

**Long Island Sound Study Science and Technical Advisory Committee
Meeting Summary, October 2, 2009 – UConn Stamford**

Charles Yarish brought the meeting to order at 9:25 a.m. and participants introduced themselves.

Stakeholder research in Long Island Sound

Background: at the July Management Committee meeting, Art Glowka was invited by Hans Dam to present the results of his research to the STAC. This presentation was in fulfillment of that invitation.

Art Glowka presented his beliefs to the STAC that after 45 years spent personally observing the Sound, it is becoming an aquatic desert. He stated that the nitrogen reductions implemented have not reduced hypoxia; they have instead resulted in clear water and more hypoxia. He questioned why hypoxia started in the 1970s. He also stated that the EPA Long Island Sound Study has become bogged down with make-work projects. Art said that the East River doesn't affect Long Island Sound as a whole and the CT River doesn't affect western Long Island Sound. He said that in the summer, wastewater treatment plants have little to no effect on nitrogen levels in the Sound. Art stated that 24 species of fish have disappeared in his time. He reported that an annual fishing contest in the Sound has had progressively smaller "winning" fish for the last three years. In the 1970s, bunker were removed by purse seiners, in the 1980s there were many dead bunker and now the bunker are gone. He linked this loss to a lack of plankton in the Sound and a shift to smaller sized plankton, noting that *Crepidula*, the slipper shell, which feeds on smaller phytoplankton, has exploded in population. He said the loss of plankton was due to nitrogen reductions. Fred Stunkel also spoke in support of Art's statements and said that he has seen a decline in fish during his years fishing the Sound.

There was an active discussion following Art's presentation. The STAC co-chairs requested a report from Art with data to support his statements. Art stated that he did not have the resources to prepare a report for the STAC. Several STAC members questioned Art's assertions, in particular with regard to riverine effects on Long Island Sound and total fish numbers. Salinity data from the western Sound indicates that the East River has a significant impact. Penny Howell's analysis of the LIS trawl survey data suggests that fish biomass has not declined. Additionally, it was suggested that fishing contests are not a good indicator of total fish health in the Sound because they are snapshots rather than true time series. Curt Johnson asked if there were numbers to support the assertion regarding loss of bunker and Art replied that there are not any numbers because it is a cash-based business.

Research, Monitoring and Assessment Needs Report

The needs assessment was updated based on information from workgroups and researcher reports and the Management Committee is scheduled to review the document Oct 21-22, 2009.

There was extensive discussion of the need for a summary/synthesis of this lengthy document and recommendations for next steps for each management theme (hypoxia, toxic substances, living resources and habitats, watershed management and cross-cutting). Mickey Weiss emphasized the need for group evaluation of proposed changes to the Needs Assessment, and questioned why some species were identified as priorities for conservation (e.g. saltmarsh sharp-tailed sparrow) while others of management interest were not included (e.g. menhaden). Several attendees suggested a group of experts is needed to figure out what has been gained from previously funded projects and identify important next steps for each management theme. Mark Tedesco reminded the STAC that this was one of the major goals of the synthesis book, but that progress on several chapters has stalled. There was agreement that one way to jump start the synthesis book was to have chapter-specific workshops involving chapter leaders and contributing authors to write the main themes. Funding is available to chapter leaders to support workshops through the existing LISS awards to CT and NY Sea Grant supporting the synthesis book. Additional 2010 funding can be requested to assure adequate support for honoraria.

The upcoming RFP was also discussed. Carmela Cuomo suggested that the synthesis/recommendations described above could be the basis for the next research RFP. Mark Tedesco said that the basis for the next research RFP is being left to the STAC to decide. The confusion during the last RFP regarding funding assessment projects in addition to research projects was brought up. There was also discussion of whether more small projects or a few large projects should be the focus of the upcoming RFP and it was agreed that a vision for the RFP is needed, particularly if the LISS budget is substantially larger in 2010 than 2009. The CAC co-chairs emphasized their need for a roadmap from researchers as to how additional federal money that may become available for LIS research would be spent. Improvements to the SWEM model were identified as a priority by several members of the STAC, and specific suggestions included improving estimates of respiration rate used in SWEM, improving the geochemical-sediment model used in SWEM and a team evaluation of different model components to see how well they work. It was agreed that further discussion of the RFP structure is going to be needed at future STAC meetings.

STAC Fellowship

Julie Rose proposed moving up the STAC Fellowship dates from one calendar year beginning September to one calendar year beginning in June. This change was recommended by the STAC Fellowship review committee in order to allow masters and final-year PhD students to compete. Sylvain DeGuise wanted to make sure that the fellowship funding cycle did not need to be tied to the LISS October-September funding cycle and also requested that a STAC meeting be coordinated with the beginning of the funding cycle so that proposed Fellow projects could get rapid approval. Mark Tedesco said that the fellow funding cycle did not need to be in sync with the LISS funding cycle. The proposed date change was approved, with notation that the RFP and review process also need to be moved up.

The second proposed change was to alter the statement in the RFP regarding advisor responsibilities should a student leave the Fellow program early. The language was originally adopted because Sea Grant has a reporting requirement. There has been concern from advisors about having to fulfill fellow responsibilities without compensation. The proposed change would require the advisor instead to update Sea Grant on the circumstances of the student's failure to fulfill their responsibilities. Sea Grant could then report to EPA the fellow's failure to complete the fellowship and this would fulfill their reporting requirement. This new language was approved.

A discussion of the research tasks for the 2009 STAC Fellows followed. Mark Tedesco noted that the research tasks should be something that fellows are interested in but also useful to LISS and the STAC. Several people suggested that the topics be included as part of the application process. Charlie Yarish stated that designation of fellow tasks is the responsibility of the STAC co-chairs. Other attendees suggested that the fellows be involved in the synthesis process that was described in the Needs Assessment discussion (see above).

Formation of Nomination Committee for CT Co-Chair Election

Jim O'Donnell and Bob Wilson volunteered to be the nomination committee for the CT co-chair election. The election will be held at the next STAC meeting in February 2010.

Updates

CAC: The CAC has been lobbying Congress for increased LISS funding. The SoundVision project is underway with the review of consultant applications. More information was requested by the STAC on how the consultant contract was advertised and on the selection criteria. Nancy and Curt Johnson reiterated the desire of the CAC to have STAC involvement in the SoundVision project.

LIS Synthesis Book: Larry Swanson reported that the geology and history chapters have made good progress but the combined biology/ecology chapter has stalled. Charlie Yarish reported that the editors are working with Springer to adjust the publishing deadline. There was discussion of the lack of progress on several stalled chapters and ways to get this project back on track. It was agreed that the editors would hold separate calls with the leaders of each chapter, starting with the Ecology and Biological Oceanography chapter to discuss the workshop idea and next steps.

Bioextraction Workshop: Julie Rose reported that the International Workshop on Bioextractive Technologies for Nutrient Remediation will be held at UConn Stamford on Dec 3-4. Speakers from around the world have been invited and the agenda will be posted shortly. The first day will be presentations and the second day a panel discussion of the potential to bring these technologies to Long Island Sound. The focus is on nutrient remediation, not biofuels. A report focusing on the panel discussion will be forthcoming as a way of focusing on "next steps" after the workshop.

Eelgrass RFP: Julie Rose reported that a RFP for an eelgrass-focused enhancement grant is being developed, with a major challenge being to develop a topic beneficial to both states. Mapping eelgrass habitat has been identified as a priority for both states and the writing team is proposing the development of a site suitability index model similar to one already

in use in the Peconic Estuary. The goal would be to assist managers in targeting sites for potential restoration efforts. The date for RFP release has not been set yet.

Sentinel Monitoring Workgroup: Sarah Deonarine reported that the Climate Ready Estuaries Direct Technical Assistance grant has gone through and the EPA contractor work has begun. The focus of this contractor work is a review/synthesis of what has been done in other coastal programs regarding climate change indicators. The two states are still working separately on developing monitoring strategies, but each state workgroup has developed overarching documents for distribution to STAC members. Julie Rose mentioned that as part of the sentinel monitoring workgroup it has become apparent that there is a lot of monitoring data available for the Sound, a lot of people are using this data, but there is very little communication among groups using the monitoring data available. She proposed starting a workgroup to facilitate communication between different scientists using LIS monitoring data. Anne MacElroy suggested a website aggregator be developed with links to specific research. Jim O'Donnell agreed that this is a valuable idea and brought up the LISICOS website as an example of this approach.

Future STAC Agenda items should be sent to Charlie Yarish and Larry Swanson, and the next meeting will be Feb 19, 2010.

Meeting adjourned.