

## Salt Marsh RAMP Meeting

February 28, 2024 2:00p-4:00p

### Meeting Notes

#### MEETING PARTICIPANTS

Joe Manetta, URI  
Amber Hardy, Independent  
Ben Gaspar, Save the Bay  
Caitlin Chaffee, NBNERR  
Danielle Perry, NOAA  
Haley Miller, EPA  
Giancarlo Cicchetti, EPA  
Jim O'Neill, Salt Marsh Sparrow Research  
Institute  
Jim Turenne, NRCS  
Jim Turek, NOAA  
John Berg, TNC  
John Veale, RIDEM  
Jon Mitchell, NBNERR  
Kenny Raposa, NBNERR

Leah Feldman, RI CRMC  
Mary Schoell, NBNERR  
Melissa Hayden, NRCS  
Michael Norton, URI  
Mike Bradley, URI  
Mark Stolt, URI  
Nick Ernst, URI  
Sabrina Pereria, NOAA  
Scott Ruhren, Audubon Society  
Suzanne Paton, USFWS  
Tom Kutcher, RINHS  
Walter Berry, EPA *retired*  
Wenley Ferguson, Save The Bay  
Ian O'Hara, Save The Bay  
Courtney Schmidt, NBEP

#### MEETING NOTES

##### WELCOME

Courtney Schmidt, NBEP, opened the meeting at 2:00pm. The members went through a round of introductions.

##### PRESENTATION: SOIL CARBON ACCOUNTING

Joe Manetta, URI, shared his thesis work to understand the carbon stock of local marshes. Soil carbon accounting is an essential part in understanding the effectiveness of carbon credits, restoration, and preservation activities. If a marsh has a lot of carbon stored, it may be an area for carbon credit trading or be prioritized for restoration or preservation. Joe presented two ways of calculating carbon storage – at a landscape level for regional accounting and at a local level for specific marshes and marsh types.

For the regional level, Joe chose different marsh types including coves, barriers, tidal creeks and tidal rivers. He found that marshes in coves held the most carbon while barrier marshes held the least. When he compared his measurements with existing models, he found that modeling does not capture the full amount of carbon storage except for tidal creek marshes. Current plant zonation not useful as variable in carbon stock modeling.

At the local level, Joe used soil groups because they hold different amounts of carbon. The soil groups more accurately predicted carbon stock than the marsh-type method. He noted that this approach is more time intensive because requires making the soil group description. However, NRCS provides a rich dataset on soil groups in local marshes. Therefore, you can use those datasets to estimate marsh carbon storage.

Future work could include differentiating between the history/origin of the marsh (e.g. cedar vs herbaceous peat), analyze marsh erosion and loss in context of carbon storage; and finally, understanding the carbon storage in *Phragmites* dominated systems.

## ROUND ROBIN UPDATES

Jon Mitchell (NBNERR) – Closing out mapping salt marshes for the state using 2021 aerial photography; final products due the end of March (includes classification of RI salt marshes in 2021, update to 2012 imagery with improvements in classification, and change analysis between 2012 and 2021)

Tom Kutcher (RINHS) – **Expanded Marsh RAM** to 55 marshes in 2023; building out sentinel site network to include 6 complete Tier-3 sites (upper, mid, and lower bay, and ponds) which can be used as reference sites for future restorations. Worked on **salt marsh change** between 1972 and 2020 using photo interpretation (recorded 11.5% change across RAM sites [does not include migration, only loss] and recorded what type of change occurred at each site). Salt marsh change analyses are a good measure of vulnerability, and we have good information on the 55 Marsh RAM sites now.

Wenley Ferguson (Save The Bay) – RIDEM/STB/partners awarded **America the Beautiful grant** for salt marsh restoration work at Ninigret, and Galilee to include sediment placement, invasive removal, and adaptive management. Doing additional restoration work and adaptive management at **Narrow River** (with USFWS, Audubon Society of RI, Narrow River Land Trust) and **Sachuest Marsh** (with Norman Bird Sanctuary). Restoring flow and doing migration work in **Sapowet Marsh** with RIDEM. With Barrington, doing mini sediment placement and marsh migration work at **Walker Farm** to take some area out of active public use for migration potential. Removing berms of an old skating rink and restoring hydrology at **Fogland Point**. **Kickimuit River** lower impoundment breach (nearly full dam removal) and saw evidence of estuarine fish reaching the upper impoundment.

Ben Gaspar (Save The Bay) – Restoring tidal hydrology, facilitating marsh migration, enhancing pollinator habitat, and repetitive *Phragmites* cutting in 2023 (to be continued in 2024) at **Sowams Preserve** which provides a marsh migration corridor against an agricultural field. Spent 2023 assessing marshes at **Rocky Hill Country Day School** (Warwick) for endangered species, slope, sun exposure, proximity to water and vegetative cover. Will return in 2024 to remove invasives and enhance endangered species nesting sites. Completed **salt marsh sparrow**

identification and nest tracking on Ninigret, Sedge Island, and Narrow River. Discovered that the salt marsh sparrow will nest on the ground provided that the ground won't flood, which is unexpected.

Walter Berry (USEPA, *retired*) – offered to do salt marsh sparrow surveys at the sites Save The Bay is working and offered historical data of bird use on those marshes.

Kenny Raposa (NBNERR) – **Manuscripts**: (1) synthesis of 4 large-scale sediment placement projects (Ninigret, Quonnie, Satchuest, and Narrow River) and will include salt marsh sparrow data; (2) summary of responses to vegetation removal to encourage marsh migration on Prudence Island. **Migration facilitation projects** on Prudence Island: (1) planning and design for migration near Coggeshall marsh to move road further inland and higher; (2) remove concrete at T-Wharf; (3) demonstration projects at Nag West to show impacts of different types of management actions.

Danielle Perry (NOAA)– NOAA has **resilience project funds** ([transformational](#) and [tribal/underserved](#) coastal resilience) which will become available later in 2024. This will be the last year of funding and you can apply for whole project amount from planning through implementation.

Caitlin Chaffee (NBNERR) – **Succotash Marsh** team in place to complete design phase. One year of data collection is complete and will release an RFQ for engineering services for design phase. Project aspects are being finalized, including monitoring plan with a social science component. If you would like get involved in the project on the ground floor, contact Caitlin. **NBNERR** hiring project specialist to assist project management. RIDEM hired a **Chief Resilience Officer** for the state, Kim Koriath, situated between NBNERR and RIDEM to focus on strategic land acquisition for marsh migration and preservation. The second round of MRP funding coming out through Kim which could be used for marsh projects.

Land acquisition: NOAA has \$1mill to do property acquisition through the Buzzards Bay Oil Spill in 2003 (**Jim Turek**). All of Narragansett Bay will qualify; USFWS coastal grants may be a source of funds with applications due Jun 21 (**Suzanne Paton**). **John Berg** may have a lead on a property for acquisition that is a TNC priority property.

Jim O'Neill (Salt Marsh Sparrow Research Institute) – Exploring **salt marsh sparrow** nesting interventions to increase number of successful nests this summer. Received RIDEM permit to raise 20 nests up to 18 cm to reduce chances of flooding.

Haley Miller (EPA)– SNEP held **salt marsh permitting** workshop for MA in 2023. They anticipate a final report soon. In the upcoming fiscal year, SNEP may have **funding** to help with salt marsh restoration.

Suzanne Paton (USFWS) – New USFWS employee, Alison Kocek, is developing a **monitoring protocol for birds** at restoration site (should be published in next few weeks) with decision trees and levels of intensity required for monitoring. USFWS used **Marsh RAM** in NY to evaluate sites and characterized vegetation on marsh. They found very little high marsh left at the sites, and now all short form and transition marsh. USFWS excited to use RAM to inform restoration in NY and CT.

## ACTION ITEMS

Things not to forget:

- [RAE Conference](#) is October 6-10, In Washington, DC
- NOAA resilience project funding: [transformational](#) and [tribal/underserved](#) coastal resilience; look for in mid-late 2024
- Succotash Marsh project is looking for folks who want to do research in a marsh before/during/after restoration activities. Contact [Caitlin Chaffee](#) to get involved.

Field Trips:

- Wenley to schedule a Kickimuit Dam tour

Land Acquisition:

- Contacts
  - [Kim Koriath](#), RIDEM; [Caitlin Chaffee](#), RIDEM; [Jim Turek](#), NOAA; [Suzanne Paton](#) USFWS; [John Berg](#), TNC
- Properties
  - Kim Koriath is focused on land acquisition for marsh migration as Chief Resilience Officer for RI
  - John Berg may have a lead on a TNC priority property
- Money
  - NOAA has \$1mill through Buzzards Bay Oil Spill
  - USFWS coastal grant application due June 21 (RI has not submitted an app, and USFWS would like to award a grant to each state)

Meeting adjourned at 4:00pm.