

## Long Island Sound Study Water Quality Monitoring Workgroup Conference Call Meeting Minutes

Wednesday, August 8, 2019, 2-3 PM

Jim Ammerman (Chair)—Long Island Sound Study (LISS)/New England Interstate Water Pollution Control Commission (NEIWPCC)

Carol DiPaolo—Coalition to Save Hempstead Harbor

Holly Drinkuth—TNC (Connecticut CAC Co-Chair)

Richard Friesner--NEIWPCC

Michele Golden--New York State Depart of Environmental Conservation (NYSDEC)

David Lipsky—New York City Department of Environmental Protection (NYCDEP)

Kamazima Lwiza—Stony Brook University

Matt Lyman—Connecticut Department of Energy and Environmental Protection (CT DEEP)

Michelle Lapinel McAllister--Coalition to Save Hempstead Harbor

Katie O'Brien-Clayton—CT DEEP

Evelyn Powers—Interstate Environmental Commission (IEC)

Beau Ranheim-- New York City Department of Environmental Protection (NYCDEP)

Paul Stacey—Footprints in the Water

Kelly Streich—CT DEEP

Mark Tedesco-EPA, LIS Office

## Agenda:

- 1. Brief: Current monitoring updates and any further discussion of 2018 hypoxia report
- 2. Main discussion: Planning documents for upcoming October 2-day Management Committee meeting. Science needs discussion will focus on water quality ecosystem targets but can include others. Current documents are preliminary and require additional workgroup input.
- 3. Other topics as needed.

Planning documents sent in advance: 1. LIS Technical Workgroup Guidance 2019, and 2. LISS Science Needs Document

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1. Current Monitoring--Matt Lyman mentioned that the CT DEEP monitoring boat (R/V John Dempsey) was crowded this summer with several additional research projects, including the recently-funded LISS projects on water column respiration (P. Vlahos, U. Conn.) and satellite remote sensing of water-quality related parameters (M. Tzortziou, CUNY), as well as others. Evelyn Powers reported that IEC had found widespread hypoxia in the western Sound and nearby embayments. She noted that IEC was sampling two

embayments as part of the Unified Water Study (UWS) and was analyzing chlorophyll *a* and nutrients collected by many of the groups in the UWS. She also thanked Katie for her collaboration on the 2018 Hypoxia Report.

Carol DiPaolo noted that bottom oxygen concentrations in Hempstead Harbor had plunged in mid-July but were now rising. She also mentioned some fish kills of bunker (menhaden) and some eels, not in huge numbers but apparently found in several embayments along the NY shoreline of LIS. These fish kills are probably connected to the oxygen declines. In addition, the multiple large rain events have produced obvious runoff and contributed to apparent algal blooms. Evelyn also noted a bunker kill outside of Hempstead Harbor. Beau Ranheim mentioned that NYC's monitoring boat was back in the water and due at least partly to early season cool weather he had seen little low dissolved oxygen, in fact Newtown Creek had values as high as 12 mg/liter.

Finally, Katie O'Brien-Clayton mentioned the Monitoring Blitz for Coastal Acidification, or Shell Day, on August 22, 2019. On this day many groups in the Northeast will be monitoring coastal acidification:

http://necan.org/sites/default/files/Shell%20Day%20Flyer\_Combined.pdf

2. The remainder of the meeting was focused on input from the workgroup for the two-day Management Committee meeting in October. There was general discussion about broadening the workgroup consideration of current LIS monitoring programs to include current work on groundwater, including the Long Island Nitrogen Action Plan (LINAP) and the Suffolk County Subwatersheds Plan, which has just been released. In addition, there is USGS groundwater modeling underway on Long Island, as well as related efforts in Connecticut including USGS monitoring of the Connecticut River and increased embayment monitoring and modeling. EPA and the LISS have benefitted from these other programs, many of them funded by the LISS, and could benefit further from closer collaboration.

Paul Stacey continued the discussion by stating that the workgroup should further broaden its purview to consider the physical, chemical, and biological health of the Sound. He praised the work of the Climate Change and Sentinel Monitoring Work Group for its ecosystem focus and suggested that the LISS should push further in this direction. Richard Friesner noted that the increase in long-term water levels from sea level rise due to climate change was also important. Climate change also increases precipitation in the northeast, further challenging coastal resiliency. Dave Lipsky suggested prioritizing embayment monitoring for dissolved oxygen and eelgrass but also sediment chemistry. Kelly Streich mentioned the increased effort in the Pawcatuck estuary, including modeling and a macroalgal survey. Paul Stacey advocated for the use of logic models, focusing on how to address the most important management questions. Both he and Dave Lipsky argued for the workgroup to consider providing broader recommendations.

Mark Tedesco returned to the benthic sampling issue and asked about its current status, since LISS provided FY2018 funds to CT DEEP for a benthic program design. Kelly Streich replied that a contractor was currently developing plans for benthic surveys, either conducted separately or at the same time as the water column surveys. These surveys may focus on specific embayments but the final approach is yet to be determined.

The meeting concluded with Paul Stacey complimenting the LISS Science Needs PowerPoint but suggesting the need to determine low, medium, and high priorities as well as short, medium, and long-term outcomes. He mentioned that he would likely migrate the document to a spreadsheet before responding in detail. Holly Drinkuth thought that additional outcomes should be added. (Note that these notes reflect only the discussion during the meeting. Some members provided additional input right after the meeting and more arrived later. After limited editing all input provided was included in the final workgroup submission to the Management Committee on August 19<sup>th</sup>.)