

Long Island Sound Eelgrass Collaborative Meeting-Virtual
Marth 1st, 2023 (1:00-3:00)

Participants: Jim Ammerman – Long Island Sound Study/NEIWPCC; Mike Bradley – University of Rhode Island; Taylor Breton – CT Audubon; Della Campbell – NY DEC; Joel Carr – USGS; Phil Colarusso – US EPA; Sarah Crosby – The Maritime Aquarium at Norwalk; Fred Fenton – Old Lyme Land Trust; Ashley Hamilton – CT NERR; Torrie Hanley – Sacred Heart University; Stephen Heck – Stony Brook University; Randall Hughes – Northeastern University; Gavin Jackson – CT NERR/ UCONN; Shauna Kamath – NY DEC; Sarah Kellogg – NY DOS; DeAva Lambert – CT DEEP; Matthew Leason – CT NERR/UCONN; Bill Lucey – Save the Sound; Katie Lund – CT NERR; Cara Manning – UCONN; Mitch McCloskey – San Juan Islands Conservation District; Alisha Milardo – CT Audubon; Jon Morrison – USGS; Chris Patrick – VIMS; Maria Rosa – Connecticut College; Athena Ryan – Dominion Energy; Jonah Saitz – USFWS; Judith Sarkodee-Adoo – NY DEP; Forest Schenck – MA Division of Marine Fisheries; Eric Schneider – RI DEM; Steve Schott – Cornell Cooperative Extension; Adam Starke – The Nature Conservancy; Isabelle Stinnette – Hudson River Foundation; Kelly Streich – CT DEEP; Cayla Sullivan – US EPA; Mark Tedesco – US EPA; Hannah Vagts – Fishers Island Seagrass Management Coalition; Jamie Vaudrey – CT NERR/UCONN; Kelsey Ward – UCONN; Emily Watling – CT NERR/UCONN; Greg Wilkerson – NY DEP; Abbie Winter – CT DEEP; Sandy Wyllie-Echeverria – University of Washington; Darcy Young – Narragansett Bay Estuary Program

I. Welcome and Meeting Overview – Katie Lund, CT NERR

II. [Presentation: Highlights and Lessons Learned from the Virginia Institute of Marine Sciences \(VIMS\) Seed Dispersal Project](#) – Chris Patrick, VIMS

Q&A

How much would you estimate a seed harvester would cost?

- The VIMS seed harvester was built about 17 years ago. Since they only have the designs and parts, a cost estimate is difficult. The harvester at VIMS has not been used since 2018, as all seeds since have been hand-collected more successfully.
- The harvester would work better in deep-water beds.

If you could do it all over again, start from scratch, what do you recommend? (besides collecting pre-water quality data as was already mentioned).

- Seawater facilities are important and needed to do the work.
- Partnerships:
 - NGOs (TNC) partnerships help with messaging and recruiting volunteers.
 - State marine resources commission provides a steady stream of small dollar funding.
- Sustained effort shows a record of success- established track record helps secure funding. When restoration has challenges (grass not taking) it is harder to get investments.

Could you provide more detail on the process of seed broadcasting?

- The actual process starts with measuring out the seeds. It is important to know how many good seeds are available per unit volume, as well as planning out all the plots ahead of time using GIS and setting up marker buoys on all plot corners. Bags of seeds are divided into 8 aliquot plots, which are then subdivided into 2 each. 8 transects are driven across the plot in a grid, with one person sprinkling the seeds off the starboard & port sides and the driver calling out points at 25, 50, 74, and 100% coverage of the total plot. Seeds (provided no high flow zone) do not go very far where they are distributing- maybe drifting a few meters. Good seeds are negatively buoyant.

III. **Management and Restoration Assessment: Project Update – Katie Lund & Emily Watling, CT NERR**

The regulatory assessment has been broadened to include a nonregulatory focus since previous reports from CT (2007) & NY (2009) have both types of recommendations. Agency meetings continue to progress and will be extended on the project timeline until June. An outline for the draft report was shared for feedback.

IV. **NERRS Science Collaborative Seed-Based Restoration Sacred Heart University – Torrie Hanley, SHU**

- **A Padlet activity** was launched to understand priorities in seagrass seed-based restoration as well as narrow in on a focus for a fall workshop. Questions reviewed included:
 - “What topics would you most like included in an online survey?”
 - “What high-priority topics would you explore in more depth with follow-up interviews?”
 - “What would make a StoryMap most useful to you?”
 - “Suggestions for invited presentations (topics and/or speakers) at a hybrid workshop?”
 - “Suggestions for hands-on activities or demonstrations at hybrid workshop?”
 - Collaborative responses are included in the [Padlet activity link](#).
- Hybrid bicoastal fall workshop (3-day workshop focused on eelgrass seed-based restoration)
 - Day 1 Virtual: Keynote presentations, small group discussions
 - Day 2 Hybrid: Workshops on both coasts (hands-on activities)
 - Day 3 Virtual: Synthesis workshop

V. **LIS Seed Dispersal RFP Update & 2024 Flowering Study Overview, Volunteer Solicitation and Training – Cayla Sullivan & Phil Colarusso, EPA**

EPA-LISS is looking for volunteers to participate in a 2024 Long Island Sound Eelgrass Flowering Study. In June 2023, they piloted this flowering study at UConn, Avery Point to introduce Long Island Sound Study partners to the goals, methods, and logistics of the study. This year, their goal is to develop a more targeted approach to start collecting data in Long Island Sound that can be applied to future restoration, management, and research of eelgrass meadows. They are planning to hold another training in April to walk through the flowering study SOP developed by Jill Carr from MassBays and Phil Colarusso. **If you are interested in learning more or volunteering, please reach out to Cayla Sullivan (Sullivan.Cayla@epa.gov) by March 31.** If you cannot make a training in April, we can provide a recording so your group can follow the steps.

VI. **June Meeting Draft Agenda and Breakout Topic Poll**

- **A Mentimeter poll** was launched to identify the breakout room and plenary speaker topics for the in-person, June 12th Eelgrass Collaborative Meeting.
- Based on the poll, the three breakout session topics will be 1) Seed Dispersal, 2) Tier I & 2 Assessments, and 3) Management Topics. The plenary speaker will focus on the topic of aquaculture and eelgrass interactions.

Agency/Partner Updates

URI (Mike Bradley)

- Intercomparison study with LISS and USFW comparing seagrass mapping strategies.
 - Aerial photos taken from satellites VS Drone imagery.

- The project is currently in its administrative stage: really learning about the dos and don'ts of flying drones with federal money.
 - Not a straightforward process.
 - Trying to figure out who has operational drone control and who has control of the imagery.
 - Partnering with CT DEEP
- Developing a set of maps of proposed drone sites.

CT General Assembly (CGA) Eelgrass Working Group (Jamie Vaudrey)

- Task force established summer 2023; work began in August 2023.
- Submitted a report to the CT General Assembly in early February 2024 related to eelgrass restoration and protection in the state.
 - The report provides a brief history of eelgrass in LIS to inform the state legislature and includes recommended next steps.
 - Includes topics of: interactions of aquaculture and eelgrass included, workforce development to support restoration, and development of facilities and workforce to support and facilitate restoration initiatives.
 - Identify concern: harvesting of seeds and impacts on the beds. Potential solution: leasing beds (similar to aquaculture process) for harvesting so that regulations and monitoring of the beds can be conducted during and around the harvesting process.
 - Reconvene the CGA Working Group at the end of 2024 to review the products that come from the Eelgrass Collaborative.
 - The General Assembly followed up with a bill to establish a CT Seagrass Coordinator based on the Working Group's recommendation.
 - Where, when and how this position will be funded has not been identified yet.

US EPA- Zosterapalooza (Phil Colarusso)

- Will be held on March 27th - email Phil to register: colarusso.phil@epa.gov
- If people are interested in aquaculture and eelgrass interactions: there will be a presentation on a new study of greenhouse gas exchange within aquaculture and eelgrass interactions. Preliminary data will be shared.

Save the Sound/LIS Advisory Committee (Bill Lucey):

- LIS advisory committee meeting – science/technology aquaculture and eelgrass interactions work.
- Getting funding for the clam-on-seed method.
 - Mimicking what was done at CT College and in Westbrook.
 - Talking with Project O to repeat on edges of Pine Island Meadow. A better evaluation of timing and progress to come next year.
- 5 locations doing the same planting technique; will most likely plant in the fall.

US EPA/LISS (Cayla Sullivan):

- Creating an eelgrass webpage on the LISS landing page, with sub-pages including different projects happening in LIS, a StoryMap, and “what you can do.” If participants have project ideas, please send to Cayla Sullivan: Sullivan.Cayla@epa.gov