

Long Island Sound Study Science and Technical Advisory Committee

Meeting minutes

13 February 2009 (Stamford, CT)

Welcome

CT STAC co-chair Charles Yarish, University of Connecticut, called the meeting to order. Yarish welcomed everyone, asked for self-introductions, and asked for the approval of the agenda.

2009-2011 NY STAC chair election

Mark Tedesco, EPA, distributed ballots for the election; results were to be announced during lunch.

Review of climate change monitoring programs

Mark Hoover, CT STAC Fellow, and Santiago Salinas, NY STAC Fellow, gave the committee a presentation based on their review of current monitoring efforts aimed at identifying climate change impacts. See attached presentation for more information.

Update on sentinel site monitoring program

Sarah Deonarine, NY DEC, reported that year 1 is for developing a strategy and year 2 is for implementing pilot study. The NY Sentinel Site group met last week. It was agreed that distinguishing anthropogenic and climate change disturbances may be exceedingly hard to disentangle. There was a consensus that monitoring should be adaptive, with frequent assessments to ensure that data being collected is sound and sufficient. Members recognized that the pilot study will not be a mini-monitoring program but a small subset of the larger project. They also decided that existing long-term data should be identified during the planning process. Three categories were recognized (changes in physical/chemical parameters, changes in community structure and function, and changes in existing habitat), and members were asked to brainstorm variables within the categories and enter them into an online document. At the next meeting, the group will refine and narrow down the lists.

Ron Rozsa, CT DEP, warned that if a state buyout package is offered, this could be his last meeting due to retirement. He reported that the CT Sentinel Site group got together last November. The online database that documents monitoring efforts on The Sound has seen some increase (e.g., 3 tidal wetland loss sites monitored by NY DEC, 12 IEC monitoring stations), but still have ways to go. For example, there is only 1 record of a NOAA tide gauge when there

are more in The Sound. CT group identified 6 drivers of ecosystem change: sea level rise, temperature, wind direction and speed, pH and ocean acidification, salinity changes, and anthropogenic changes. However, for some, the real driver is actually CO₂. Thus, CT members are reviewing the classification. Building a website to spread ideas about climate change monitoring program was considered. There is a need to move to next step: identify questions about climate change that monitoring would answer. How comprehensive should the plan be? Another way to plan monitoring program would be to create a list of questions (for example, about tidal marshes) and see if they could be answered by data in the database. He noted that a big question is who is going to write the planning document? He noted that discussions have occurred with CT and NY Sea Grant College Programs on having them take the lead. Sylvain DeGuise, University of Connecticut, made it clear that CT Sea Grant would be interested in participating if The States are willing to coordinate the planning process and there is a cooperative process in place and funds available. James O'Donnell, University of Connecticut, asked about the scope of the effort. Mark Tedesco reported that each state was awarded \$75,000, a total of \$150,000. Ron Rozsa stated that, as of now, working numbers are: \$25,000 for data management and to hire a contractor for planning, \$50,000 for implementation. The plan is to ask for an extension after first year (it was originally a 1-year program). James O'Donnell felt that the scale of effort should be appropriate for planning; \$75,000 per state is too small for implementation. Money and resources should really be focused on planning, not implementation. He asked when it has to be done by. Mark Tedesco answered that originally the target was to have a plan by September 2009 (reason: end of fiscal year). Charles Yarish further inquired about involvement of NY and CT Sea Grant College Programs. Sylvain DeGuise requested the STAC not view Sea Grant as the leader in the planning effort, but as a facilitator of the planning process. Sea Grant is not interested in taking program over. Financial requirement is a few months of someone's salary. Money would be used for a facilitator and to help write the final plan. Ron Rozsa agreed with DeGuise and suggested the creation of a couple of working groups that can get together and achieve deliverables. Most important is to create a strategic plan. Climate change initiatives could start getting funded shortly given current Congress bills; LISS STAC should have plan ready for when money becomes available. Sarah Deonarine reminded The Committee that there was a plan to have a CT and a NY group working under an overarching group. Is that still the plan? Ron Rozsa replied that no plan has been established for how to develop a monitoring program and that he is open to any ideas. He feels that development of the plan should be done rapidly—and that is why allocating some funds for a paid Sea Grant facilitator was suggested.

Carmela Cuomo, University of New Haven, stated that no benefit would be gained from splitting the two states. She fears that set-up would lead to duplication of work. Sylvain DeGuise said that he would favor a coordinated approach to avoid duplication of work. James

O'Donnell suggested that there should also be time for review of the plan (month or two) and time for authors to respond to input. Hence, plan/report should be written by middle of summer.

Charles Yarish asked whether NY Sea Grant identified a potential person to serve as facilitator. Cornelia Schlenk, New York Sea Grant, answered that she has a person on the staff interested. She is a fisheries specialist and attended the NY Sentinel Site group meeting. Sylvain DeGuise suggested that facilitators could start right away even if money is not available. Ron Rozsa cautioned that given current spending freezes it should not be assumed that a transfer of funds from the states to Sea Grant can be accomplished. Sarah Deonarine echoed Rozsa's concerns; spending is also frozen in NY.

Stuart Findlay, IEC, felt that most of the discussion was about how to break down pieces (e.g., what variables to measure) while it was unclear whether everyone was starting from same place and with the same common conceptions on the key links in the ecosystem to measure. He emphasized that he sees two ways to go: 1) put together what is out there, and 2) think carefully and plan considering relevant scales, new approaches, etc.

Robert Wilson, Stony Brook University, asked the guest speaker, Christopher Deacutis, University of Rhode Island, about The Narragansett Bay experience regarding climate change monitoring. Adam Whelchel, The Nature Conservancy, wondered whether any lessons had been learned that could help the group visualize what deliverables could be like. Chris Deacutis responded that he would address these issues during his talk.

Yan Zheng, Queens College, stated that the Chesapeake Bay is in a similar state and wanted to know any lessons from them. She also suggested that the priority should be to prioritize variables. James O'Donnell felt that uncertainty on the temporal scale of samples was a key issue that needs addressing. Another topic: community respiration rate, which is very important in modeling, is not reliably estimated

Carmela Cuomo agreed with the proposed approach of having a coordinator from each Sea Grant who could work with The States and universities, as well as other relevant people, to establish what is being monitored and to identify gaps that need to be filled. Charles Yarish established that a consensus exists to direct The States to enter into an agreement with the Sea Grant Programs to have two staff members for the facilitation of the planning process. Everyone agreed. Mark Tedesco emphasized that the first step will be for The States to determine whether they can pass through funds to their respective Sea Grants to support the

strategy development. All agreed and Ron Rozsa closed by asking for volunteers to join workgroups in both states.

LISS research grant program review

Larry Swanson, Stony Brook University, introduced the subject by noting that a discussion had begun in the last STAC meeting regarding the 2008 funding process. Several scientists had complained about the review process.

Sylvain DeGuise distributed a handout describing the timeline for the competition and selection, and listing the five proposals selected for funding. Final dollar amounts for the projects have not been established yet. The competition was run jointly by NY and CT Sea Grant College Programs in one unified process. He believed that the common agreement was that the LISS 2008 Needs Assessment research topics were to be the eligible research priorities. The time available to complete the process in time to allow researchers to have money in hand by March 1 for spring field work was very condensed. Fifty-three pre-proposals were received. A team of CT and NY Sea Grant, NY and CT state agencies, and EPA reviewed the proposals. Twice the number of full proposals were reviewed than funds were available to support (10 pre-proposals were selected, 5 funded). CT and NY Sea Grant, NY and CT state agencies, EPA and two non-STAC scientists were panel reviewers of the full proposals. In addition, each full proposal was reviewed by at least five external peer reviewers. Of the winning proposals, 4 out of 5 are from Stony Brook University, which is explained because it was agreed to fund the more meritorious proposals regardless of origin or topic. Of the 10 full proposals that made the first cut, the first five, based on a ranking of reviewers' scores, were funded. Cornelia Schlenk agreed with DeGuise's description of the events and stated that Sea Grant followed very closely what had been agreed upon by the STAC and in Sea Grant's grant agreements with EPA.

Mickey Weiss, NEIWPC, noted that NIH has test-tube-ready projects that they hail as true job-creating projects eligible for stimulus funding and asked whether the same case be made for our projects. Mark Tedesco responded that there currently exists a long list of shovel-ready projects (wastewater treatment plant upgrades, habitat restoration, improvement in parks, etc.). EPA got \$6 billion for clean water programs to give states to fund existing projects. However, there was no money allocated specifically to estuary programs. Additional money is being provided to NOAA and the ACOE. Mark Tedesco noted that existing programs will be used so that money can be put in circulation rapidly.

James O'Donnell congratulated SBU on the number of projects selected, but expressed concern with the process for screening and evaluating pre-proposals. He obtained a one-line response stating that his pre-proposal was "not science". He felt that the initial screening was rushed and the response disrespectful. Also mentioned that the Sea Grant server in NY had problems and trying to deliver the proposal before the deadline was not possible. Despite their electronic glitches, Sea Grant did not allow submittal afterwards. Despite these complaints, he still supports Sea Grant's use as the coordinating agency in fund-granting.

Carmela Cuomo seconded that the one-line responses to the pre-proposals were disrespectful and not helpful. She did not feel the research priorities agreed upon in STAC were represented by Sea Grant. She also noted that a similar case of computer malfunction at a NOAA grant due date was rectified by allowing researchers to submit proposals after the fact.

Larry Swanson added that he received complaints that reviewers of the pre-proposals were not scientists and asked for clarification of who served as pre-proposal reviewers. He also expressed concern about whether NY DEC and CT DEP reviewers might not support research that conflicts with state policies? Carmela Cuomo agreed that scientists should review pre-proposals.

Charles Yarish maintained that the Needs Assessment document included research, assessment, and monitoring. Thus, the pre-proposal review should have considered monitoring – only one part of the document being considered (research needs) was not the intent of the STAC.

In response, Sylvain DeGuise said that he recognized that responses to the pre-proposals should have been more explicit and informative and apologized for one-line responses. He made clear that the responses did not reflect the review process (i.e., there was extensive review and deliberation on each pre-proposal). Sylvain noted that he thought the very broad list of priorities in the Needs Assessment made it difficult to evaluate pre-proposals for responsiveness and noted that the list of priorities should be narrowed for a particular announcement. Sylvain also noted that the RFP was clearly focused on research needs, not assessment or monitoring and that the review was conducted with that interpretation. Sylvain stated that CT and NY Sea Grant, NY DEC, CT DEP, and EPA were in the pre-proposal panel, and that the emphasis was on relevance but that the overall approach was considered regarding the science, but that the methods, etc could not be evaluated due to the inherent limits to the detail provided in pre-proposals. However, many members of the STAC continued to disagree with that assessment.

Cornelia Schlenk agreed with DeGuise. She felt that the STAC had plenty of opportunities for comment on the Needs Assessment and said that they used the final document from the LIS office. She thought it would be easier for PIs and Sea Grant if the scope of the research needs was more evenly treated in the Needs Assessment (some needs were very specific while others were very broad). She emphasized that we need to be clear on what it is that we're looking for.

Carmela Cuomo felt that keeping things broad keeps things open for researchers to innovate and/or think of new things. If the needs are very narrow, she presumes that the STAC knows perfectly well what is needed.

Charles Yarish stated that that, for the next round of funding, it is imperative that a new Needs Assessment document be put together and that the RFP clearly establishes what parts of the document would be eligible for funding. He also stated that the pre-proposal review panel should not only look at relevance, but also at the science.

Mark Tedesco gave a quick overview of how the research process was conducted this year. The LISS asked Sea Grant to undertake the review process in a condensed time frame in order to make funds available for the spring field season. The FY08 appropriation from Congress was delayed, which shortened the time available to conduct the competition. Nevertheless, The Sea Grant College Programs were able to meet all the deadlines in the grant agreement with EPA. He felt that The Sea Grant College Programs were a great partner and appreciated that others favored The Sea Grant College Programs to continue administering the competition. Based on the input received he offered three recommendation for improving the next round of the LIS Research Grant Program.

1. Update the Needs Assessment
 - a. Clarify what's eligible for funding under the RFP. He recommends research AND assessment needs;
 - b. Consider a sub list of topics for the RFP.
2. Consider expansion of the preproposal panel (e.g. in the past the STAC co-chairs participated provided that they were not in the competition).
3. Expand the timeframe for the competition. Announce the RFP early in the year to provide more time for proposal preparation and review.

Joseph Salata, EPA, also recognized the contribution of The Sea Grant College Programs and thanked them. Cornelia Schlenk closed by stating that Sea Grant took the process seriously. She affirmed that The Sea Grant College Programs will address the comments before the next round of funding.

LIS Book Synthesis Report

Larry Swanson reported that there was a call last week with all of the chapter leads. He explained that the call addressed two concerns: the lack of progress with the writing, and the need to sort out problems with style, format, and attribution. The phone call lasted for 2 hours and the chapter leads left being re-inspired and ready to move forward. The discussion cleared up points with style to make it easier on authors and a standard format for references will be sent out. He ended by stating that the phone call also discussed that the development of base maps for the general use of the book

Charles Yarish stated book production guidelines were developed following the call and distributed to all chapter leaders. Monthly conference calls with chapter leads are now scheduled. The guidelines include information on chapter lengths and a detailed schedule for products. Mark Tedesco emphasized that authors should be contacted by chapter leads in the next two weeks to get info on the contribution. He emphasized the need to put together detailed outlines by the end of the month to make sure there is no overlap. The revised outline is due on February 28th.

Penny Howell, CT DEP, stated that the guidelines did not correspond with previous outlines given out and asked if there were some missing documents that explained this. Charles Yarish replied that they will send out the latest documents to the STAC and all authors.

Johan Varekamp, Wesleyan University, agreed with Larry that all the section leads got re-inspired by the phone call.

Stuart Findlay was concerned that the timing was tight and ambitious. He noted that it seemed that the timeline did not allow for replacing people that did not come through as authors. He recommended having replacements ready to go. Charles Yarish commented that it was important that the editors stay on top of chapter leads with conference calls. He also stated the need to have alternates identified.

Charles Yarish informed the group that there will be a password restricted Wiki page set up for people to post drafts, share information, and make comments. Guidance on the Wiki will be provided in the near future. He then asked for comments about the LIS synthesis document and concluded the topic.

During lunch Ron Rozsa gave a presentation on the eroded edge phenomenon in salt marshes.

Chris Deacutis presentation: “Water Quality Status & Trends in Narragansett Bay: An Overview of Science Issues”

Chris Deacutis, of the Narragansett Bay Program, gave a presentation on the key issues facing the Bay.

Penny Howell asked how he separated pelagic fishes from others. She stated that in Connecticut epibenthics have dropped but demersals have gone up. Also in CT warm tolerant species have gone up and cold tolerant species have decreased. Chris Deacutis replied that there had been a 2-degree change in temperature in The Bay and that chlorophyll had gone down.

Johan Varekamp asked if the sulfur precipitation was common. Chris Deacutis answered, yes; the sulfur came up from the anoxic water into water with oxygen and precipitated. Johan Varekamp asked where sulfur goes? Ron Rozsa noted that sulfur had been seen in tidal marshes.

James O’Donnell stated that, in some inlets in LIS, respiration was so high that at night you can get low oxygen conditions. He suggested that it could mean some species have gotten used to it. He noted that it may be natural in marshes. Ron Rozsa added that it didn’t happen every year but that it happened frequently in mosquito ditches. James O’Donnell said he was just talking about low oxygen events that would be noticed more frequently if there were more oxygen sensors. He suggested that in Mumford Cove (a cove in east Connecticut) it was common because there were high macroalgae with low flushing. Chris Deacutis answered that the buoys that were used were in deeper waters of Narragansett Bay were not cut off from flushing, so the low oxygen was not from that. He noted that the greenish area in their coves or bays experienced high inflow of groundwater which may have been from houses which had septic systems.

Charles Yarish was impressed by the green tides and asked if there were any estimates of biomass. Chris Deacutis replied that there had not been biomass estimates but that the density had been checked by helicopter.

Budget update

Mark Tedesco reported good news on the LISS budget. He stated that the budget would continue at the 2008 level which would come in at about \$5.5 million. The proposal for the 2010 budget may also be a continuation of 2008 level, but Congress still has to take that up.

Charles Yarish asked whether the LISS would support another RFP with the new budget. He would like a consistent and more robust budget for science. Mark Tedesco replied that they could do another release or maybe hold off for a year and get funds from a second year to have a similar amount of resources as the research RFP just conducted. Charles Yarish stated that the budget seemed to be a positive situation and that the last RFP used funds from two years. He also stated that support for Enhancement Grants is also possible. Mark Tedesco suggested that the LISS will go back to the list of priorities that was generated and see which ones go forward in the enhancement phase.

Louise Harrison, EPA, informed the group that there would be a celebration for the purchase of property at Barn Island (eastern Connecticut) on February 19. She noted that the purchase completed an acquisition scenario that took several years. She concluded that the celebration was open to everyone and that congressional people have been invited. Adam Whelchel noted that Joe Courtney and Gina McCarthy would be attending. Charles Yarish suggested that Louise send an invitational email to all the members of the STAC.

Next STAC Agenda

Larry Swanson asked for STAC agenda suggestions. He suggested that they could have an update on the synthesis report, and more on the budget. Asked if anyone else could think of anything for the agenda, or any suggestions for presentations? James O'Donnell replied that he could brief people on the assessment of the water quality model. He stated that so far the assessment had helped him understand the weakness of the model, and what we have to learn could lead to new monitoring. Mark Tedesco commented that that topic it goes with the need for future enhancements.

Charles Yarish then asked Mark Tedesco for the results of the NY Co-chair election. Larry Swanson was re-elected as the co-chair with a majority vote of STAC members. Charles Yarish then adjourned the meeting.

Minutes by:

Mark Hoover, University of Connecticut
Santiago Salinas, Stony Brook University

Handouts available upon request.