Eel Grass Working Group Meeting Minutes
October 26th, 2023
3:00 p.m. to 4:30 p.m.
Zoom Remote Meeting

Attendance: Jamie Vaudrey (Chair), Larry Dunn, Lukas Houle (Administrator), Tessa Getchis, David Carey, Griffin Harris, Bradford Towson (LCO), Zach Gordon, Craig Tobias, Hillary Desideraggio (Lopes LA)

1) Welcoming Remarks and introduction of new members
2) Establish a Recurring Meeting Time (or the next meeting time)
    a) After 3 PM works best for largest number of members
        i) November – 8th or 9th
        ii) December – 6th or 7th
        iii) December – 18th or 19th
        iv) January – 10th or 11th
        v) January 24th or 26th
3) Brief review of the charge (SA 23-7):
    a) *Such working group shall develop strategies for the preservation, restoration and expansion of eel grass along the state's shoreline. In developing such strategies, the working group shall review and synthesize information from studies performed by the states of New York and Rhode Island, including, but not limited to, Tier 1 mapping of Zostera marina in Long Island Sound and change analysis performed by the University of Rhode Island.* [...] *including, but not limited to, explanations of any such strategies and identification of any priority areas of the shoreline for the implementation of such strategies.*
    b) Link to the ENV website w/ info on the working group https://cga.ct.gov/env/taskforce.asp?TF=20230720_Eel%20Grass%20Working%20Group
4) Review Resources
    a) Our working group resources include links to information from other states
        i) Rhode Island's Eelgrass Mapper – reviewed, maps the locations in black where Eel Grass is populating, lost a large number of EG due to nutrient dumping in the Providence River
        ii) 2012 Rhode Island Aerial Survey Report – both this and 2021 Aerial Survey Report include stats on Eel Grass Acreage, coverage overtime, change analysis
        iii) 2021 Rhode Island Aerial Survey Report – important because change in other states of Eel Grass Populations could explain changes in ours, these ecosystems are connected on a regional scale, finding the coverage of Eel Grass is important
            (1) Eel grass grows and contracts naturally, important to understand if it is "meaningful" loss/ gain in E.G. acreage
        iv) New York State Seagrass Protection Act – something to review, as CT doesn't have a specific Seagrass Protection Act from legislature; despite standards and regulations from DEEP
        v) New York State Seagrass Task Force Proceedings Webpage – reports and summaries that have come out of task force in NYS area, NY does have a seagrass coordinator that could be a valuable resource for how they're looking to increase
    b) Connecticut's Eelgrass
        i) Tier 1 2017 Mapping of *Zostera marina* in Long Island Sound and Change Analysis – Primarily conducted by US Fish and Wildlife Services, mapping in CT LIS

(1) Includes change analysis, 2002, 2006, 2012, 2017 – laid out by location Zones; has been some gain, some loss, and some uncertainty in acreage
(2) Between 2012 and 2017; has been a loss of 1000+ acres

ii) Aquaculture Mapping Atlas allows you to view the 2012 and 2017 mapping of Eel Grass Beds

5) Long Island Sound Eelgrass Management and Restoration Strategy, Identifies key tasks:
   a) Create an Eelgrass Collaborative (first meeting was October, next 12/12/23, reach out to Dr. Vaudrey to get involved)
      i) Professional sharing
      ii) Identify & remove barriers to restoration
      iii) Advise on how to update the Eelgrass Habitat Suitability Index
      iv) Work closely with CT DEEP and the Connecticut Aquaculture Permitting Work Group to alleviate user conflicts between eelgrass and aquaculture
      v) Work closely with NYSDEC and the New York State Seagrass Task Force to help implement the actions outlined in the Report of the New York State Seagrass Task Force
      vi) Work with all LISS partners and regional Long Island Estuary Programs (South Shore Estuary Reserve and Peconic Estuary Partnership) to address similar priorities and actions outlined in this strategy and develop new actions as new science and needs arise
   b) Update the Eelgrass Habitat Suitability Index – map that guides where restoration efforts may be most successful
   c) Enhance Continuous Water Quality Monitoring and Initiate Human Activity and Eelgrass Monitoring – need more focus on Human Activity initiative, people boating, anchoring, fishing
      (1) Where there is most potential for disturbing replanting activities
   d) Continue and Enhance Remote Sensing Surveys – satellites and drones to map distribution of EG overtime
   e) Analysis of Historical Data
   f) Identification of Eelgrass Resiliency and Common Garden Implementation – common garden meaning taking seeds from other locations (i.e. New Jersey, Rhode Island) and see if they are more successfully planted
6) Establish Outline for Report (suggestions below, for discussion)
   a) Current Knowledge
      i) Benefits of Eel Grass Habitat – compelling reasons why preservation matters, ecological importance, ecosystem impact
         (1) Carbon sequestration credits – highlighting existing work
         (2) GC3 – carbon credit discussion
         (3) National Academies Report – came out last year, on carbon sequestration, includes SAV
         (4) Include cross-section of human benefits
      ii) Engaging the community early and often – recommendations for how specifically to communicate the importance of the work in the area and any obstructions to current use i.e. diving, boating etc.
      iii) History of LIS policy (NYS task force and seagrass liaison)
      iv) Mapping results & overview of change analysis in CT & LIS
      v) Review of issues identified by LISS Eelgrass Management and Restoration Strategy
   b) Stressors

i) Nutrient Inputs
ii) Temperature
iii) Physical Damage
iv) Storm Water/ for water clarity

c) Preservation
   i) Reviewing current polices for preservation, in CT and neighboring states
   ii) Best practices for preserving what we have
      (1) For example – Look Before You Drop campaign on Fisher's Island

d) Restoration
   i) Identification of suitable areas (Eelgrass Habitat Suitability Index)
   ii) Overview & review of restoration techniques and capacity for upscaling in LIS.
      (1) Cornell Cooperative Extension of Suffolk County's plantings in NY and CT
         (a) Adult plants
         (b) BUDS (seeding method)
         (c) Tobias & Vaudrey soil amendments to improve planting success
      (2) Save the Sound's clam planting, as an example of continuing innovation
      (3) Overview of the need for genetic populations resilient to higher temperatures.
      (4) Available infrastructure to support restoration.
   iii) Potential Barriers to Restoration – likely a more difficult topic to find information on
      (1) Siting & Permitting of planting
         (a) Planting of eelgrass - no known barriers
         (b) Obtaining eelgrass - protection of current beds, timing of flowering and seed availability
   iv) Co-location of restoration with aquaculture
      (1) Review potential overlap between eelgrass habitat suitability and aquaculture leases (active and inactive)
      (2) Out-of-state seeds
         (a) Potential for invasives
         (b) Can be sterilized, but needs confirmation at what level/degree?

e) Engaging the Community – Recommendations
   i) Plan for allaying fears, addressing concerns, sharing successes, and sharing benefits

f) Suggestions on Funding Needs

g) Suggestions on Policy / Procedural Needs

7) Committee Members - Volunteer/Assignment of topics to review prior to our next meeting, to begin populating the outline for the report.

a) Volunteer assignments on sections of the report to report back to group next meeting
   i) Craig Tobias interested in completing 'Restoration' piece of report
   ii) Asking others to take other sections within their interests