

**Long Island Sound Study  
Science and Technical Advisory Committee  
Meeting Summary  
Friday, April 4, 2008  
Stony Brook University, NY**

**Welcome/Introductions:** The meeting was called to order at 9:30am by Larry Swanson, NY STAC co-chair. Formal introductions of new STAC members, Adam Whelchel (The Nature Conservancy-Connecticut) and Robert Wilson (Stony Brook University), were made. Introductions of the new Long Island Sound Study staff were also made to the STAC (Sarah Deonarine, NY State Department of Environmental Conservation, Long Island Sound Study Coordinator and Larissa Graham, NY Sea Grant, Long Island Sound Study Public Outreach Coordinator).

**Election of Connecticut Co-Chair:** Charlie Yarish was nominated and re-elected unanimously.

**Draft of STAC Fellows Guidelines:** A draft entitled “Proposed Process, Roles, and Responsibilities for Selecting and Administering the LIS STAC Fellows” was included in the agenda. These guidelines are meant to clarify the selection and administration of the STAC fellows. Discussion on the proposed guidelines centered on the ethical issues of selecting fellows from institutions represented by STAC members, and the role of the STAC chairs in the selection process. Also, the requirement of institutional matching was discussed. Currently institutional matching is required, however this limits the institutions that may have applicants (i.e., not all institutions have matching funds). Discussion arose concerning the topics of STAC fellow applicants, and how they are appropriately matched. Mark Tedesco noted that membership of the STAC committee is large enough so that applications from NY can be reviewed by CT members and vice versa, eliminating conflicts of interest. Based on the discussion, clarifying language was added to the write-up.

Motion for adoption of STAC Fellows Guidelines: Carmela Cuomo

Second: Anne McElroy

Vote: Unanimous Approval

**Long Island Sound Study Funding FY2008:** LISS funding was increased to \$5.5 million, a significant increase over the past year. It is unknown if funding increase will be sustained. Mark Tedesco presented the breakdown of funding in a PowerPoint presentation.

Priorities for funding include:

-Hypoxia

    Tributary load trends

    TMDL (total maximum daily load) reassessment

    Nutrient extraction technologies- including a workshop on extraction technologies

-Pathogens

-Toxic substances

-Living resources and habitat

    Historic extent and location of habitats

    Sentinel site monitoring

- Stewardship- including a systematic method for site selection
- Watershed management
- Public education – Development of LIS watershed signs
- Synthesis report

Tedesco reported that funding increases are not specific to one funding priority; however the Stewardship Act was important for getting funding increases, so the LISS is targeting \$1-1.5 million for stewardship activity, including acquisitions and landscape analyses of priorities for remaining open parcel protection. Stuart Findlay noted that stewardship activity must keep issues of climate change at the forefront, including planning on providing ecosystem resilience. Carmela Cuomo added that climate change must be implicit in all undertakings of LISS because of its scale and importance. Also LISS EPA has submitted a proposal for funding to produce a climate ready estuary report. Tedesco also added that the formulation of a Stewardship committee must follow protocol established in the Stewardship Act.

**Sentinel Site Monitoring (SSM) Discussion:** Tedesco outlined the general idea and concepts of SSM. The idea is to establish at least one site in each state to monitor biotic and abiotic factors to help understand the impacts of changing climate on the LIS ecosystem. This project will help develop standard protocols for monitoring sites in the Sound. Development of a proposal is urgent as the budget meeting is on April 24<sup>th</sup>.

Ron Rozsa and Karen Chytalo helped organize meetings in each state on developing the SSM concept.

Debate is centered on:

- 1) What type of habitats should be monitored (i.e., marsh, subtidal, intertidal)?
- 2) What parameters should be measured (i.e., biological, chemical, physical)?
- 3) What questions are being addressed with the SSM?
- 4) How will this project be paid for and will this be supported for long term?

Joe Salata noted that the SSM is a high priority and is included in the draft of the governor's agreement. The hope is that a SSM program could be expanded in the future using funding from a variety of sources. To further develop a proposal for Management Committee consideration of funding, a STAC committee was formed. CT members: Hans Dam, Carmela Cuomo, Mickey Weiss. NY members: John Mullaney, Stuart Findley, Karen Chytalo, Bob Wilson. Karen Chytalo agreed to organize a conference call prior to the April 24 Management Committee meeting.

To help stimulate discussion on the SSM concept a presentation was given by Chris Schubert, on work USGS is conducting to better understand the factors contributing to loss of tidal wetland vegetation. The monitoring is being performed at four wetland sites in New York with in situ equipment.

**September Research Funding Priorities:** Mark Tedesco discussed the plan to release a LIS RFP in September, noting that LISS is open to additional suggestions on priority research topics. Currently two topics, identification of historic distribution of seafloor habitats and development

of a benthic index are included. Tedesco handed out the LISS Needs Assessment, which highlights the research, monitoring, and assessment needs, along with work conducted to date.

Next Sylvain DeGuise introduced the CT and NY Sea Grant proposal to administer the research grant fund this year. In previous years it was administered by EPA. Sea Grant would provide logistical support for RFP competition, but conduct it consistent with LISS priorities. Tedesco noted that this approach should improve administrative efficiency.

Tedesco noted that \$260,000 has been carried over from FY07. Baseline levels for research funding have been around \$300,000/year, making the starting point for discussion \$560,000, with an upper limit of \$1 m.

Larry Swanson asked about the conflict of interest issues with STAC members serving on selection committee when other STAC members are submitting proposals. Cornelia Schlenk said that the proposal acknowledges that conflict of interest is a problem and would create a review committee that would ensure that there would be no conflict on the review committee.

### **LISS Synthesis Report:**

Larry Swanson reported that \$15,000 for honoraria were set aside last year and an additional \$50,000 is being requested for LISS FY08 funding. Honoraria will be allocated to sections and section leaders will decide how those funds will be divided. Funds could be used for a mini-workshop or given to individuals.

Charlie Yarish added that funds will also go towards publication costs including figures and images. Obligations to the publisher, Springer, have been fulfilled. Yarish also noted that Springer must now develop a contract before guidelines to authors are sent out, and it is unclear if Springer is moving forward or another publisher must be sought. This book, Yarish said, must be scholarly and available for public consumption. The target date for the book is at the end of 2009. (Note: subsequent to the meeting Springer replied that it has agreed to publish the book and would develop a publishing contract)

### **Art Glowka on the Fisherman's Perspective:**

Glowka said that he is reporting on the reality of what's going on in LIS. Glowka is interested in understanding how the system is changing from reduced nitrogen. Smaller phytoplankton seem to be more abundant. *Crepidula* has exploded, but it is not understood why. SWEM model may be flawed in flow data, Glowka suggested. Glowka added, the legality of TMDLs is in question in the Clean Water Act. Plankton drives the LIS and clams are not growing in Great South Bay. Winter Flounder used to be abundant. Spring catch of winter flounder was less than 14000 last year less than 4000. In LIS catch used to be 1million. Mummy Chug, a hardy critter, are no longer present. Where are they and why? Great South Bay, TNC are doing a good job asking why are clams not growing. The western LIS may be starving and we may not realize it.

### **Progress Report on Synthesis Chapters:**

Larry Swanson reported that the LIS biennial research conference will focus on the general thrust of the synthesis report, and should be an impetus for authors to start working and to prepare a presentation for the conference. Frank Bohlen at UCONN is helping to organize the conference and should be contacted for questions and ideas.

**LIS history**

Beth Pillsbury reported that the history chapter will include two sections: a general history and background, and land uses impacts. A second section will be an annotated bibliography and Beth welcomed input from STAC members on any items that should be reviewed or included.

**Continuing advances in circulation mixing**

Bob Wilson told the committee that his chapter will include tide mixing, vertical mixing and will provide a framework for interpreting other sections. Swanson asked whether we have data of climate change and meteorological forcing and whether it would be helpful to include this. Wilson agreed with Swanson's suggestion.

**Sediment processes and diagenesis**

Carmela Cuomo reported that the sediment processes chapter will focus on the carbonate and iron systems including microbial community, bioturbation including coarse grain sediment. She suggested that hypoxia should be separated into physical and sediment driven events. McElroy asked whether these concepts will be these going to be small individual chapters. Cuomo replied that the chapter structure has yet to be decided.

**Pollution sources**

Anne McElroy reported that not much has been done but that many people have volunteered.

**Ecological process**

Mickey Weiss reported that Gary Capriuolo has been in contact and that biological conditions chapter has some overlap with ecological process. Weiss is hesitant to start writing if there will be duplication of work.

**Review of Priorities for 2008 Program:**

McElroy was unclear about funding priorities because Tedesco's presentation was inconsistent with the priorities document. Tedesco stated that the hand out is divided into sections that provide more detail. Each section starts with the management goals, and then lists research, monitoring, and assessment needs to support those goals. Following that is a listing of work supported to date. At the end of each section there are priorities for future work. The previous power point did not include all research and monitoring needs, but did list implementation needs. McElroy wants to make sure that RFPs encourages research and doesn't think there is much research included in the 2008 Research, Monitoring and Assessment needs. Sylvain DeGuise and Roman Zajac stressed the importance of providing RFPs that allow for interdisciplinary work.

It was commented that there needs to be general clarification and distinction regarding RFPs. It was specifically asked, to what degree are RFPs scientific as opposed to monitoring (i.e., science

or contracting)? Who defines the question, the scientist or the RFP? How closely must these questions be tied in with management practices?

Tedesco added that these concerns connect to the synthesis document. The synthesis document will address what has been done, what it means for the research priorities, and what are the next steps. Cuomo also added that the synthesis report may be useful mechanism to ask about research needs among other authors. Discussion about research priorities will be quite engaging.

McElroy wondered how the STAC are going to help frame the new RFP. Hans Dam emphasized that many of the assessment needs were identified by the STAC subcommittees. The committees could be reformed to update those needs. Tedesco agreed that a comprehensive STAC review of the research needs is needed. Not all of the needs would be topics for the research RFP since some topics would be supported by other means. For example, benthic mapping will be funded with the Sound Cable Fund.

**Action:** It was agreed that the EPA LIS Office will summarize all the research needs previously identified and distribute it to the STAC. The Office will then work to reestablish the subcommittees to modify the list. The list will also be provided to the Synthesis Report authors for comment. A draft final list will be circulated to the STAC for finalization at its June 20 meeting. The final list would be available to support topics for the release of the research RFP.

**The Nature Conservancy:**

Adam Whelchel reported that TNC has a new Long Island Sound initiative involving the CT, NY, and RI chapters. The strength of TNC has been their focus on management and policy. TNC has identified priority areas and climate change is one. What TNC will learn on this highly urbanized seaboard will be exported to estuaries throughout US and internationally. Other issues that TNC are interested in include: supporting historic extent work, taking a hard look at the eel grass issues (this year larger appropriation for research on eel grass, specifically). TNC is looking at setting up master plan on identifying management issues and research issues related to shellfish research in LIS and also developing ways to connect to the work of the LISS.

Whelchel stressed that an ecosystem based management approach is inherent in current TNC work. There is a need to integrate social, economic, and ecological aspects of Long Island Sound. TNC has used a “Targets, Threats, Strategies” concept with some differences specific to the LIS. Whelchel reported that targets in LIS include salt and brackish marsh, sills and shoals in the sound – while trying to capture trophic interactions. Species specific interests include alewife, menhaden, oysters, clams and horseshoe crabs. While habitat priorities are beaches and dunes, rocky, intertidal and subtidal habitats.

Whelchel informed the STAC that TNC has raised over \$100k for this project and has outreach programs to highlight this program and that TNC has a big emphasis on North Atlantic marine area, which is fully funded and is expanding. TNC work and LISS is not overlap, but complementary. Also noted was that a LIS TNC head has been named, John Kachmer, from Maine where he has worked between states and Canada.

Tedesco stated that the work of TNC as participants with LIS stewardship initiative has been enormously helpful. LISS cannot go subtidal and TNC has more flexibility. Tedesco further noted that the TNC has nothing in opposition to the objectives of LISS and TNC builds on work of FWS analyzing valuable ecological areas. Previously, LISS has worked with TNC on Saugatauck river program. Louise Harrison commented that TNC has had a positive impact on all projects where the Fish and Wildlife Services and TNC have had interaction.

Yarish suggested that the June 20<sup>th</sup> STAC meeting would be a good time for a TNC presentation to the STAC. There was also the suggestion to have New York City report on its NYC2020 plan

The meeting was adjourned at 2:10 pm