Long Island Sound Eelgrass Collaborative Meeting – Virtual
September 24th, 2025 (10:00-12:00)

Participants: Suzanne Ayvazian – US EPA; Juliana Barrett – CT Sea Grant; Lauren Barrett – CT NERR; Mike Bradley – University of Rhode Island; Susan Bryant – Center for Student Coastal Research; Della Campbell – NYSDEC; David Carey – CT Department Agriculture; Sara Cernadas-Martin – Long Island Sound Partnership/NYSDEC/NEIWPCC; Emma Coffey – CT DEEP; Phil Colarusso – US EPA; Melissa DeFrancesco – Connecticut; Gabriella DiPreta – NOAA/NMFS; Matt Dorman – USDA; Alexander DuMont – NEIWPCC; Eve Frankin Lynes – SAVE Environmental; Julia Frees – Remote Ecologist; Jessica Griffin – Northeastern University and The Nature Conservancy; Torrance Hanley – Sacred Heart University; Sarah Healy – NYSDEC; Stephen Heck – Stony Brook University; Athena Hermann – Millstone - Dominion Energy; Emily Herz – CT DEEP; David Hudson – Remote Ecologist; Gavin Jackson – CT DEEP; Simen Kaalstad – Atlantic Coastal Fish Habitat Partnership; Shauna Kamath – NYSDEC; Jennifer Lafayette – USGS; DeAva Lambert – CTDEEP; Matthew Leason – UConn & CT NERR; Xiaoshu Lin – Remote Ecologist Inc.; Laura Logozzo – Hudson River Foundation; Katie Lund – UConn & CT NERR; Sabrina Lyall – CT DEEP; Kevin O'Brien – CT NERR; Candace Oviatt – Graduate School of Oceanography, URI; Jillian Pasquino – CT NERR; Suzanne Paton – USFWS; Kenzie Payne – USFWS; Sabrina Pereira – NOAA Fisheries; Carl Persson – Ocean Solutions, Inc.; Maria Rosa – Connecticut College; Maeve Rourke – CT DEEP; Judith Sarkodee-Adoo – NYC DEP; Courtney Schmidt – Narragansett Bay Estuary Program; Eric Schneider – RI DMF; Steve Schott – Cornell Cooperative Extension; Evelyn Spencer – US EPA; Kathryn Staebler – URI-GSO; Adam Starke – The Nature Conservancy; Isabelle Stinnette – NY-NJ Harbor & Estuary Program; Kelly Streich – CT DEEP; Cayla Sullivan – EPA Region 2 Long Island Sound Office; Hannah Vagts – Fishers Island Seagrass Management Coalition; Robert Vasiluth – Save Environmental; Jamie Vaudrey – CT NERR & UConn; Marissa Velasquez – Peconic Estuary Partnership; Tim Visel – Retired; Emily Watling – UConn & CT NERR; Abbie Winter – CT DEEP; Harry Yamalis – CTDEEP

I. Welcome and Overview

II. LIS Eelgrass Mapping and Monitoring Strategy – Mike Bradley, URI

Mike Bradley presented updates on the mapping and assessment efforts in Long Island Sound, outlining the goals of the intercomparison study and sharing processes. Methods for data collection and defined tiered approaches were presented, as well as results from 2024 and 2025. More information on the data collection, results, and status can be found on the LIS Partnership website.

Q&A

What is the smallest area that can be detected using these remote technologies?

- Remote sensing has widely known detection limits and may not capture every individual eelgrass shoot. This methodology is designed to track and monitor beds that are greater than 5% cover, rather than detect every shoot.

Could the results from Barleyfield Cove support extending survey activities beyond current recommended deadlines (October 1 for New England and October 15 for mid-Atlantic)?

- The EPA typically exercises caution when extending monitoring timelines too far into the fall.
- Extending the survey windows largely depends upon the characteristics of the waterbody. In more protected areas like Barleyfield Cove, where conditions tend to remain relatively stable throughout the season, an extension may be justified.
- Exposed meadows can dramatically shift in response to weather events.
- If the surveyor/researcher demonstrates that survey accuracy would improve dramatically if fieldwork was delayed by a couple of weeks, and the site was protected, an extension may be approved.

III. Pilot Project: Eelgrass Area Classification in ArcGIS Pro – Kelly Streich & Abbie Winter, CT DEEP

The purpose of this study was to evaluate the feasibility of using drone technology to collect imagery and develop an automated method to delineate eelgrass bed area. The project involved assessing the quality of the imagery and comparing the results of hand-digitization with those generated by the automated tool. CT DEEP has produced a comprehensive manual that outlines the steps and provides training data in a tutorial-style process that is available upon request.

Q&A

Could you do a sensitivity analysis looking at a threshold lower than 50% cutoff for the "no eelgrass/other" category?

- Over 80% of the eelgrass samples fell within the greater than 50% range that was used, with minimal representation in the lower percentage categories.

If someone had access to a broader range of percent cover data, could they apply a lower sensitivity for the "no eelgrass/other" category?

- Lower sensitivity thresholds would not be effective in capturing density changes within the beds.

Does CT DEEP plan to use this methodology in other embayments?

- This was a one-time effort, though the knowledge and methods could be shared to support future research, including the development of advanced approaches such as AI-based systems. This would only be possible with a regular and consistent inflow of data.

For the percent cover measurements, were there GPS coordinates involved and what size quadrat does that represent?

- Correlation between percent cover and density of eelgrass was not investigated, especially since the methods utilized are imperfect regarding calculating percent cover.
- Quadrat dimensions used for visual percent cover estimates were 0.5 meters by 0.5 meters.

What cell size was used for this process?

- A cell size of 0.042 meters was used.

IV. Seed Based Restoration : Updates & Discussion – Steve Schott, Cornell Cooperative Extension & Jamie Vaudrey, UConn & CT NERR

BMP Draft Document Update:

Steve Schott provided a brief update about the Best Management Practices (BMP) DRAFT document, highlighting comments and input collected over the summer of 2025. The next version will be available in late 2025 or early 2026, incorporating key additions based on feedback. The newest addition will include lessons learned, specific guidance on construction of materials, recommended methods for long-term seed storage, the introduction of more detailed technical specifications, and clarification of the geographic region that the BMP is intended to cover. This is expected to be a living document and can be modified over the next few years of LIS restoration work.

The Long Island Sound Long-Tem and Large-Scale Eelgrass Seed Dispersal Restoration Program:

Jamie Vaudrey introduced the Long Island Sound "Long-Tem and Large-Scale Eelgrass Seed Dispersal Restoration Program" (funded by NEIWPCC) and outlined the program's overall goals and upcoming tasks. A project manager was hired to organize and support implementation, and current plans call for accommodating approximately 7-8 million seeds across the two primary sites: UConn Avery Point in

Groton, CT and with Cornell Cooperative Extension. The development of a tracking database was discussed to support seed management and restoration monitoring, as well as tracking where seeds are collected and planted. Three potential platforms are being reviewed, with a final selection expected to be recommended at the November Collaborative meeting.

V. Agency/Partner Updates

NYSDEC New Policy for Harvesting/Planting Seeds, Della Campbell

- The New York State Department of Environmental Conservation (NYSDEC) is implementing a new policy to track seagrass restoration efforts, specifically regarding where shoots and seeds are being collected and planted.
- The policy requests that practitioners involved in seagrass harvesting or restoration in New York share the following basic information:
    - Location and size of donor beds
    - Harvesting methods
    - Quantity of shoots or seeds collected
    - If possible: estimated seed capacity of the donor bed
    - Proposed restoration sites
    - Methods for restoration
- The policy will support consistent statewide tracking of restoration efforts and enhance project evaluation methods. By clarifying outcomes and successes, it also can facilitate understanding of how specific methods can influence performance.
- The NYSDEC has proposed this new tracking method utilizing a user-friendly online platform.
- A survey has been distributed to NYSDEC audiences asking practitioners for feedback on the seagrass restoration reporting and submission process.

Q&A

Is there a minimum threshold for the percentage of reproductive plants that must be left intact in the donor bed?

- The general guideline is to harvest no more than 10% or less of reproductive shoots.

What is the current status of policy regarding cross-state restoration activities?

- A 2024 white paper for LIS seed based restoration outlines agency guidance for seed movement.
- Restoration work conducted within the Long Island Sound estuary is viewed as lower risk. NYSDEC is not as concerned about potential adverse impacts from seed movement within the same estuary.

Atlantic Coastal Fish Habitat Partnership (ACFHP) Seed Transfer Guidance Document, Eric Schneider

- The Atlantic Coastal Fish Habitat Partnership (ACFHP) is supporting the development of a coastwide guidance document to help define and outline local, state, and regional seed transfer policies and agreements.
- This would include previous work done through the Collaborative.
- A planning committee is being formed, comprised of representatives from the ACFHP, academia, practitioners, and regulatory agencies to provide feedback for the board to consider on seed transfer.

Narragansett Bay National Estuary Program (NBNEP) RI Seagrass Task Force, Courtney Schmidt

- The NBNEP is re-energizing the RI Seagrass Task Force, with a renewed focus on Tier 1 monitoring.
- The initiative has convened researchers, practitioners, and regulators in Rhode Island to identify ways to fund monitoring when it is not embedded in the state's operating costs.

- The group will work to identify sources of funding, assess existing data, develop and refine research goals, and identify local needs.
- There is an opportunity for regional collaboration with LIS and Massachusetts.

Seed-Based Restoration Survey Results & Pilot Website, Tori Hanley

- The results of the seed-based restoration survey is now available as an interactive story map.
- A pilot website has been developed to collect baseline data on seed collection and transport.
- The platform will be available for broad sharing to support similar initiatives.

NEP Seagrass and SAV Monitoring Workshop, Cayla Sullivan

- A workshop is being organized to bring together National Estuary Programs (NEPs) for a focused discussion on seagrass and SAV monitoring efforts.
- Results would be produced in a white paper outlining the status and priorities of each program, including goals for moving forward.
- This workshop would also serve as a platform for needs assessment and identification of potential funding opportunities.

Seagrass Blue Carbon Journal Opportunity, Phil Colarusso

- Researchers working on seagrass blue carbon or greenhouse gas exchange are encouraged to contact Phil Colarusso, who is assembling a collection for a journal focused on these topics.
- The journal focuses on video production as well as manuscript publication, and is interested in methods of blue carbon or greenhouse gas exchange research in seagrass ecosystems.

LIS Eelgrass Collaborative FY 25-27 Funding Update

- Funding for the Collaborative has been approved for 2025-2027.