



Long Island Sound Study

A Partnership to Restore and Protect the Sound

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

Thursday, June 22, 2017 1-2:30 PM

Participants:

Jim Ammerman (Chair)--LISS/NEIWPCC
Nicholas Cholewka--NYCDEP
Charles DeQuillfeldt—NYSDEC
Laura Grieco--NYCDEP
Lorraine Holdridge-NYSDEC
Peter Linderoth—Save the Sound
Kamazima Lwiza—Stony Brook University
Katie O'Brien-Clayton--CT DEEP
Leah O'Neill—EPA
Evelyn Powers--IEC/NEIWPCC
Beau Ranheim--NYCDEP
Mark Tedesco—EPA

Advance Agenda:

1. Current monitoring issues
2. Updates, Unified water study and others
3. Data Archiving and Analysis Activities and Updates: Tetra Tech, LINAP, IEC, others
4. GIS in LIS (previously distributed Corbel Analytics report)
5. Modeling needs, budget, and funding issues; see attached summary from past meeting with STAC
6. GAO questions, see attached, I have an interview with GAO on July 13 after discussing these with you
7. New LDEO/CUNY NASA Project
8. Others

Meeting Discussion:

1. Current monitoring issues: Katie O'Brien-Clayton called in while returning from an embayment monitoring trip. She mentioned that recent monitoring at Station A4 showed a Secchi depth of less than 1 meter, suggesting a possible phytoplankton bloom, and a

reduced dissolved oxygen of 4.75 mg/l.

2. Updates, Unified Water Study and others: Peter Linderoth described the current status of the Unified Water Study (UWS) in detail. This summer there are 12 citizen groups monitoring 24 embayments (11 groups and 20 embayments in LIS) for Tier 1 parameters (T, S, DO, chlorophyll a, turbidity, and qualitative macrophyte assessments). Two embayments, Mamaroneck and Little Neck Bay are being monitored for Tier 2 parameters including nutrients, continuous DO, and quantitative macrophyte assessments. The QAPPs are completed for most of the groups and the LIS Funders Collaborative has provided support for an equipment loan program that many groups are using, Harbor Watch is administering the loans. Peter noted that the UWS has received significant press and outreach attention and that 16 additional groups are considering participation next year.
3. Data Archiving and Analysis Activities and Updates:
 - a. IEC—Evelyn Powers discussed the recent contract awarded to Industrial Economics, Inc., following detailed proposal review, for a data archiving and analysis of 26 years of Western LIS monitoring data. She noted that the QAPP should be completed in July, a draft report is due in early 2018, and the contract provides for two in-person presentations of results. Some of the workgroup members were involved in the proposal review process for this contract and were also instrumental (especially Lorraine Holdridge) in detailing the GIS deliverables required through an added addendum to the RFP. Evelyn also noted that this year's IEC monitoring program starts next week.
 - b. Tetra Tech—Leah O'Neill briefly summarized the Tetra Tech project to help implement the EPA Nitrogen Strategy. Tetra Tech is archiving data from Western LIS, LIS embayments, and large riverine systems with the goal of determining allowable nitrogen thresholds for different ecological endpoints. They are compiling the data into Excel spreadsheets, but GIS maps of the data are not currently a deliverable, though this issue could be raised with Tetra Tech.
 - c. Connecticut Blue Plan-- Katie O'Brien-Clayton noted that the Connecticut Blue Plan (LIS coastal and marine spatial planning) has some LIS GIS mapping information on the NY Department of State Office of Planning and Development's Geographic Information Gateway. She sent the following link to the site after the meeting:
<http://opdqig.dos.ny.gov/index.html#/home>
More information is being added and the focus is on the main stem of the Sound, not embayments. Later in the discussion Katie also mentioned that there was an upcoming webinar on CT DEEP's new nitrogen reduction strategy for LIS at 2 PM on June 28th. After the meeting, she distributed the link to register for the webinar:
<https://register.gotowebinar.com/register/2137615914314984706>
 - d. NYSDEC—Lorraine Holdridge provided an update on the Long Island Nitrogen Action Plan (LINAP). She mentioned a series of recent successful meetings of the fertilizer workgroup with diverse representatives of the consumers and producers of fertilizer, including agriculture, landscapers, golf courses, and fertilizer manufacturers. All acknowledged the nitrogen pollution problems that fertilizers cause in aquatic systems and discussed ways to mitigate them. Environmental advocates were also represented in the discussions. She also noted the LINAP information and newsletters are available on the DEC LINAP website.
4. GIS in LIS (discussion related to 2013 Corbel Analytics Report "Long Island Sound Study GIS Needs Assessment" distributed in advance by Jim Ammerman)—Jim opened the discussion by describing the potential significance of broader implementation of GIS analysis in the archiving and analysis of LIS information, as already alluded to in some of the previous discussion. Jim noted that the Narragansett Bay National Estuary Program has a staff member whose primary responsibility is GIS analysis. Mark Tedesco

provided a background and perspective on the August 2013 LIS GIS Report. Recommendations from the stewardship initiative, as well as other concerns about coastal hazards and habitats resulted in a contract to Corbel Analytics/GIS Resource Group to develop a report on LISS Geospatial Goals, LISS GIS Capacity, GIS Data Needs, and Clear Recommendations. The report notes the limited GIS expertise and usage within the LISS, despite the fact that most of its partner agencies have in-house GIS capabilities. The dispersion of LIS data across two states and many organizations does pose a challenge for GIS utilization, but regional examples of its use by University of Connecticut CLEAR, potentially for high-level products of the LIS Seafloor Mapping Study, and by the Connecticut Blue Plan via the NYS Gateway (mentioned above) are available. Lorraine Holdridge also mentioned that GIS analysis of LINAP data was an area of concern. This is an issue for more detailed discussion going forward.

5. Modeling needs, budget, and funding issues (Jim Ammerman had previously distributed the “Science Needs for Eutrophication Management” which resulted from discussions at the February 17, 2017 joint meeting of the LISS Science and Technical Advisory Committee (STAC) and the Water Quality Monitoring Workgroup.) The inadequacies of the current water quality-related knowledge and modeling for LIS have been apparent for some time, and are summarized in the above “Science Needs” document. A prior attempt to support additional measurements and modeling through a 2016 NOAA Coastal Hypoxia Research Proposal was unsuccessful. However, with the unexpected availability of additional FY2017 funding for the LISS, discussions have recently ensued between the LISS and NYCDEP on a joint effort to fund a new generation of hydrodynamic and water quality models for LIS. Mark Tedesco and Laura Grieco briefly described these efforts and noted that the proposal from NYCDEP to EPA to develop a scope of work document was nearly complete. The scope of work will be developed by an outside consultant with the help of a panel of experts from other estuaries. In response to a question by Kamazima Lwiza, it was noted that this will be a long-term project with opportunities for additional data collection and analysis as well as modeling. The models and data should provide feedback to each other as the program develops.
6. GAO Questions (Jim Ammerman had previously distributed a series of questions from the GAO for an upcoming interview): The US Government Accountability Office (GAO) is conducting evaluations of a number of EPA Geographic Programs such as the Great Lakes, Puget Sound, and others at the behest of Rep. Bill Shuster, Chairman of the U.S. House Committee on Transportation and Infrastructure. This is a routine process and GAO staff have attended or called into LISS Management Committee, I Team, and workgroup meetings as well as other events. They have also interview various staff and partners and are continuing to do so in order to gather a range of perspectives. As the Water Quality Workgroup Chair, Jim Ammerman will be interviewed on July 13th. Most of the questions relate to the role of the workgroup, the accomplishments under the 1994 CCMP, and the role of the workgroup in developing the goals of the 2015 CCMP and its 20 ecosystem targets, as well as the current 52 indicators of LIS health on the webpage. It was noted that much of this information can be found in the self-assessment of the EPA Program Review.
7. New CCNY NASA-funded Project (Jim Ammerman distributed a 1 page project summary just prior to the meeting): Dr. Maria Tzortziou of the City University of New York and colleagues have recently been awarded a major grant from the NASA Ocean Biology and Biogeochemistry Program entitled “Ecological and sociodemographic determinants and impacts of urbanization and restoration on intertwined urban—wetland-estuarine systems”. Their test-bed is Long Island Sound and Mark Tedesco is listed as a collaborator on the proposal. The principal researchers have inquired about the possibilities for participating in monitoring cruises and have been given contact

information for Evelyn Powers at IEC and Matt Lyman at CT DEEP. A question was raised about possible comparison with aerial photography but none was evident from the abstract.

8. Other: There was a brief discussion about New York City monitoring programs following discussion of Jim Ammerman's discussion of his recent participation in the Harbor Estuary Program's Water Quality Workgroup Meeting. NYCDEP will conduct some additional monitoring focused on its MS4 efforts as well as the regular harbor monitoring.