



Meeting Minutes:

Attendees: Casey Personius, NYSDEC; Mark Parker, CTDEEP; Anthony Caniano, SCDOH; Cayla Sullivan, EPA; Chet Arnold, UCONN; Dave Dickson, UCONN; George Hoffman, SHTF; Holly Drinkuth, LISS CAC/TNC; Jimena Viscasillas-Perez, NYSG; Judy Preston, CTSG; Kathleen Knight, CTDEEP; Kelly Streich, CTDEEP; Leah O'Neill, EPA; Mark Parker, CTDEEP; Sarah Deonarine, MBPC; Susan Van Patten, NYSDEC; Victoria O'Neill, NYSDEC/NEIWPC. Peter Linderoth, STS; Eric Swenson, HHPC; Evelyn Powers, IEC; Jamie Vaudrey, UCONN; Kristin Kraseski, NYSDEC; Marybeth Hart, CTDEEP; Sarah Crosby, HW

2020 Long Island Sound Report Card and Sound Health Viewer Update.

Peter Linderoth, Save the Sound, gave an overview of the 2020 Report Card and Sound Health Viewer update. This year's report card also included Bay Grades that assessed the embayments based on data from the Unified Water Study. View the full report [here](#).

Questions & Comments:

M.T. – Has there been a difference in public response since inclusion of the bays?

P.L. – Absolutely. People had a tendency to attribute the open water grades to the associated bays and that isn't necessarily the case. We have gotten a much more localized response to the report card with the Bays. It's a great starting point to talk about local conditions and pollution sources.

Action Item – Mark T. to and Peter L. to set up date for algae tossing!

Peter also gave an overview of the Sound Health Explorer. The Sound Health Explorer takes data from EPA's Water Quality Portal for LIS beaches and grades the local beaches swimming conditions based on frequency and magnitude of failures. The Sound Health Explorer presents historic data and integrates the report card information as well. The UWS fuels the Bay grades but this data is also shared with EPA through WQX, NYSDEC for LINAP consideration, CTDEEP for their integrated Water Quality Report, and, in general, helps create a roadmap to prioritize both restoration and protection. Explore the tool [here](#).

Questions & Comments:

D.D. – Is the metadata behind the layers available in the explorer

P.L. – Yes, the raw quality assured data currently lives on the website.

C.P. – How has the general public responded to the update and is the general public having any difficulty understanding the data?

P.L. – Not really. The general packaging of the information with clear grades and colors makes it pretty user friendly to the public. Most of the feedback that we see is from concerned individuals or groups who are unhappy with the grade their local waterbody received and want to know what they can do to improve it. Which is great. We haven't gotten a lot of people that follow up on good grades to understand what they can do to keep it that way but people who see those F's, D's, and C's are directed to the take action and work to improve water quality. It has gotten some traction with

teachers who use the data as part of their classroom studies, which wasn't the initial intent but has been a nice side effect.

LIS Bioextraction Initiatives Update

Kristin Kraseski gave an update on LISS Bioextraction Initiatives. Bioextraction is the growing and harvesting of shellfish and seaweed as a method to remove nitrogen and other nutrients from coastal waters. Nutrient Bioextraction can be used to remove excess nutrients once they have already entered the waters and thus work to reduce eutrophication and other negative consequences of nitrogen pollution. The Long Island Nitrogen Action Plan (LINAP) began the Bioextraction Initiative in 2018, and aims to improve water quality in both NY and CT by removing excess nitrogen. The Initiative is investigating how effectively aquaculture removes excess nitrogen and challenges to establishing a nutrient bioextraction industry. It is based around four main activities: 1) Development of products to help aquaculture industries identify appropriate sites, 2) A comprehensive guide for permitting shellfish aquaculture 3) Planning and development of nutrient bioextraction pilot projects and 4) Identifying overall economic viability of nutrient bioextraction. An aquaculture viewer was developed and is an interactive online map to assist new or current aquaculture growers to site potential aquaculture operations. Check out the map [here](#). There is currently a draft version of a bioextraction guidance document that is being developed to help potential aquaculture industry with permitting and other logistics. There has also been a Sugar Kelp Bioextraction pilot project at sites in Nassau and Suffolk County. The Bioextraction Initiative is looking forward to a ribbed mussel bioextraction pilot project, a Seaweed Symposium, and an Economic Feasibility Study to investigate the economic viability of bioextraction activities. More information can be found on the [LINAP website](#) and [LISS bioextraction website](#).

Questions & Comments:

G.H. – Dave Burg has reached out to Setauket Harbor Task force to work on a project to grow and harvest Sugar Kelp in Setauket Harbor.

K.K. – That's great. I'd love to hear more about that as it progresses.

P.L. – Do the organisms need to be removed from the water or harvested for it to truly be bioextraction?

K.K. – I need to look into this further but there is research related to uptake rates and Nelle, previous bioextraction coordinator, has started working on this. There are two ways to look at this problem: you can have shellfish sanctuaries that are containing some of the nitrogen and improving water quality that way versus actually harvesting the shellfish or seaweed and removing the nitrogen completely.

M.P. – With the fertilizer project, was there a composting step or was it cleaning, drying, chopping it and blending it into the soil?

K.K. – They took the kelp out and dried it and processed it but there wasn't a composting step.

LISS Enhancement: Tracking Water Quality Contaminants to Inform Mitigation Pilot

Evelyn Powers, IEC, gave an overview of a LISS enhancement proposal. This project came about through discussion with DEC and IEC to attempt to remedy a recent problem and progress the Open Shellfish Areas Ecosystem Target of the LISS. There has recently been significant expansion to two closures, outside of Baiting Hollow and Wading River Creeks, in the LIS, which now cover over a mile of shoreline. Understanding the cause of the recent expansions will help to mitigate problems before it gets worse. Additionally, this is an opportunity to pilot a source tracking methodology that can be applied in other areas of the sound to mitigate a variety of pathogen problems in LIS waters. Given the relatively targeted geographic area, recent expansion of these closures, and new methodologies that detect signals for specific loading sources (such as human sewage), we think this is a great opportunity to pilot a methodology and abate future closures. Project implementation will

The Watershed and Embayments Work Group assists the Long Island Sound Study Management Conference in effectively implementing the nonpoint source mitigation actions in the watershed and embayments as outlined in the LISS Comprehensive Conservation and Management Plan.

receive guidance from a project advisory panel that consists of local, state, and federal agencies including Health departments.

Questions & Comments:

P.L. – We will be really interested in your MST work and would love to stay in touch. We were using a lab in Florida because STS does a lot of pathogen monitoring in Westchester, Greenwich, and Queens, and we are always looking for a cheaper way to get that done. We are currently looking into a new lab Colorado, Jonah labs, that is still pricey but much more affordable. We piloted their method and it worked out pretty well, but they seemed to have refined it some since.

E.P. – MST work is very pricey and one of the things we learned in our Passaic project is the importance of having local partners. Once we identified problem outfalls, we were able to pass it off as a compliance issue to local regulators. The adaptive management can really help with the costs. You can filter and preserve samples so that once the conventional pathogen indicators are analyzed you can decide if you should submit the samples for the more expensive analyses.

General Check-In

- P.L. – STS has multiple positions open including a Clean Water Advocate and Ecological Restoration Manager. Check out [open positions](#) at Save The Sound.
- C.A. – UCONN has a viewer up that shows 1 meter land cover from NOAA. The normal data is 30 meter resolution and this is 1 meter resolution so it's pretty amazing. Check out [new viewer](#).
- M.P. – Maybe we should start thinking about funding some atmospheric Nitrogen deposit mitigation projects.
- K.S. – CTDEEP has initiated their embayment projects and will be organizing bays into bins based on flushing times and other characteristics to better understand the type of model that would be best suited to each embayment. We are also looking at the Norwalk Harbor and Mystic River and Harbor area to do some model planning. A contractor is working on data collection and sampling plans to prepare for model development. Another study funded by the LISS involves assessment of Onsite Wastewater Treatment Systems in coastal areas and we focused on 10 watersheds where we improved an inventory of systems and worked on attenuation factors of nitrogen. That first phase of the project is complete, and I would be happy to present on it if the group is interested. Executive summary attached with these minutes.

Next Meeting

Wednesday, February 10th from 10-12pm

Adjourn

Thanks for a productive meeting. Have a great day and stay safe!