations will be announced and discussed with the committee.*

*Question of term limits for chair and co-chair positions were discussed. The program officer will clarify, but there is no belief to be term limits for chair positions, and can be renominated for the position.*

*Matt Sclafani mentions that he has been chair for this committee for multiple terms, therefore it is believed that term limits do not exist.*

**10:30** - Dr. Christopher Gobler (Stony Brook University, SOMAS) *Harmful Algal Blooms Project - Priority Embayments Study*

**10:45** - Questions

*Theresa Masin asked what is the correlation between precipitation rate and occurrence of algal blooms? Are there years where there is significantly more rain and higher concentration of algal blooms? Or is there more nutrient loading and rainfall that dilutes concentration of algal blooms in the bay itself?*

*Dr. Gobler states that there are a lot of variables that come into play with this, such as which harmful algal bloom it is, and which creek it is occurring in. He mentions that an algal bloom can actually be flushed from a creek due to rainfall. However, Cochlodinium responds strongly to heavy rainfall. It is diluted in the water initially, and then it will intensify.*

*Rain and runoff itself isn't a very nutrient intense source compared to groundwater flow, less than 5% of what comes in through ground water. It is complicated. It can lead to a delayed effect, entering*

*through the aquifer and into the estuary.*

*Matt Sclafani asked about experimental design, were the samples taken from the field to the lab?*

*Dr. Gobler responds that the samples were taken from the field and brought back to the lab, manipulated in regards to the nutrient levels, and then incubated and then brought back out to Old Fort Pond, so they are getting near ambient light and temperature within the treatments.*

*Matt also asks what form of nitrogen is being used in the experiments.*

*Dr. Gobler explains that they utilize ammonium. It is the easiest form of nitrogen for phytoplankton to use and the most available. Different forms of nitrogen that come in from groundwater. Timing of events and concentrations, high levels of nitrates in the winter, by the time it gets through the vent, it comes out as ammonia.*

*Is there a spatial difference between harmful algal species within the estuary? Are there different needs for certain nutrients in specific locations?*

*More important from management standpoint, is target per location. Suffolk County Subwatershed study, target nutrient reduction goal. More tricky to determine nutrient reduction for all three of these HABs. Might affect some and not all, can be a little tricky. Hope to have baseline data, different metrics were used in previous studies.*

*Looking at a serious reduction for these sites, all Suffolk County called for 50% reduction, which is why this is the starting point for the study.*

*Nitrogen to phosphorus ratio, each site is different with the N:P ratios. Jockey creek fluctuates between the two.*

**10:50** - FY25 Workplan DIscussion

*Marissa Velasquez-Rosante gives a brief description of tentative plans to be added to the FY25 work plan. The project lists were as follows: eDNA study to be conducted with diadromous fish within the Peconic River System, Lake Montauk Stormwater Plan, and North Fork Tidal Wetland Restoration Project. If there are other projects you have in mind, please reach out. We can utilize*

*Matt Sclafani asks about the potential eDNA study and quantifying diadromous fish. He mentions eDNA isn't a great method to use for that. What technology would be used to quantify?*

*Marissa mentions this has been done with other groups and is a project partnered with the NYSDEC. The idea is to experiment with the technology and replicate what other groups are doing. The focus will be less on quantifying, and more determining the presence and the movement of fish within the Peconic River system. Highlighting where they are going and what fish passes they are utilizing would be the main target of the study.*

*Matt mentions that Keith Dutton at Monmouth has used eDNA with sturgeon. Potential to reach out to him for more technical advice, as well as other options (acoustic studies?).*

*Nicole Maher asks for the clarification of the location of the tidal wetland project.*

*Marissa mentions that the area is proposed in the Town of Southold, near Narrow River, off of Narrow River Rd. Proposed state land regulated by the NYSDEC. Looking into the logistics of that location.*

*More information to come.*

*Theresa asks about eDNA, not an endemic population, could we use eDNA to determine if there is greater genetic diversity within the populations? Is there enough genetic diversity to support a population?*

*Matt mentions that eDNA is more utilized for presence/absence. It is possible to get the community engaged, this will also depend on sampling frequency, and other anticipated sampling parameters.*

*Dr. Gobler has done eDNA work before, it is more to determine presence and absence. It is valuable to know if the fish are present, especially depending on the flow of water. It is definitely not great for quantifying but for relative abundance, it can be useful within the Peconic system. Results that demonstrate high relative abundance, can also be useful, especially depending on the time of year the sampling occurs.*

*Matt mentions that alewife samples might need to be collected to determine genetic diversity. Transplanting of alewife throughout the different estuaries can contribute to diversity but within the Peconic River system, that is unknown.*

*Marissa mentions that another important aspect of this project is to validate our partnered citizen science programs through Seatuck Environmental. This work wouldn't replace the current monitoring work that is being conducted at Woodhull or Grangebel, this project would work in tandem with existing projects, and be used to engage in more citizen science.*

**11:20**- PEP Program Office Updates

*Marissa provides the schedules for the PEP/PBK Winter Watershed Walk Series. Next walk is January 11th, please attend and pass along the information to those that would be interested!*

*Marissa also announces the PEP Mini Grant Award Winners. The theme for this year's projects are surrounding our Clean Waters initiative as stated within PEP's CCMP Goals.*

*Marissa also called for updates on the 2023 Mini Grant Award recipients.*

*Matt provided an update on the horseshoe crab/diamondback terrapin project. Tags were successfully placed on horseshoe crabs this past spring. Limited detections from horseshoe crab tags as expected, but hopeful there will be greater detections this upcoming spring. There is a lot of diamondback terrapin data from those off of Orient Harbor. They were remaining active till December and now they are dormant, either hibernating or batteries on tags are dead. We will have data to share in the spring/summer with that data to review.*

*Maureen Dunne provided an update for Halfshells for Habitat; currently working with SOFO Sea Farmers and wanting to expand efforts on the East End. Met with Southampton Town and Riverhead Town, going through the legalities of the process. Working with the rotary in Riverhead to increase shell recycling. Southold Town and Cornell are working together, looking to have them partnered with H4H. Maureen is looking for any form of networking to continue to move efforts forward.*

*Maureen Dunne also provided an update on the NYSDEC Lidwigia Removal Project. 2024 was the last year two herbicides were being applied (specific to Lidwigia). Questions of appropriateness of the use of these herbicides, and its effects on the invasive species. The program is considered a success as they have decreased the presence of Lidwigia. They are removing large areas of Liudwigia, but finding*

*more invasive species appearing. Overall there is a decrease in the amount of herbicide use but diversity of aquatic invasives is getting larger. Large invasive removal has been a success just the appearance of other invasive species begs questions for future management.*

*Matt speaks on the PEP Horseshoe Crab Workgroup: a couple of meetings to review the issues and the conservation around it. Follow up meeting about the link between other intertidal species, bulkheads, rising sea levels, and the loss of intertidal habitat. The plan is to have a draft action plan, ready for March, and then given to the larger TAC/NRSC to review and then produce an action plan for implementation. Hope to incorporate the work of the Geospatial Center and VIMS and their Shoreline Management Model. Look for updates in March.*

*Patrice Dalton asks if the VIMS model is Python-based and mentions the use of the model and utilizing the existing data we have as criteria for the model, leading to a lot of potential in the future.*

*Water Access and Bulkhead Removal Sites: Call for project sites for bulkhead removal. Needs to be public land! Reach out to the PEP Program Office for any site suggestions.*

*Call for participants and volunteers for the CLPS Tool and Strategy Workgroup. Please reach out to the program office, if interested in participating.*

*PEP Data Hub: Call for any technical assistance as to the organization of data for the PEP Central Data Hub operated through the Geospatial Center*

*Reminder: The next Natural Resources SubCommittee meeting will be February 5th, 2025. If you are a town or project representative, please prepare updates to discuss within the meeting. Reminder to also enter project statuses within the project mapper. A guide will be circulated in the post-meeting minutes.*

**11:45** - Public Comment

**12:00** - Adjourn

***Next Technical Advisory Committee Meeting will be held on May 7, 2025 at 10AM***