

**Long Island Sound Eelgrass Collaborative Meeting – Virtual
December 5th, 2024 (1:00-3:00)**

Participants: Juliana Barrett – UCONN; Alexandra Beardwood – US EPA; Steve Borghardt – Community Member; Mike Bradley – University of Rhode Island; Della Campbell – NY DEC; David Carey – CT Department of Agriculture; Jill Carr – MassBays National Estuary Partnership; Carriel Cataldi – CT DEEP; Sara Cernadas-Martin – NY DEC; Emma Coffey – CT DEEP; Phil Colarusso – US EPA; Alex DuMont – NEIWPCC; Barley Dunne – Aquaculture Director; Thaïs Fournier – RI DEM Division of Marine Fisheries; Tessa Getchis – UConn; Jessica Griffin- Northeastern University; Ashley Hamilton – CT NERR; Stephen Heck – Stony Brook University; Athena Hermann – Millstone; Emily Herz – CT DEEP; David Hudson – Remote Ecologist; Randall Hughes – Northeastern University; Jacob Isleib – USDA-NRCS; Gavin Jackson – CT NERR/UCONN; Simen Kaalstad – Atlantic Coastal Fish Habitat Partnership; Shauna Kamath – NY DEC; Kate Knight – CT DEEP; Jason Krumholz – CT NERR/UCONN; DeAva Lambert – CT DEEP; Matthew Leason – CT NERR/UCONN; Katie Lund – CT NERR; Sabrina Lyall – CT DEEP; Daniel Mullins – Connecticut Conservation Districts; Kevin O’Brien – CT NERR; Victoria O’Neill – National Audubon Society; Heather Palardy – URI; Sabrina Pereira – NOAA; Bradley Peterson – Stony Brook University; Maria Rosa – Connecticut College; Cori Rose – USACE; Forest Schenck – MA Division of Marine Fisheries; Courtney Schmidt- Narragansett Bay Estuary Program; Eric Schneider – RI DEM; Steve Schott – Cornell Cooperative Extension; Adam Starke – The Nature Conservancy; Kelly Streich – CT DEEP; Cayla Sullivan – US EPA; Mark Tedesco – US EPA; Jim Turenne – USDA; Hannah Vagts – Fishers Island Seagrass Management Coalition; Robert Vasiluth – SAVE Environmental; Jamie Vaudrey – CT NERR/UCONN; Tim Visel – Community Member; Kelsey Ward – UCONN; Emily Watling – CT NERR/UCONN; Andrea Williams – USACE; Abbie Winter – CT DEEP; Harry Yamalis – CT DEEP

I. [Updates on the LIS Coastal Zone Survey – Jacob Isleib, USDA-NRCS Soil Scientist](#) (PPT Link)

A presentation on the status of the LIS Coastal Zone Survey, focusing on the completion of its first phase along the Connecticut shoreline. A live demonstration of the NRCS Web Soil survey website was provided, emphasizing its applications in eelgrass restoration and habitat suitability analysis (see the [Eelgrass Collaborative website](#) for the meeting video that includes the live demo).

Q&A and Discussion with Jacob Isleib on Use of Soil Survey Products for Eelgrass Restoration

Is it possible based on your data to look at different layers within a core on the application/website?

- In Web Soil Survey, you can specify a depth for certain soil properties and limit the results to that specific part of the soil column. You can also download the data and do the same analysis in GIS, allowing you to generate layers and aggregate specific properties you wish into whatever depth you want to look at.

How extensive was your ground-truthing for the soil types, specifically the subaqueous soils?

- We had a high density of observations with a large team of individuals, conducting these surveys through knowledge-based modeling and in-field observation. Depending upon location, we had some areas with higher densities of ground-truthing. This project had a higher number of ground-truth and in-field observations than any I have ever worked on, with 800 full descriptions conducted.

Will the point sample information be available for use and download?

- We are happy to share that information with individuals who want and ask for it. The information can be easily packaged as a feature class or shapefile for use.

How many of those 800 samples were run in the lab, and for what parameters?

- Roughly 300 of those 800 samples had a lab analysis done, including parameters like initial and oxidized pH, grain or particle size, sulfides, and carbon.

What factors or points went into your interpretation of eelgrass habitat suitability?

- The presence or lack of sulfides and particle size are the two main parameters used to give a rating of eelgrass habitat suitability in this project.
- A report is available from NRCS: [Eelgrass Restoration Suitability – A Subaqueous Soil Interpretation](#)

II. Eelgrass Seed-Based Restoration Topics with Q&A

a. [CT & NY Guidance White Paper – Katie Lund, CT NERR](#) (PPT Link)

Special thanks to everyone who contributed to and helped review the white paper on seed-based restoration, which was developed in response to insights from the [Long Island Sound \(LIS\) Eelgrass Collaborative workshop](#) in June. Currently in the final stages of review, the draft is expected to be ready for distribution by the end of December 2024. An overview and breakdown of the paper's focus, writing process, and main conclusions were shared and discussed.

b. [Draft BMPs for Seed Transport – Steve Schott, Cornell Cooperative Extension](#) (PPT Link)

An update on the status of the Seed Harvesting and Processing guide was shared, which will include best management practices (BMPs) for seed-based restoration and transport. A potential draft is expected to be ready for review by the Collaborative in January 2025. A detailed breakdown of the document's key points were highlighted, including guidelines for seed harvesting and processing during seed-based restoration projects.

Q&A with Steve Schott

Will the document touch upon seed viability testing?

- We have done such tests in the past using the squeeze or Tetrazolium methods to see if seed germs are viable, as well as some basic petri dish germination rate testing. This was the standard back in the day, though there are inaccuracies in some of these methods. We want to rely on the Collaborative to provide some experience and opinions on this.

What should the process be for people if they want to help or get involved in this process?

- Once the draft is together, I would like to send it out to the Collaborative and give whoever wants to respond and review it a chance to do so. That way everyone will have the necessary contact information as well.

c. [LISS Seed Dispersal RFP – Cayla Sullivan, EPA-LISS](#) (PPT Link)

A Request for Proposals (RFP) from NEIWPCC, EPA, and the LISS will be released in early January 2025 to initiate a long-term, large-scale eelgrass seed dispersal program in LIS. The first year of the program will focus on infrastructure and equipment preparation, with restoration projects planned for the following three years, culminating in 2028. A mural board activity was launched to gather input on seed transport activities and to identify both short- and long-term priorities and goals for LIS eelgrass seed-based restoration activities.

III. Agency/Partner Updates

SAVE Environmental, Rob Vasiluth

- Large-scale seed collections in estuaries across LIS – around 300,000 seeds collected.

- Seed-on-clam method with 10,000 clams placed in a 100 square-foot area
- Conducted 13 outreach workshops getting students involved in the restoration project
- Compared the viability of seeds and processes from both Stony Brook University and Cornell Cooperative Extension.
- Returned to a restoration site that had no eelgrass in 2020. 2021 planting has yielded 10-12 acres of eelgrass growth.

Connecticut College, Maria Rosa & Remote Ecologist, Dave Hudson

- Working on restoration projects in areas where eelgrass has been found historically.
 - Doing plantings after taking water quality data such as temperature and salinity
- Using the seed-on-clam method deployed in 2023 in plots that can be returned to for later comparison
 - Relying on volunteer labor and assessing scalability
 - Looking to move away from diver/scuba deployment into parallel transect line deployments from boats
- Common garden experiments have been initiated at UConn Avery Point to understand germination rates with and without clams, as well as in different sediment types.

Zosterapalooza, Phil Colarusso

- Zosterapalooza will be March 26th in a hybrid format with an in-person component hosted in Boston.
- A call for speakers has gone out for anyone interested in presenting this year, as well as anyone who wants to display a poster.

LIS Eelgrass Collaborative May Workshop

A poll was launched to gather information from Collaborative participants on May workshop timing, location and content.