

# Watershed and Embayments Work Group Meeting Notes

Wednesday, November 10, 2021

Meeting conducted remotely due to COVID-19



## Attendees:

Casey Abel, EPA	Jonathan Morrison, USGS
Mary Arnold, NYSDEC/NEIWPPC (Co-chair)	Esther Nelson, EPA
Chet Arnold, UConn, CLEAR	Leah O'Neill, EPA
Jordan Bishop, NEIWPPC	Vicky O'Neill, NYSDEC/NEIWPPC
Sarah Crosby, Earth Place/Harbor Watch	Mark Parker, CT DEEP (Co-Chair)
David Dixon, UCONN	Jimena Beatriz Perez-Viscasillas, NYSG
Holly Drinkuth, TNC	Sarah Powell, NYSG
Richard Friesner, NEIWPPC	Judy Preston, CTSG
Michelle Golden, NYSDEC	Evelyn Powers, IEC
Mary Beth Hart, CTDEEP	Sarah Schaefer-Brown, NYSG
Elizabeth Hornstein, NYSG	Nicole Tachiki, EPA
Brittney Izbicki, USGS	Susan Van Patten, NYSDEC
Kristin Kraseski, NYSDEC	Tim Visel
Peter Linderroth, STS, UWS	

## Introduction:

Mark Parker called the meeting to order at approximately 10:00am in the Teams Meeting. Introduced Mary Arnold (NYSDEC) as the New York co-chair. Recapped October 21<sup>st</sup>, Management Committee meeting, discussed the Infrastructure, Investments and JOBS Act passed, which affords LIS an additional \$106M over 5 years (~\$21M per year). Last year, LIS budget process was to have based proposals and an enhancement call for our partners to be able to highlight direct actions that were needed to implement the CCMP. The workgroups all developed workplans and priorities. Mary Arnold and Michelle Golden (NYSDEC) put together a spreadsheet that compiled these workplans and priorities. The next stage is to think about high priority FY22 needs and specific funding actions, and identify any overlap between workgroups and federal, state, and local partners.

## Recap of Bio-extraction Presentation: Nutrient Bio-extraction Initiative: Reducing Nitrogen in Long Island Sound – Kristin Kraseski (NEIWPPC/NYSDEC) Bio-extraction Coordinator for the Long Island Sound Study:

- Kristin Kraseski (NEIWPPC/NYSDEC): Provided a summary of how bio-extraction can benefit water quality in the Long Island Sound. Nitrogen is a leading cause of water quality deterioration in Long Island Sound. New York, Connecticut, and EPA have all developed strategies to address the issue, but local leaders (ex. Suffolk County) have developed a comprehensive sub-watersheds wastewater plan. Bio-extraction is the growing and harvesting of shellfish and or seaweed for the express purpose of removing nitrogen and other nutrients from coastal waters. There's been interest in bio-extraction in the Long Island Sound since before 2009 when the Long Island Sound study and others hosted and International Workshop on bio-extractive technologies for nutrient remediation and that was to promote new and innovative technologies for the management of hypoxia in the sound. Work within the sound then built on the discussions and outcomes from that workshop and this was followed directly by a few pilot projects investigating bio-extractive species of interest. Additionally, bio-extraction is specifically called out in 3 of the 4 themes of the Long Island Sound CCMP. Long Island Nitrogen Action Plan or LINAP is a multi-year effort by the New York State Department of Environmental Conservation to make meaningful reductions in nitrogen levels around Long Island. Provided an overview of a Sugar Kelp and gracilaria bio-extraction study, the harvested kelp is being studied to determine its potential use as a fertilizer. A pilot using ribbed mussels that builds on earlier work from UCONN is investigating their use for nutrient bio-extraction. Studies are also being conducted to overview potential markets for bio-extraction and overall economic feasibility. Highlighted some challenges such as: permitting and harvest variability (seaweed and shellfish are living organisms that

are affected by their environments). Hope to learn from examples from work in other regions such as kelp farms in Maine.

- Mark Parker: Could you use Unified Water Study data to find high concentrations of macrophytes, to identify areas for seaweed bio-extraction?
- Kristin Kraseski: Responded that it is a great idea and will follow up with Peter Linderoth and Evelyn Powers.

**Discussion of WEWG Work Plan and Priority recommendations for the FY22:**

- Identify 1-2 top priorities for FY22, so proposals/immediate actions can be developed
  - Support and increase implementation of projects and programs to reduce nonpoint source.
  - Deal with aging infrastructure and continue to support mapping and community science.
- Using Mary Arnold and Michelle Golden's excel spreadsheet, look for opportunities to overlap with other workgroups.
  - Implementing a coordinated and standardized pathogen monitoring program – overlap with Citizen's Advisory Committee and the Water Quality Monitoring Work Group.

**Next Meeting & Adjournment – Mark Parker**

- Meeting was adjourned at 12:00pm.
- Next meeting: February 09, 2022