

Long Island Sound Study Management Committee Meeting- Notes Housatonic Community College Thursday, July 20, 2017

Attendees: Jim Ammerman, NEIWPCC; Rick Balla, EPA Region 2; Cassie Bauer, NYSDEC; Robert Burg, NEIWPCC; Mel Coté, EPA/NE; Sylvain DeGuise, CT Sea Grant; Nancy Ferlow USDA/NRCS/CT; Peter Francis, Richard Friesner, NEIWPCC; CTDEEP; Laura Grieco, NYCDEP; Chuck Lee, CTDEEP; Dawn McReynolds, NYSDEC; Chris Mecozzi, EPA Region 2; Jonathan Morrison, USGS/CT; Jim O'Donnell, STAC/CT; Leah O'Neill, EPA; Mark Parker, CTDEEP; Evelyn Powers, IEC/NEIWPCC; Kimberly Roth, NEIWPCC; Nancy Seligson, CAC/NY; Mark Tedesco, EPA; Harry Yamalis, CTDEEP; Todd Randall, USACE; Mike Stover, EPA Region 1; Judy Preston, CTSG, Dave Lipsky, NYCDEP, Gary Wikfors, NOAA Fish; Tracy Brown, Save the Sound.

Welcome/Introductions/Logistics: Mark Tedesco called the meeting to order at 10:05am. Mark welcomed everyone and asked if there were any comments to the May 11 Management Committee meeting summary provided and or any proposed changes to the agenda for today's meeting. An update on the eelgrass surveys conducted by USFW was added to the agenda. Laura Grieco announced that she would be sitting in for Pinar Balci (NYCDEP) who was scheduled to give an update on the eutrophication modeling effort. There were no members of the public in attendance for ideas or comments.

REPORTS

Science and Technical Advisory Committee (STAC): The last STAC meeting was held on June 16th at the UConn Avery Point Campus. The 4-page meeting summary is available on the LISS website. This meeting was a follow-up to the February STAC meeting on modeling and focused around carbon and biogeochemistry. Heidi Dierssen presented on remote sensing of chlorophyll and SST in LIS; Suzanne Paton gave an update on the plans for eelgrass survey overflights in eastern LIS; Craig Tobias gave a talk about sediment-water nitrogen fluxes in LIS; Jim O'Donnell gave an update on the new LISICOS acidification and nutrient sensors; Penny Vlahos and Mike Whitney presented on nutrient and carbon fluxes in LIS; and Mark Tedesco gave an update on the FY17 budget. There was also a carbon and biogeochemistry panel

discussion following the presentations. Mark Tedesco commented it was excellent panel discussion on modeling and prediction of hypoxia. No questions were asked at the end of the presentation.

Citizens Advisory Committee (CAC): The last CAC meeting was held on June 8th at Housatonic Community College, Bridgeport. The meeting began by CAC members sharing thoughts and feelings about Sandy Breslin, the former CAC Co-Chair, who passed away in May. Mark provided an update on the FY17 budget. During a discussion about the budget, the group acknowledged that they should reach out and thank the NY and CT representatives that helped secure \$8 million in funding for LIS. The members also talked about how budget money should be used. It would helpful for the trip to Washington if there was a list of projects that we would like to get funded. In addition to the budget discussion, Robert Burg provided an update on the Niantic Bay Behavior Change Project and Social Media Campaign #DontTrashLISound, Adrienne Esposito talked about the Washington DC trip, Jim Ammerman gave an update on the research projects, and Mark Parker provided an update on CT DEEP activities and restructuring. The NY/NJ estuary program approached the CAC about their interest in a joint meeting. A joint meeting is currently being planned, topics may include modeling. The LI funders collaborative also approached the CAC about what they want to get funded. The CAC also talked about planning a few LISS events including a press event regarding reaching the TMDL target of 58.5% and having the governors and policy committee members come together to celebrate LIS and have a signing of the CCMP. Nancy will keep the MC informed when these events get scheduled, no definitive timeframe is set at this time. Jim Ammerman mentioned that the CAC also talked about organizing another day of Hill visits in DC in September. Nancy will let the MC know when the date is set. No questions were asked at the end of the presentation

CCMP IA PROGRESS REPORTS

<u>Public Involvement & Education:</u> Judy and Robert and the PIE work group developed a social media campaign #DontTrashLISound on marine debris focusing on plastics and micro plastics. The campaign began on July 18th and will run through the International Coastal Cleanup day in September. This is the first time that LISS is using social media for education; approximately 2 years ago, social media was used to promote the CCMP release. Robert will track progress to measure the success of this campaign. Jim Ammerman mentioned that NYCDEP just started a "Don't Trash Our Waters" anti-litter campaign and thought it would be a good idea for LISS to connect with them. Jon Morrison suggested that the campaign not just focus on coastal marine debris – a lot of floatables are coming down from the rivers into LIS.

Climate Change & Sentinel Monitoring: Cassie Bauer gave an update on the Climate Change and Sentinel Monitoring activities. The Sentinel Monitoring technical work teams are currently working on reviewing and revising the Sentinel Monitoring Strategy that was developed in 2011. Currently, the work teams have updated the matrix of Climate Change Sentinels and identified any gaps. To identify priority sentinels, a survey was sent out to the work team members. Responses to the survey are due by August 8th. After the priority sentinels have been selected, the "looking forward" section of the strategy section will be update. Ron Rozsa has also volunteered to draft a section about the database and identifying a monitoring network. Mark Tedesco mentioned that \$30,000 was given to the LISS for a CCMP climate change vulnerability

assessment that will be led by Connecticut Sea Grant (Juliana Barrett0. This work group will be involved in the review of that assessment.

<u>Tracking and Reporting:</u> It was suggested to reconvene the ad hoc reporting work group to work on tracking and reporting of implementation activities. The Management Committee agreed. This work group had been led by Leah O'Neill and Joe Salata (EPA LISO) for implementation and tracking, to condense the reporting and separate paper reports and online reporting. Mark Tedesco suggested to reconvene this ad hoc work group to further evaluate and recommend activities for implementation tracking and reporting and to present their recommendations at the October Management Committee meeting.

BUDGET UPDATE:

FY 17 Budget update: Mark Tedesco passed around a handout of the final FY17 budget numbers for each of the tasks. The tasks are consistent to what the MC agreed to at the May meeting, but with finalized numbers that needed to be refined after some discussion with the grant applicants. There was some open discussion about required matching fund amounts and what needed 1:1 and what didn't. Leah thanked all 9 base grantees for getting the budget proposals in and working quickly to get these awards out by October 1. Some grant applications are in and some grantees are still working to get them in before Sept 30th.

FY18 budget process: Mark Tedesco suggested that the MC have discussions of the FY18 budget options at the October meeting. Mark will send out a formal request for pre-proposals following the meeting. The pre-proposals will be reviewed at the September 6th I-team meeting in preparation for the October 19th MC meeting.

- Sylvain mentioned that there was no science research funding in the FY17 budget and that the MC should keep that in mind for the FY18 budget. The research competition is held on every two years, on the off year of the sea grant research competition cycle. As these two RFPs would not be able to be administered during the same year, the MC needs to decide whether to include enough money for an RFP in the FY18 budget or wait three years for the next RFP.
- It was also suggested that if we are going to continue with an increase in the geographic scope of the LIS Futures Fund that we give the upper watershed States more notice.
- Leah reminded the MC that CT can no longer provide large amounts of overmatch, so groups should try to provide match and clarified that federal funds cannot be used for match. We also may need to require match from the research grants.

PRESENTATIONS

Sea level rise in LIS and its implications for people and coastal ecosystems.

Jim O'Donnell gave a presentation on sea level rise in Long Island Sound. Connecticut is requiring towns to think about sea level rise based off the NOAA technical report (global mean SLR scenarios). So, UConn was asked to make sure the global scenarios were consistent with the geology of Connecticut. The conclusions of Jim's analysis were:

- Mean (annual) sea level in LIS has large amplitude decadal variations

- Sea Level rise in LIS will be higher than global average
- Uncertainty is higher (double) than global average
- 2050 predictions are fairly robust up to .5 m (95%)
- 2100 predications are very uncertain current model consensus 1m +/- .5m
- Flooding frequency will increase. Larger increase in the east
- Property values will decrease
- Marshes will flood more often raising accretion rate, but pressure to control flow will increase
- Management of small scale flow constrictions are critical- they determine mean level, flooding frequency, salinity and temperatures.

Break for lunch at 12:27 pm, Restart after lunch at 1:09pm

Eutrophication Modeling Update: Laura Grieco (NYCDEP) gave an update on the Eutrophication Modeling effort. At the May MC meeting, the MC members decided to set aside 1.4 million to this effort in FY17 budget. Pinar Balci (NYCDEP) will be doing this work under an existing contract. Laura passed around a hand out with a diagram demonstrating the tasks in the proposal. The solid squares and circles in the diagram are covered under the \$1.4 million and the open circles currently don't have funding. Phase 1. B (the hydrodynamic model) will probably take about 80% of that 1.4 million. The first step is for NYCDEP to create and initial scope of work. NYCDEP will review past work and modeling literature. After initial scope of work is developed, it will be given to a technical advisory committee for review. The technical advisory committee will make the document more detailed (more specific needs of the model). NYCDEP will select the technical advisory committee members from a list of 40 people who have expertise in modeling. After the technical advisory committee makes comments, NYCDEP involve a review committee selected from stakeholders and regulators in the region. NYCDEP will take the review committees recommendations and finalize the Statement of Work for the LIS integrated modeling approach. There will be stakeholder engagement for each part of the model. NYCDEP has a meeting next week to talk about the grant specific conditions and will send the final proposal over to LISS shortly.

USGS Monitoring Summary: Jon Morrison gave an update on the nitrogen loading work that USGS has been doing in the CT River. Historically, USGS calculated the N load for the CT River using the data at Thompsonville, CT. So, the land use and watershed area below Thompsonville was missed in the analysis. Therefore, USGS decided to add a stream gauge in Middle Haddam, CT to extend the watershed area that is being accounted for. Middle Haddam, CT is freshwater tidal and 5 miles upstream from where we really see any of the salt. USGS has also extended north of Thompsonville by adding a stream gauge station in Northfield, MA, with support from MADEP. The Middle Haddam stream gauge is located on a fuel pier at the Pratt and Whitney jet engine facility. Instantaneous discharge (stream flow) is measured every 5 minutes using an Acoustic Doppler Velocity Meter. A UV Nitrate sensor was installed at the end of 2011. This unit operates every 15 minutes. The Nitrate sensor has done very well and the data correlates with TN. USGS did a comparison of the TN loads for Middle Haddam and Thompsonville in 2014 and found that there was a 30% increase in the N load for about a 10% increase in the area as there is a much different land use signal and N sources in the southern part

of the river. With the addition of the two gauges, USGS now has almost 90% of the drainage area monitored.

UPDATES

Nitrogen Reduction Updates: CTDEEP updates: Chuck Lee handed out a summary of CTDEEP's "2nd Generation Nitrogen Strategy" activities this past year, which included continuation of CT's Nitrogen Trading Program and denitrification upgrades at sewage treatment plants. Stormwater and nonpoint source issues are being addressed through a Revised MS4 General Permit and DOT (MS4) General Permit. UConn CLEAR has been contracted by DEEP to conduct MS4 outreach as well and a special Coastal Community Nitrogen Sources Outreach project. An Integrated Water Resource Management program has identified eight embayment complexes (along the CT Coast) as priority areas for nutrient management improvements.

EPA's N reduction strategy: Leah O'Neill (EPA Reg. 1) reported that the Nitrogen Reduction task order with Tetra Tech is scheduled to close September 30th. Many final deliverables are posted on the LISS website. The Management Committee recommend funding for the Option Period on the Task Order at the May 11th meeting. The option period will start in October and run through March 2018, will be doing the same work, just in additional embayments and rivers. EPA and Tetra Tech are planning another public webinar later this year to review progress and outline next steps. EPA has been coordinating their efforts with the Suffolk Co/LINAP and CTDEEP 2nd Generation work. More information can be found at: http://longislandsoundstudy.net/issues-actions/water-quality/nitrogen-strategy/

GAO Engagement: The GAO is continuing to do their investigation and will send us a draft report when they are done.

LIS Futures Fund: Chris Mecozzi gave brief update on the Futures Fund administered by the National Fish and Wildlife Foundation (NFWF). There are 47 proposals being reviewed from July 12, 2017 to August 18, 2017. The LISFF has approximately \$2 million in available funds to award this year. The program priorities are consistent with the CCMP: Clean Waters and Healthy Watersheds, Thriving Habitats and Abundant Wildlife, and Educating to Engage Sustainable and Resilient Communities. In early September, there will be an onsite meeting for the review team and decisions will be made in later September and early October.

CT DEEP: Mark Parker gave a PowerPoint update on CTDEEP's coordination activities and efforts to establish a National Estuarine Research Reserve (NERR) in the Long Island Sound. In 2015 CTDEEP's Office of Long Island Sound Programs (OLISP) submitted a letter of intent to the National Oceanic Atmospheric Administration (NOAA) to establish a Connecticut NERR site designation in Long Island Sound. A Steering Committee was created led by DEEP, the Marine Sciences Department at the University of Connecticut, and CT Sea Grant. In May 2016, a Site Selection Team was established and began a year-long process to identify and evaluate potential sites. Staff of the Department of Energy and Environmental Protection's Land and Water Resources Division (LWRD) (formerly Office of Long Island Sound Programs or OLISP) are coordinating the site selection process and has created a Project Web Site on at www.ct.gov/DEEP/NERR to document progress, Team meetings, agendas and minutes. The Site

Selection Team is composed of 19 volunteers from a wide range of state, federal, academic, non-governmental entities and environmental groups and public stakeholders. The Team completed a preliminary evaluation of several potential locations in coastal CT and identified four finalist complexes. In October 2016, he Team then broke into sub teams to tackle five classes of detailed criteria with which to further evaluate and score the four complexes in order to, ultimately, narrow down to one finalist site complex. The Steering Committee held a public informational meeting at UConn Avery Point on May 16, 2017 to give an update on the preliminary results and the four site complexes moving into detailed criteria evaluation stage. Site scoring is expected to be completed in early September 2017. Once a nominee has been selected, a formal public meeting will be scheduled in November to present results and seek public comment. Formal nomination material will be sent to NOAA by January 2018. For more information on the process to establish a reserve in Connecticut, please email DEEP.NERR.contact@ct.gov or visit www.ct.gov/DEEP/NERR.

Eelgrass mapping: Suzanne Paton took the lead for using an existing contract with USGS for data collection (overflight conducted June 28^{th)} and with URI for interpretation of data. The USFWS has in place the field validation work. Should have good interpretation with seagrass in 2017 within a few months. The Images will be made publicly accessible though the USGS site.

<u>Save The Sound</u>: Tracy Brown, director of Save the Sound, reported that the Unified Water Study is currently underway in its inaugural season. There are 12 groups monitoring with the Tier 1 protocol in 24 Sound embayments. There are an additional 12 groups have expressed interest in joining the study in 2018. The funding to date is entirely from the Long Island Sound Funders Collaborative. Applications have been submitted to the Futures Fund to support the expansion of the study in 2018.

Save the Sound is piloting the Tier 2 protocol of the UWS this summer. Tier 1 parameters are DO, Chl-a, temperature, salinity, clarity and macrophytes. Tier 2 parameters are continuous DO, nutrients and an advanced macrophyte survey.

The third Long Island Sound Report Card is scheduled to be published in late spring of 2018. Starting next week, a process to revisit and possibly revise the indicators and thresholds used to report on and grade nutrients in Long Island Sound will begin. A survey will be emailed to all stakeholders in the coming week and a working group will be assembled under the leadership of Jamie Vaudrey, Jason Krumholz and Darcy Lonsdale. The indicators and thresholds review process with be completed by this November. The 2018 Report Card will be produced using this revised approach and will include data from 2007 – 2017.

More information on the Unified Water Study – $\underline{www.savethesound.org/uws}$ More information on the LIS Report Card – $\underline{https://ecoreportcard.org/report-cards/long-island-sound/}$

Floor Updates: Susan Sullivan is now director of NEIWPCC

<u>Next Meeting & Adjournment:</u> Next Meeting is October 19. Topics: Sea Floor Mapping (NRCS subaqueous work and Sound Cable Fund), Blue Plan, Budget Discussion follow-up from today's meeting

Mark Tedesco adjourned the meeting at 2:51 pm.
