

1st Long Island Sound Eelgrass Collaborative Meeting-Virtual
October 12th, 2023, 1:00-3:30

Participants: James Ammerman - LISS/NEIWPC; Juliana Barrett – UCONN; Della Campbell – NYSDEC; Phil Colarusso - US EPA; Emma DeLoughry - STS Soundkeeper; Joshua Dera – USDA; Adam DeWolfe – USDA; Melissa Duvall - US EPA; Steve Dwyer - Dominion Energy; Ashley Hamilton - CT NERR; Stephen Heck - Stony Brook University; Gavin Jackson - UCONN/CT NERR; Jessie Jarvis - UNCW; Shauna Kamath - DEC; Kristen Laccetti – US EPA; DeAva Lambert - CT DEEP; Brooke Landry – Maryland Dept of Natural Resources; Ben Lawton - ORISE Fellow/US EPA; Matthew Leason – UCONN; Jon Lefcheck – PEP/UMCES; Bill Lucey - Save the Sound; Katie Lund - CT NERR; Melissa Martinez – USGS; Esther Nelson – LISS/US EPA; Victoria O'Neill - NYSDEC/NEIWPC; Suzanne Paton – USFWS; Athena Ryan - Dominion Energy; Samarra Scantlebury – NYSDEC; Courtney Schmidt - Narragansett Bay Estuary Program; Kelly Streich - CT DEEP; Cayla Sullivan - US EPA; Nicole Tachiki – LISS/US EPA; Mark Tedesco - US EPA; Andrew Thuman – HDR; Hannah Vagts - Project Coordinator - Fishers Island Seagrass Management Coalition; Jamie Vaudrey - UCONN/CT NERR; Emily Watling - UCONN/CT NERR; Gregory Wilkerson - NYCDEP; Harry Yamalis - CT DEEP; Darcy Young - Narragansett Bay NEP

- I. **Welcome and Meeting Overview - Katie Lund**
- II. **Presentation: [Eelgrass Management and Restoration Strategy](#) – Cayla Sullivan**
- III. **State Updates:**

New York's Seagrass Task Force – Della Campbell

- Created in 2002 – Legislation
- 2006 - Main NY State Task Force meeting (not a regular occurring meeting)
- 2009 - [Governor and Legislature Report](#)
- Developing site suitability map for aquaculture industry to reference/site pilot projects
- Septic improvement planning
 - Onsite wastewater disposal in Suffolk County
 - Monetary reimbursement for those replacing old septic systems
- Eelgrass extent aerial survey 2024 (LISS annual, PEP every 3 yrs)

Works with local estuary programs:

- PEP: Peconic Estuary Program - long term eelgrass monitoring program since 1997
 - Stony Brook graduate student is currently compiling database.
 - Data on environmental and anthropogenic effects - human impact index
- South Shore estuary reserve/Blue Carbon seagrass restoration project – information available in May
 - Developing seagrass management plan describing knowledge gaps and ways to protect seagrass and preserve recreational activities through seagrass management areas

Connecticut Eelgrass Working Group – Bill Lucey

- [Special Act No. 23-7](#), “An Act Establishing a Working Group on the Restoration of Eel Grass” – including activities and membership (conservation commissions, shellfish commissions, CT Sea Grant, NOAA, CT DABA, and CT NERR staff)
 - Recently, the Governor of Massachusetts released an executive order recognizing the importance of coastal habitats for climate change mitigation, including using seagrass in carbon accounting systems. This also provides additional funding for restoration and conservation.

Discussion:

Have we invited people from Hudson River foundation?

- We should invite individuals from Westchester & the Hudson River Foundation since they have expressed interest in eelgrass restoration & management.

Is there eelgrass in the NY State Shellfish restoration plan?

- There was a push to include it, but the plan has not been finished, so it is unknown.

IV. Presentation: [Eelgrass Collaborative’s Focus, Timeline, and Deliverables](#) – Katie Lund & Emily Watling

- A Jamboard activity was launched to collect information about regulatory topics and questions to ask state agency staff regarding barriers to eelgrass management and restoration (*see end of this document for a summary*).

V. Grant Discussion: How to prioritize and Target Current and Future Funding Opportunities – Brook Landry & Jon Lefcheck

- The [East Coast SAV Collaborative](#) meets quarterly with reps from each state on a steering committee – launched February 2023
 - 1st meeting focused on SAV sentinel sites with a remote sensing workshop (report not yet released)
- This group is working on 2 grant proposals for [NOAA Transformational Habitat Restoration and Coastal Resiliency Grant](#):

Mid-Atlantic SAV Nursery Proposal

1. Restoration barrier = the availability of SAV seeds. This proposal seeks to establish seed nurseries for SAV restoration.
2. Collaborating with oyster hatcheries to open nursery space within their locations to promote sources of commercial SAV seeds.
3. Looking to establish an SAV restoration training and certification program.
 - a. Developed and implemented for the Mid-Atlantic
 - b. Hoping to expand along East Coast
 - c. Includes a focus on SAV restoration – restoring freshwater and mesohaline grasses- working with [Restore America’s Estuaries](#)

Helping Eelgrass Adapt to Temperature (HEAT)

- Proposes to investigate and build climate resilience in eelgrass through “assisted gene flow,” or the movement of particular genotypes from one population to another, using a seed-based approach to restoration along the east coast.
- North Carolina to Maine, including a CT NERR plot.
- Identify best performing genotypes to reinforce existing meadows and expand common garden plots.
- Proposal includes site selection, education, and outreach work with East Coast SAV collaborative & LIS Eelgrass Collaborative.
- Will include a permitting focus: moving seeds across jurisdictions and ideally reaching a consensus across states.
- PEW charitable trusts – offered to host a workshop across regulatory agencies to work around these issues.
- Contact Jon Lefcheck to write a letter of support: jlefcheck@umces.edu

Discussion: Regulatory Challenges & Research Gaps - What are we allowed to do now? How do we convince state agencies?

- Research in sterilization of seeds
- Viruses & complex invasive species
- Bring up temperature-resistant species from further south
- Regulatory hurdles to moving plants and seeds across state lines; it is more feasible to change the policies rather than legislation. Most people do not know who to talk to about making such a decision.
- CT has no laws against seed transport, but relevant prohibitions and concerns.
- NY – cannot bring seeds from elsewhere.
- NYDEC Invasives Work Group is important to coordinate with
- Nothing specifically prohibiting movement, but further discussion is needed to understand and make changes if necessary.
- Randal Hughes is leading a third grant proposal about policy issues and addressing eelgrass related regulatory questions.
- Proposal is focused on Northern New England

VI. **Break**

VII. **Presentation: [Eelgrass Habitat Suitability Index Model Update](#) – Ben Lawton**

Comments and Discussion

- The new EHSI method captures temperature gradients within LIS embayments.
- Hard to differentiate temperature with CT DEEP measurements.
 - Temperature stations are far from eelgrass meadows & in deeper waters.
- Most temperature data in LIS is sampled at a max of 1X every 2 weeks.
- Want to transition the model into using embayment temperature monitoring stations.
- Using satellite imagery & mapping leaf area index.
- Storymap available soon on the LISS website.

Questions and Answers

- *Will wind/wave data included in the future? Does this work include significant rainfall events in nearshore temperature (and impervious cover as well)?*
- The goal is to include these factors and get feedback on others that could be important – though a challenge with getting wind/wave data for every embayment location; not enough wind/wave data collection locations.
- Related project: Hypoxia prediction tool – similar data challenges
 - Only measured in a few locations.
 - Would improve the time accuracy of the model but not the spatial variability.
- The update to the model is coming (with discussions amongst various eelgrass/SAV groups providing feedback) with other parameters to be included in the model.

VIII. Agency/Partner Updates

FISMC (Hannah Vagts)

- Highlighted outreach materials now available for public education, including seagrass, boating, and fertilizer-focused brochures, stickers, and posters.
- A zip file will be shared with Collaborative participants.

CT NERR (Ashley Hamilton)

- Provided an update about a new Bebee Cove research project (funded through CT Sea Grant's Research Program) with a focus on eelgrass and aquaculture interactions.
- The project will include an oyster industry partner who is farming in the Cove and will have a focus on co-locating elevated oyster cages with eelgrass.
- Will start in April 2024 and run for 2 years.

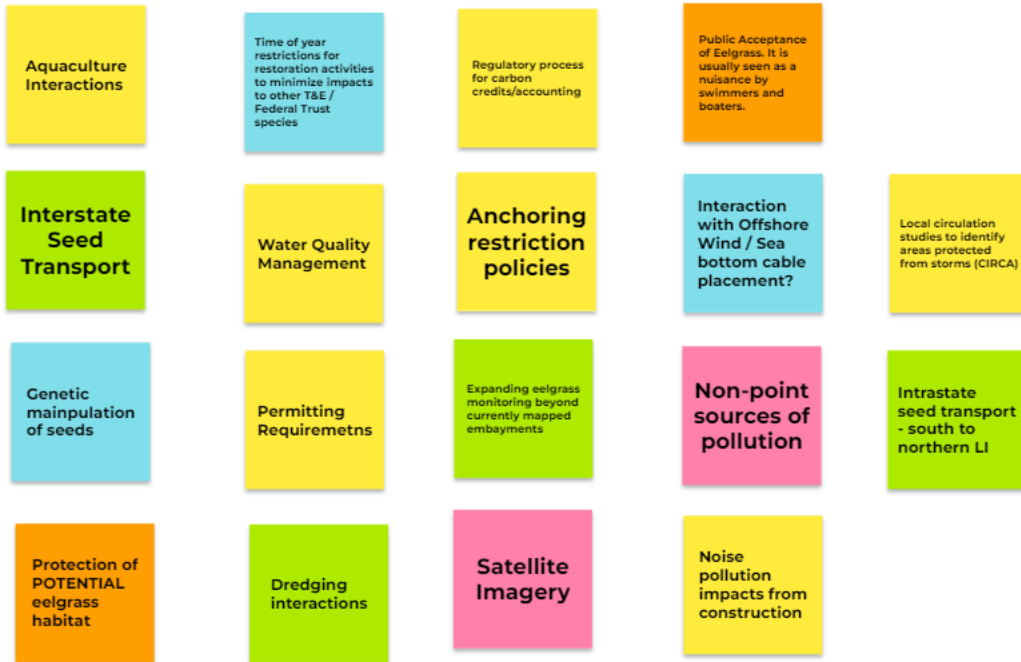
Save the Sound (Bill Lucey)

- Restoration project continues with focus on taking eelgrass seeds, gluing them to clams, and then using these as a vehicle to plant seeds.
 - Working with the Hampton Trustee Council
 - 3 CT sites of 1-meter plots: Clinton, Duck Island Westbrook, CT College reef balls
 - Good variety of seeds, some from NY & Fisher's Island Sound
 - Case study for permitting processes

IX. Next Steps – Katie Lund

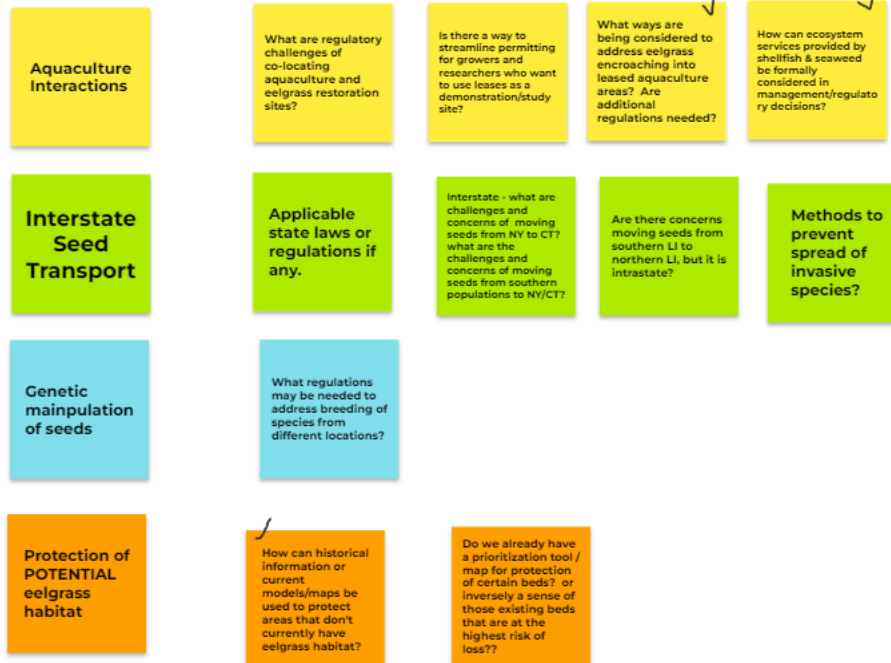
- Proposed next meeting date: December 12th - stay tuned for registration.
- Each meeting will include a featured presenter(s) - with December's meeting focused on the topic of mapping.
- Meetings will also include time for partner updates at the end – please be in touch in advance so you can be added to the list before the next meeting.
- New [Eelgrass Collaborative](#) webpage created to house meeting materials, background and products.

Eelgrass Restoration and Management Regulatory TOPICS



TOPICS:

QUESTIONS to ask Staff Relating to Regulatory Topic:



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Time of year restrictions for restoration activities to minimize impacts to other T&E / Federal Trust species

Water Quality Management

Water Quality Management -> linking directly to seagrass, what has worked? what has not? recommendations moving ahead?

Are there seagrass strains that do well in higher nutrient areas? Can those strains be planted in challenge areas to increase diversity?

Utility of SAV as a water quality indicator

Permitting Requirements

Dredging interactions

Have light availability models been applied to dredging?

TOPICS:

QUESTIONS to ask Staff Relating to Regulatory Topic:

Regulatory process for carbon credits/accounting

How far are we from being able to certify eelgrass carbon credits?

Anchoring restriction policies

Expanding eelgrass monitoring beyond currently mapped embayments

Satellite Imagery

