

Watershed and Embayments Work Group Meeting Notes
Wednesday, February 8, 2023
Meeting conducted remotely via Microsoft Teams



Attendees:

Kelly Streich, CT DEEP (Co-chair)
Mary Arnold, NYSDEC/NEIWPC (Co-chair)
Qian Lei-parent, UCONN
Jordan Bishop, NEIWPC
Samantha Wilder, IEC/MBPC
Dave Dickson, UCONN
Jonathan Morrison, USGS
Evelyn Powers, IEC
Jaime Viens, Conserve CT
Sarah Healy, NYSDEC/NEIWPC
Sue Van Patten, NYSDEC
Peter Linderoth, Save the Sound
Sarah Deonarine, Manhasset Bay

Robert Burg, NEIWPC
Paul Stacey, Footprints on the Sand
Esther Nelson, EPA (EPA Lead)
Casey Abel, EPA (EPA Lead)
Samarra Scantlebury, NYSDEC
Paul Stacey, Footprints on the Water
Heather Johnson, Friends of the Bay
Jimena Beatriz Perez-Viscasillas, NYSG
Sarah Crosby, Maritime Aquarium
Holly Drinkuth, TNC
Mary Beth Hart, CT DEEP
Richard Friesner, NEIWPC

Introduction:

The meeting was called to order at approximately 10:04am in the teams meeting by co-chairs Mary Arnold and Kelly Streich.

Feedback on [Local Watershed Assessment Tool](#):

Kelly Streich initiated the conversation to follow November's presentation and the demonstration of the tool. The goal was to get some feedback from folks as far as capability and usefulness. Questions were taken and areas of support for the tool were also discussed to use it to the fullest capacity.

Questions & Comments:

- [Peter Linderoth](#) asked questions regarding and went through a "How-to" simulation for the scenario builder, with assistance from Qian Lei-Parent from UCONN Clear.
- No current plans to bring the tool to NY until high resolution data of land cover is acquired.
- [Paul Stacey](#) said that the thought behind the tool was to not just rely on nitrogen and best management practices but look at bio-integrity.
- [Dave Dickson](#) UCONN, added the focus on riparian areas and engage communities on work in those areas. This tool is to be used for broadscale planning.
- [Peter Linderoth](#) asked how successful it has been in engaging the communities and utilizing planning for municipalities.
- [Dave Dickson](#) responded saying it is too soon, just was released, but we are working on trainings to embrace them, rather than wait for them to come to us, to show them how the tool can help them specifically.
- [Paul Stacey](#) added the LWAT tool will show what needs to be done on a landscape perspective and noted the benefits to EJ areas.

FY23 Proposals Supported by WEWG: All presentations will be supplied with meeting notes. Kelly Streich and Mary Arnold introduced next agenda topic.

Interstate Environmental Commission, Regional Fecal Monitoring Index (FY22 and FY23), Evelyn Powers:

- Update from previously funded FY22 project: Year 1.
 - Inventoried existing watershed pathogen monitoring effort
 - Identified data gaps and priority areas based on existing data

- Created a set of standardized, shared, monitoring, quality assurance, and data management protocols.
- FY23: Pilot the project in the summer with 2-5 groups.

Questions:

Peter Linderoth asked about involvement with the states regarding shellfish requirements. Evelyn explained they have been and plan to keep the conversations going and align work with individual state requirements.

CT DEEP, Development of Benthic Macroinvertebrate Sampling Methodology and Tools to assess Embayment Health in LIS Phase 2, Kelly Streich

- The project objective is to develop a macroinvertebrate index of biological integrity for LIS embayments using the white paper from Phase I and subsequent NCCA sampling results.
- This approach has been developed and used in other programs, such as Chesapeake Bay, Tampa Bay, Puget Sound, Great Bay.
- This approach will allow LISS to use benthic macroinvertebrates as indicators of water quality to assess embayments and observe response to change over time.
- This project is a continuation of Phase I.

Funded FY18: Phase I was designed to direct the collection and analysis of scientific information to better assess the ecological condition of LIS embayments; evaluate existing estuarine benthic biological indices; and prepare a sampling and analysis plan to acquire data specific for indices testing and assessment of biological conditions in LIS embayments.

Funded FY19 and FY20: National Coastal Conditions Assessment embayment intensification sampling. Samples were collected in a total of 120 sites located in both CT and NY's embayments, and analyzed according to NCCA protocols.

No Questions or Comments.

NYSDEC DOW, Mary Arnold:

Residential Fertilizer Community Based Social Marketing Project

- Objective: Address undesirable fertilizer behaviors by homeowners
- Barriers will be identified by results of a LINAP survey.
- Methodology: CBSM campaign will be developed by an industry professional, which will be contracted through NYSDEC.

Questions & Comments:

Jimena Beatriz Perez-Viscasillas (via chat): What'll be the range of that CBSM project? (all of LI? will it include parts of the city?)

Mary Arnold answered the exact area hasn't been selected yet, we will go through that process with the consultant, but believe to start in Nassau County.

FY23 Large-scale bioextraction pilot project:

- To move bioextraction out of the theoretical phase, where we are estimating farm-scale impacts from one or two kelp lines in the water, there is a need to determine whether large-scale projects are feasible.
- This project will determine whether those removal rates scale in a linear way as projects increase in size and will demonstrate the potential of bioextraction operations if they are built to commercial scale.
 - Municipalities can then use this information for management purposes to determine if and where bioextraction may be useful in reaching their nitrogen reduction goals.
- This project will have two phases, the first being to determine the most suitable site for larger scale bioextraction, and whether permitting will be possible. The second phase will be the in-water pilot project itself, with a determination of N removal rates and monitoring of environmental impacts.

Funded FY22: Assessment of wild harvest of seaweeds as a tool to bioextract nutrients from coastal waters

- Previous work focused on cultivated species for bioextraction, but naturally occurring seaweed beds can remove excess nutrients as well. Often the growth of nuisance seaweed is the direct result of excess nitrogen in the waterways, so this method may ensure that we are using bioextraction where it is needed the most.

Funded FY22: Investigating the long-term storage of viable sugar kelp spores and use of cultivated sugar kelp for seaweed turfgrass fertilizer amendment study

- Previous FY22, FY21 and FY20 sugar kelp bioextraction work demonstrated a need for consistent supply of kelp spores at a consistent time of the year.
- Seaweed experts from SoMAS suggest that holding naturally released spores could be possible for extended periods of time, which would allow bioextraction to become a self-sustaining industry.

FY23: Sugar Kelp Direct Seeding Pilot Project

- Starting to explore new and innovative methods for ensuring consistency in kelp growth between years.
- Dr. Yarish and others on the LISS Bioextraction Initiative's "Bioextraction Advisory Committee" have identified direct seeding as an important next step for allowing nutrient bioextraction to become economically feasible, and this work will build on the work that Dr. Yarish has started.

FY23: Investigation of the Impacts of Heavy Metals in Seaweed Fertilizers

- This is something that previous projects of the Bioextraction Initiative, and there appears to be some promise for the use of seaweed as a fertilizer amendment.
- For bioextraction to become an economically feasible, commercial endeavor, there needs to be consideration of uses of the harvested materials.
 - Because seaweed grown for bioextraction is often grown in areas with water quality impairments, they may pick up contaminants and heavy metals in addition to removing excess nitrogen from these waters.
- This proposed project will begin with a review of existing literature around heavy metals in soils and/or fertilizers to identify any gaps that may be related to seaweed fertilizer amendments. Deduce how contaminant and heavy metal levels in locally produced seaweed fertilizer amendment products compare to other commercial fertilizers and amendments on the market, and/or if contaminants build up in the soils after repeated use of the amendments and whether this should be a cause for concern for local growers.

Questions & Comments:

Paul Stacey suggest bioextraction of hydrilla in the CT river, to remove excess nutrient with intervention technique.

Updates from Workgroup Functions Management Committee Meeting

Led by Casey Abel and Esther Nelson

- STAC and CAC
 - New NY STAC representative to the CAC is Maria Tzortziou.
 - CAC- New members, funding finder (NY), Francine Gordon (new member coordinator)
- CCMP Progress Report and Update/Revision
 - Next update is due in 2025 but could also be a major revision - under discussion.
- Overview of FY23 Budget – See Management Committee notes for more detail
- Update on Bipartisan Infrastructure Law
 - Justice 40 Initiative - Justice40 planning requirement is the equity strategy, will be needed to continue to provide match waivers for BIL funds
- Executive Steering Committee – 1/17/23
 - Approved governance document.
 - Discussed the budget, introduced name change idea and discussed opportunities for involvement of tributary states.
- Long Island Community Impact Fund cooperative agreement with Restore Americas Estuaries
 - New subaward and technical assistance program focused on underserved communities
 - Funded through BIL, ~\$2.3 million awarded to date, up to \$5 million available

LISS Technical Workgroup Coordination, Casey Abel

- Website access and usage updates
 - Email blast from Evelyn Spencer to WG co-chairs, re: Workgroup website pages.
 - Working on timely posting of minutes
- Shared calendar
 - Easier to find on LISS website
 - Links to teams meeting on internal Sharepoint site
 - Contact WG chairs or Casey Abel for links if you do not have access.
- Workgroup cross-collaboration
 - Overlapping meetings
 - EJ meeting with each WG
 - Francine Gordon supporting WG collaboration for CAC

Long Island Sound Study Renaming Project- Robert Burg

Not rebranding, simply renaming to make the message clear and concise and more in line with our work.

Options:

1. Long Island Sound Estuary Partnership
2. Long Island Sound Estuary Program
3. Long Island Sound Partnership
4. Partnership for Long Island Sound
5. Long Island Sound Restoration Partnership

Questions

Paul Stacey suggested “healthy” or “regional” in the name.

Kelly Streich try to connect to the community, like “Community Partnership for LIS”, but noted that it could be too long.

Sue Van Patten asked how the other programs are including that perspective, after rereviewing the slides, the word estuary was pervasive. Noted that PEP has changed from program to partnership.

Peter Linderoth Surveying partners at CAC meeting good idea but engaging with communities and laypeople to connect with them and determine the best name possible.

Paul Stacey also noted an option to remain LISS because we are still doing a lot of studying.

Next Meeting & Adjournment

- In-person Meeting Feedback Welcomed – Yes or No?
 - Kelly Streich we could meet in-person for the August meeting
 - Peter Linderoth offered a tour of their new water quality laboratory in Larchmont, NY.
- Meeting was adjourned at 11:50pm.
- Next Meeting will be Environmental Justice focused so any thoughts or questions ahead of time are welcomed.
- **Next Meeting Date:** May 10, 2023