

Climate Change and Sentinel Monitoring Workgroup Meeting Summary

Tuesday, April 19, 2022

Teams Meeting (Link in Meeting Invite)



Attendees

Samarra Scantlebury, NYSDEC (Co-Chair), Kathleen Knight, CT DEEP (Co-Chair), Mark Parker, CT DEEP (Co-Chair), Jim Ammerman, NEIWPC, Victoria O'Neill, NYSDEC, Harry Yamalis, CT DEEP, Cayla Sullivan, EPA/LISO, Nicole Tachiki, EPA/LISO, Richard Friesner, NEIWPC, Juliana Barrett, CTSG, James O'Donnell PhD, UConn and CIRCA Executive Director, Ron Rozsa, CT DEEP (Ret.), Penny Vlahos, PhD, UConn, Sarah Crosby, PhD, Earthplace/Harbor Watch

Introduction

Samarra Scantlebury called the meeting to order at approximately 10:00 AM. Samarra provided a synopsis of the December 2021 meeting: NEIWPC provided a summary of the workshop effort, an overview of the coastal acidification proposals was presented, and the team focused much of the rest of the effort on reviewing the FY22 proposed budgets.

Workgroup Logistics

Roles:

Samarra informed the group of the shifting roles in the Workgroup:

- Samarra will be co-chair for NYSDEC
- With Mark Parker's retirement, Kathleen Knight will be CT DEEP's respective co-chair.

Schedule:

Samarra proposed a new meeting schedule. Additional discussion and exploration for new days, Wednesdays was one recommendation. But in the end the team found other LISS related conflicts.

The final decision was to hold the meetings on third Tuesday of August, November, February and May.

Meeting Platform:

Utilizing the virtual platform teams, was proposed and everyone agreed.

Sentinel Monitoring Workshop Update, Cayla Sullivan

Workshop is planned for June 2 and 3rd from 9AM- 12PM. The invitations are expected to be released in coming weeks; first round of invitations is from a list compiled by the planning committee. This workshop will be 100% virtual.

Workshop will begin with an update of where we stand, but most of the workshop will center around the themes of sentinel monitoring and facilitate break out rooms to provide the platforms to get the work done.

The objective of the workshop is to evaluate the quality of the current sentinels inventory database for eventual usage including:

- support existing monitoring of indicators that support priority sentinels
- initiate and support new monitoring of indicators that support priority sentinels that are not being adequately tracked
- Defining & supporting a region-wide monitoring network

Ron Rozsa provided some background on the development of the database.

- Initially built in 2008
- Juliana Barrett then utilized the database to develop a 5 yr monitoring plan

- Ron was then brought back in to facilitate the QA of the entries in the database.

Cayla noted there was a USGS proposal to develop a meta data-database. Some concern was expressed that this was reinventing the database that existed and some clarification was added that the intent of USGS proposal was to go well beyond sentinel monitoring, but we should look at what is/should be included with respect to sentinel monitoring.

Conceptual Tidal Marsh Model, Ron Rozsa

Ron Rozsa opened with a verbal description of the tidal marsh model. Ron indicated that he believes the work at Barn Island Supports the driver is the metonic cycle. Ron indicated that this new knowledge should be incorporated into the Tidal Marsh Model's original proposal.

Penny opened the floor for Jim to indicate his work through CIRCA on this topic. Jim shared with us that he believed the discrepancy is primarily a semantics exercise. The driver behind marsh elevation change is driven by the frequency of flooding, and small changes in sea level rise can be impactful.

Ron clarified mean level rise has no impact and it is water table and thereby metonic cycle.

This disparity, in how they link or do not link, was noted.

Ron provided a presentation on marsh monitoring, specifically Mamacoke Marsh. Ron provided the overview of the monitoring by Dr Niering in the 1950-60s and a more recent update that utilized older aerial photographs. These photographs indicated this marsh may not have been a virgin marsh but rather had been manipulated and then had been naturally restored. Ron noted that he believed the tidal/metonic patterns were driving the marsh height. The time scale and variability were more reflective of the metonic cycle and variability than it was monthly average or longer-term averages.

Ron noted several correlations between Hammock River and Leetes Island, however indicated they were not as far along in their process.

Jim asked if this observation regarding the sensitivity to time scale variations was unique to New England or if it was noted elsewhere?

Ron noted that it was not an issue in Belgium because they had long term data, but it could be more than this area. There is a unique aspect to the problem in NE since there is little effort to lay out the transects for each creek.

Ron recommended the establishment of a group to regularly discuss Marsh issues and suggested it include a future presentation regarding the long-term change at Barn Island and this presentation would need about an hour and 45 min.

Goals and Next Steps

Samarra recapped the new meeting schedule. Group confirmed that the next meeting would be held August 16th 10AM-12PM. Samarra provided a quick preview of what we intend to cover at this next meeting: Review of the sentinel monitoring strategies, and recap of the workshop and outcomes.

Meeting Adjourned at 11:51