December 12th Agenda

Funded by:

Facilitated by:

1:00 – 1:15 (15 mins)	Welcome, Meeting Overview, and Progress on Management and Restoration Barriers Tasks	Katie Lund, CT NERR
1:15 – 1:35 (20 mins)	Comparative SAV Mapping Methods & Associated Errors (a brief overview of a recent MIT eelgrass/aquaculture interactions workshop will also be included)	Jill Carr, MassBays/ UMass Boston
1:35 – 1:55 (20 mins)	Lessons learned from the 2017 Long Island Sound and 2021 Rhode Island Tier 1 Eelgrass Surveys: Steps Toward a Comprehensive Monitoring Strategy	Mike Bradley, URI
1:55 – 2:00 (5 mins)	BREAK	
2:00 – 2:30	Speaker Q&A – Group Discussion (15 mins) Mural Activity: Research Ideas, Next Steps, and Potential Grant Opportunities (15 mins)	Jamie Vaudrey, CT NERR
2:30 – 2:55 (25 mins)	Agency/Partner Updates: FISMC, USFWS, CT DEEP, EPA	

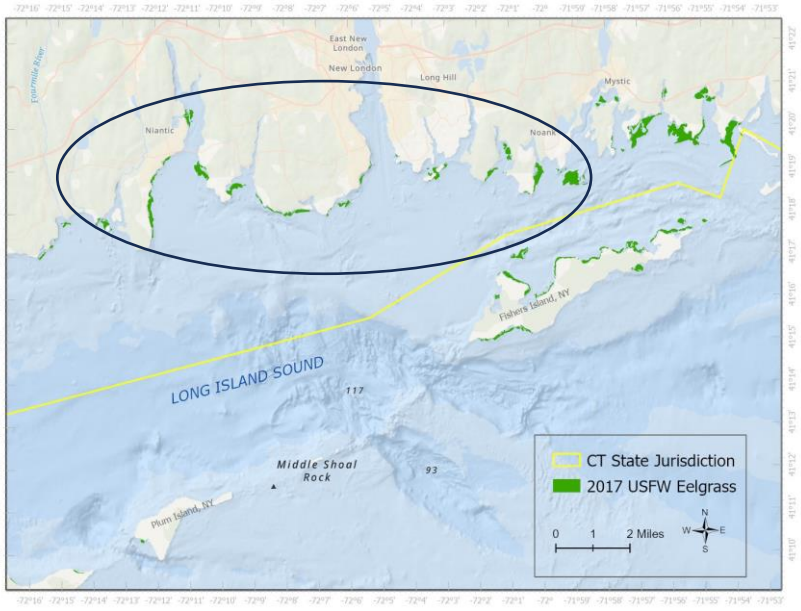
LIS Eelgrass Strategy YR 1-2 Implementation:

- Create a LIS Eelgrass Collaborative.
- Work with state partners to identify management and restoration barriers.
- Advise on updates to the EHSI Model.
- Enhance continuous water quality monitoring efforts for eelgrass and human activity.
- Support remote sensing surveys.
- Analyze historical data to confirm distribution trends.

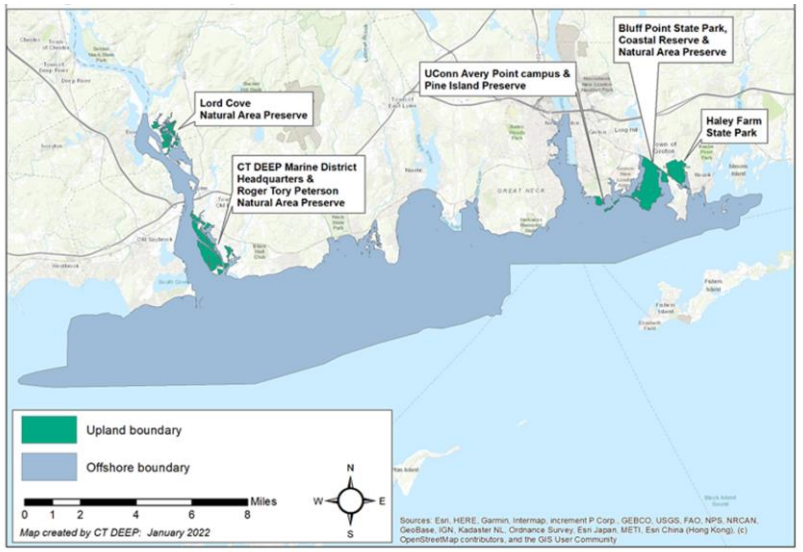
Collaborative facilitated by the CT NERR with funding and partnership of the LISS.

CT NERR encompass 53% of CT's existing eelgrass beds and 37% of Long Island Sound and Fishers Island Sound's beds. Focus of reserve's training and research programs.

Eelgrass Collaborative website with background, links, and meeting materials.

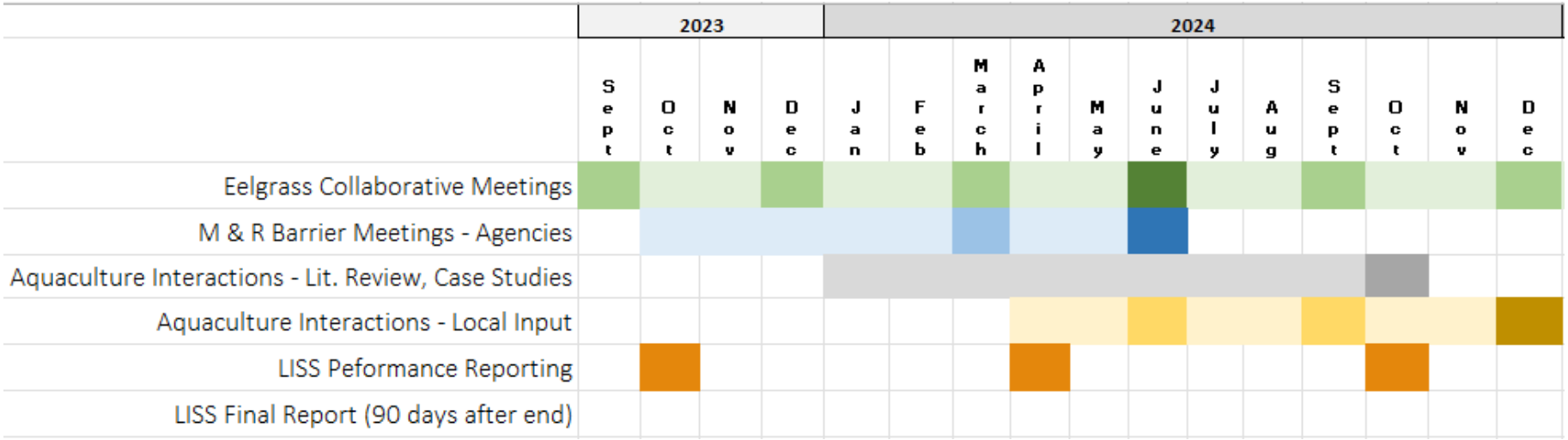


Source: Bradley, 2017 Aerial Survey



CT NERR Boundary

Activity Timeline



Regulatory Barriers Project Timeline

Workplan Task	Sub-Tasks	Progress (0-5)	Progress Bar	2023 Oct	2023 Nov	2023 Dec	2024 Jan	2024 Feb	2024 Mar	2024 April	2024 May	2024 June
M & R Barrier Meeting - Agencies	Research and document existing state and federal regulations and policies	4										
	Draft questions for agency staff calls	3										
	Schedule and meet with agency staff and summarize feedback	1										
	Draft document to include existing regulatory frameworks and recommendations to address management and restoration barriers	0										

Background for Regulatory Discussions:

An Assessment of the Impacts of Commercial and Recreational Fishing and Other Activities to Eelgrass in Connecticut's Waters and Recommendations for Management (2007)

Report of the New York State Seagrass Task Force (2009)

Marine Aquaculture Permitting in Connecticut (2019)

NOAA State-By-State Summary of Shellfish Aquaculture Leasing and Permitting (2021)

The Nature Conservancy Building Eelgrass Resilience Along the Mid-Atlantic and New England Coast, Conference Proceedings (2022)

Interactions Between Aquaculture and Eelgrass – MIT workshop (2022)

Finding new sources through agency meetings and Collaborative discussions – Jamboard 10/12

Draft Questions

Draft List of Questions for Agency Discussion

- In addition to the regulatory framework that we've researched, are there any *existing* regulatory mechanisms we are missing?
- Are there *additional* regulatory mechanisms that would be useful to incorporate into (the state's) environmental review process?
- How do we find *existing policy* used to make decisions during project review? Are there opportunities for *new policy* to address emerging activities like common garden experiments or interstate seed transport/seed dispersal? Is implementing policy more likely than regulations?
- Are there ways state regulations or policies can be used to protect POTENTIAL eelgrass habitat? What are barriers to doing so?
- Are there nonregulatory mechanisms that (the state) currently uses to manage and protect eelgrass? What nonregulatory tools could be helpful/models that we can research?
- Aquaculture/Eelgrass Interaction related questions:
    - Is there a way to streamline permitting for growers and researchers who want to use leases as a demonstration/study site?
    - Are there nonregulatory ways used to minimize impacts (e.g. developing BMPS for gear use)? Are there barriers to implementation?

AGENCY DISCUSSIONS

State staff:

CT

Carey*	Dave	DABA
Bartell	Matt	DABA
Dragan	Alissa	DABA
Jacobson*	Sue	DEEP
Herz	Emily	DEEP
Rourke	Maeve	DEEP
Thompson*	Brian	DEEP
Yamalis*	Harry	DEEP
Kendzierski*	Julie	DEEP
Streich*	Kelly	DEEP
Williams*	Bruce	DEEP

NY

Bauer	Cassie	NY DEC
Cambell*	Della	NY DEC
Pearson	Steve	NY DEC
McGlynn*	Cathy	NY DEC
Barnes	Deb	NY DEC
Carden*	Wade	NY DEC
Kamath	Shauna	NY DEC

Federal staff:

Colarusso*	Phil	US EPA
Reiss	Mark	US EPA
Ganju	Neil	USGS
Isleib	Jacob	USDA
Paton*	Suzanne	USFWS
Pereira*	Sabrina	NOAA
Rose*	Julie	NOAA
Shaw*	Caitlyn	NOAA
Johnson*	Mike	NOAA
Rose*	Cori	USACE
Bell*	Taylor	USACE
Vanderbilt	Forrest	USGS
Williams	Andrea	USACE

= aquaculture focus

= habitat focus

* = contacting first

	Need	Barrier	Recommendations	Case Studies Mentioned
Regulatory	Regulatory language defining an eelgrass meadow/historical understanding	No consistent regulatory definition	Develop a consistent definition of meadows, advocate for buffer zones, advocate for protections of areas where there was present vegetation within the last five years (potential/historical habitat protection)	MASS DEP: limits meadows to 1/4 acre in size or greater with 10% cover or greater - leaves out many eelgrass patches
	Adequately implementing NEPA	Language and legislation is written - no initiative to enforce and implement	Identify an authority to enforce in towns/states	U/K
	Use of CZMA to designate MPAs	Not utilized in state government - USACE has not commented	Develop state MPAs to protect coastal wetlands and vital habitat	MA Governor issued a public executive order to develop more MPAs
	Interstate Seed Transport	Hesitancy of states to approve seed movement - lack of understanding of regulations	Larger experiments with higher successes - written description and understanding of the rules/regulations	Federally, restoration processes will not require permitting for seed transport, only plant
Non-Regulatory	Development of numeric criteria for nitrogen content in water	Nitrogen content is hard to measure in the water column: it is absorbed by plants quickly, there is a temporal and spatial component involved, and many labs do not have the resources to measure nitrogen.	Scale nitrogen to temperature and water clarity, do research to better understand the temporal component, consider a reference approach that takes into account flushing and water circulation at particular embayments, and focus on locations where EHSI model indicates priority.	MA set limits in 88 embayments using eelgrass, DO, and the benthic community as indicators. Each embayment had its own standards based on those factors.
	Lack of knowledge relating to the amount of light required for eelgrass to survive	Little research into the amount of light a growing plant needs - the main light numbers used are for healthy adult shoots, which does not tell anything about the temporal aspect	Research into the amount of light over the amount of time that is needed, including the amount of carbon a plan may need to survive and thrive during both growing season and the tough epiphyte season.	U/K