

# Climate Change and Sentinel Monitoring Workgroup Meeting Summary

## Tuesday, August 18, 2022

### Zoom Meeting (Link in Meeting Invite)



#### **Attendees**

Samarra Scantlebury, NYSDEC (Co-Chair), Kathleen Knight, CTDEEP (Co-Chair), Jim Ammerman, NEIWPC, Greg Dietl (Cornell), Matthew Pruden (Cornell), Ron Rozsa, CTDEEP (Ret.), Penny Vlahos, PhD, UConn, Sarah Crosby, PhD, Maritime Aquarium

#### **Introduction**

Samarra Scantlebury called the meeting to order at approximately 10:00 AM. Samarra provided a synopsis of the [April 2022 meeting](#): Cayla provided a summary of the Sentinel Monitoring Workshop, and Ron Rozsa provided a presentation of Conceptual Tidal Marsh Model. Minutes were posted to the Climate Change and Sentinel Monitoring Website and any revisions to the summary should be emailed to [Kathleen.Knight@ct.gov](mailto:Kathleen.Knight@ct.gov).

#### **Summary of the Workshop**

Jordan Bishop provided a summary of the development of and outcome of the workshop. The highlights of that presentation include:

- Additional resources post workshop resources are coming. NEIWPC is compiling a report and plans to continue to coordinate with co-chairs to ensure that report is useable by the committee.
- The narrowing of the focus for the workshop was the product of a lot of data review and quality checking. The review resulted in 20 entries that passed this test and being the only data available for consideration that narrowed the focus for the workshop. These entries happen to only relate to two sentinels: Water Quality and Quantity; and Coastal Habitat & the associated species and systems.
- Pre-Workshop effort provided a lot of lessons learned, these take-aways were:
  - There is a need for crosswalk bt priority sentinels and the research/programs identified
  - Funding will be needed to complete a survey of existing sentinels
  - Establish an identify for the Sentinel Monitoring Database
- The main take-aways from the workshop were as follows:
  - Strengths of the DB lie in the historical data, and the DB may be more seamlessly integrated regarding other initiatives versus scaling up (concerns noted: funding, staffing, technological upgrades)
  - Advertise and incentivize data input. Rework the database to facilitate scraping data. Ease of import/export
  - Known gaps in the database are mitigated elsewhere. UWS for example.
  - New Projects should be QA/QC at inception and explicitly linked to sentinels

Discussion:

- Ron recommended we no longer refer to the Long Island Sound Resource Center, but rather the Long Island Sound Sentinel Monitoring Program website
- Ron raised concerns about moving data from databases and that there may be confusion to the purpose of the Sentinel Monitoring Database.
- Kate clarified is that the data really is meant to be meta data and that the discussion about coordinating with other databases is in part in response the barriers preventing data entry into the existing sentinel monitoring database and looking to avoid redundant labor some data entry. The hope is the coordination will enable less maintenance and thereby greater longevity to this tool.

- Discussion around the role of a ORIS fellow/Intern for data entry and possibly for gap identification occurred. Some final thoughts that provided good direction were as follows:
  - Jordan indicated that the period of an ORIS position was better suited to this project than a 6 mo intern position.
  - Penny recommended the team write out a job description to define the needs and this would thereby then attract the professionals that have that interest and expertise rather than borrowing another positions time.
- Penny recommended that as we coordinate with other creators/owners of other databases we facilitate the conversation to standardize meta data.

### **FY23 Workplan**

Kate Knight reported on the minor revisions that had been incorporated to date on the FY22 workplan to create the FY23 Workplan. At present the primary revisions presented to the group centered around enhanced coordination amongst the other working groups and addressing the outcomes of the June Workshop. Kate then opened the floor for discussion. Summary of the verbal feedback collected is as follows:

- It was noted that the focus was driven by the fact that the other sentinels lacked data. Additional workshops should be considered and implemented to continue to address the areas that were not the focus of the 2022 Workshop, such as pelagic.
- Regarding the requested revision to the LISS Research RFP, can we require entry into Sentinel Monitoring Database to be funded and link the database that houses the main dataset.
- Listing databases should be suggested at this point since we have to collaborate to initiate this in 2023.
- Caution was noted regarding the availability of that data, some institutions will change websites and broken links are the result and yet there are others who will not share data until published and publish date often slips.
- It was noted that many funding streams and journals now have data transparency requirements and making that data publicly available should be an issue that is well on its way to being remedied.
- Discussion indicated that a good objective for the workgroup in FY23 is to review completed pilot studies and decide what next steps are needed. To do so the workplan itself should cite and directly link to the final documents. This will be platform for us to review any related content that may disagree with findings. This discussion included detailed descriptions of various studies and how they may over simplify the results or have alternate cause and effect.
- A lot of the discussion also related to Sentinel Strategy and indicated the review of this document is an important focus for FY23. See more detailed direction on that review noted below.
- Kate indicated a focus that co-chairs would like to take the initiative on enhance cross LISS and related coordination, and requested feedback for this particular topic too, should the team have specific areas they believe we should coordinate with.
- Deadline for comments is Sept 16<sup>th</sup>

### **Sentinel Monitoring Strategy Review**

Samarra Scantlebury provided an overview of the existing Sentinel Monitoring Strategy. Samarra indicated it's the intent to spend the next year reviewing this and creating an updated document about one year from now. Summary of the discussion is as follows:

- Discussion around geographic area, and needing to stay consistent with how LISS is adjusting the boundaries and the impacts of this on opening the opportunities for tracking freshwater wetlands.
- Samarra indicated we needed to set a baseline and this will be integrated into the workplan.

- Questions about what is the formal definition of baseline, will there be a discussion regarding what that means? Agreement with this sentiment and that by topic we will need to discuss with each areas experts.
- Discussion around changing the workflow of the program to ensure we coordinate with other workgroups and the studies/monitoring is reviewed and those learnings are re-incorporated into our planning.
- It was noted that pilot studies should not be the only focus and its time to implement and take action.
- Adding points of contact to our strategy to have reference and a “QAPP” like approach to our data/study review, sharing etc. It was noted it is important to keep this a living document and maintain it or this information gets out of date with attrition and retirements.
- Noted that fish communities and relating to climate change was noted to be complex to make and why this area did not get covered yet. It was noted that this highlights the need for a workshop to bring this science together.
- We should consider a re-evaluation of the sentinels: are the sentinels not there because we are not aware of the meta data or is there a true lack of interest to study this?
- There is a note about additional resources from citizen volunteer groups, we should work with Peter Linderoth to understand this better but he is working with these groups to get this data into WQX.
- This database collaboration is known issue we do need to work through.
- A few people are working on data analysis including the ORIS fellow, but this person is dedicated to the eel grass study atleast to start. This highlights the need for new description for the need we have identified.
- Parameters identified as measure should be reviewed too, the pH was noted that acidification study and USGS gages will be/are still tracking but sources are different or additional then noted in the strategy.
- Samarra opened the conversation about reviewing the priority Sentinels, agreement was voiced that we should identify the gaps and review if that data is available elsewhere and getting the team together to find that identify. Also clarified that we are taking feedback about the format for evaluating sentinels too aka how should we frame the questions. Additionally, questions were raised about the audience too, should we explore a wider audience? This question led to discussion about what public perception survey data might be available to get an understanding of where we might be starting about this.
- Discussion about pilots listed in the strategy. Discussion was limited but agreement that we need to focus on next steps but also need to leave the door open incase we identify a gap that requires a pilot study.

### **Priority Sentinel Matrix**

Samarra Scantlebury introduced the top three sentinel results from the two categories that were focused on in the workshop. Summary of the discussion around this topic were as follows:

- HABs were noted to be discussed at a recent WEWG meeting it was noted that HABS are not a sound (off-shore) issue, should this feed our priorities here. It was noted that there are concerns about this possibly growing due to climate change and particularly the impact on shellfish, agreement it is not a current concern (unless you are talking about benthic macro algae that could be different) but something to watch for future. It was also noted that during the workshop this topic was one with a key data gap was benthic macro algae. There are monitoring experts, specifically out of Stony Brook that indicates the locations of HAB around LIS.
- Samarra and Kate asked that the team consider feedback on this particular topic since it will play an important role in our FY23 plan too.

**Sentinel Monitoring Site Visit**

Samarra Scantlebury introduced a quick poll to gauge interest in a group site visit to sentinel monitoring. Live results indicated all present were interested but noted it may depend on location or time of the visit. Co-chairs will begin planning for this over the winter and possibly implement for next summer. Therefore, please still give your feedback regarding where, and when you have interest.

**Actionable Items Summary (Immediate Actions Only)**

- Any comments on April Meeting Minutes should be emailed to Kathleen Knight at [Kathleen.Knight@ct.gov](mailto:Kathleen.Knight@ct.gov)
- Any comments on the FY23 Workplan should be made in track changes (and if in a separate document uploaded to the share drive that will be provided post meeting). Final deadline is September 16, 2022.
- Co-Chair, Kate Knight will amend FY23 with verbal comments taken today and incorporate them into the draft but again encourage written comments.
- Next meetings will continue to discuss the strategy and goal is to have a complete document in a year.
- Planning committee will initiate workgroup coordination, including but not limited to the exploration of what the public perception survey may be able to provide for CCSM.
- Co-Chairs will outline a job description to describe the data need of the CCSM.
- Ron Rozsa plans to follow up with the Workgroup with a summary of his study regarding the natural restoration of Connecticut Marshes.

**Meeting Adjourned at 12:02 PM**