

SOUTH SHORE ESTUARY RESERVE COUNCIL (SSERC) MEETING FINAL APPROVED MEETING NOTES

March 24, 2011

10:30 a.m. to 2:00 p.m.

NYS Office Building, Room 2/3, Veterans Memorial Highway, Hauppauge, NY

SSERC Members Present: Fred Anders (NYS DOS, Alternate for Acting Secretary of State Cesar A. Perales); Laretta Fischer (Alternate for Suffolk County Executive Steven Levy); Michael Foley (Alternate for Town of Hempstead Supervisor Kate Murray); Nancy Kearney (Alternate for Town of Oyster Bay Supervisor John Venditto); Richard Groh (Designee for Town of Babylon Supervisor Steven Bellone); Thomas Marquardt (Alternate for Town of Islip Supervisor Phil Nolan); Thomas Carrano for Jeffrey Kassner (Designee for Town of Brookhaven Supervisor Mark Lesko); Maureen Dolan Murphy (SSERC Citizens Advisory Committee Chair (Citizens Campaign for the Environment)); Robert Grover (Great South Bay Audubon Society); William Wise (Designee for Stony Brook University, SoMAS Interim Dean Dr. Minghua Zhang); Robert DeBona (Mastic Beach Property Owners Association); Christopher Squeri (NY Marine Trades Association); Carl LoBue (The Nature Conservancy); Kenneth Budny (Brookhaven Bayman's Association); Michael Eagan (Captree Boatman's Association).

SSERC Advisors Present: Charles deQuillfeldt (NYS DEC); Brian X. Foley (NYS OPRHP); Gregg Williams (NYS DOT).

SSERC Members Absent: Nassau County; City of Long Beach; Town of Southampton; NY Conference of Mayors (Freeport); Technical Advisory Committee Chair (NY Sea Grant); NY Sportfishing Federation; Long Island Association; Long Island Builders Institute.

Guest Speaker: Dr. Linda Sohl (Columbia University).

Audience Members: Nancy Solomon (L.I. Traditions); Robert Weltner (Operation SPLASH); Sean Jordan (Town of Oyster Bay); Melissa Young (Cornell University); Katie Magee (Suffolk County Planning Dept.).

NYS Department of State (DOS)/SSER Office Staff Present: Patricia Bowie (NYS DOS); Patrice Benneward (SSER Office); Sherry Forgash (SSER Office).

I. Welcome and Introductions

F. Anders called the meeting to order at 10:35 a.m.

He spoke of the passing of Corey Weyant in March as a result of a boating accident in Freeport. Mr. Weyant received the 2009 SSERC Stewardship Award for his long-time work as a bayman and estuary educator.

F. Anders introduced Patricia Bowie who began working for NYS DOS in 2008 as a NOAA Coastal Management Fellow. As a Fellow, Ms. Bowie developed draft guidelines for communities to prepare Coastal Hazard Resilience Plans. The guidelines can be used to assist communities in preparing for potential climate change impacts. The specifics of the plans will be discussed at a future SSERC meeting. A Coastal Hazard Resilience Plan could be a component of a Local Waterfront Revitalization Program (LWRP). The NYS DOS offers competitive, cost-share grants, plus technical assistance, through the Environmental Protection Fund to assist communities with the preparation of LWRPs.

F. Anders introduced two guest speakers:

Dr. Linda Sohl, Center for Climate Systems Research/NASA Goddard Institute for Space Studies at Columbia University, presenting "*Climate Change in the NY Metro Area and Long Island: Understanding Impacts and Managing Risks.*" Dr. Sohl received her doctorate degree in Earth and Environmental Sciences from Columbia University's Lamont-Doherty Earth Observatory. Dr. Sohl's research includes understanding past extreme climates, specializing in data-climate model comparison. She participates in the Educational Global Climate Modeling (EdGCM), an educational project at the University aimed at providing students with the experience of running a NASA Global Climate Model (GCM) with a user-friendly interface that can be run on a desktop computer (www.edgcm.columbia.edu.) In 2010, Dr. Sohl began work on the Consortium for Climate Risk in the Urban Northeast (CCRUN), a new 5-year project funded by NOAA as part of its Regional Integrated Sciences and Assessments (RISA) program.

William Wise, SUNY SoMAS, presented a progress update on the NYSDOS/SUNY SoMAS Great South Bay monitoring program. He also presented a project update for Dr. Larry Swanson, Associate Dean, SUNY SoMAS; Director, Waste Reduction and Management Institute, on the NYSDOS/SUNY SoMAS Western Bays TMDL.

II. Approval of the September 28, 2010 Meeting Minutes/Comment on DOS/SSER Office Reports

F. Anders asked for comments on the corrected draft September 28, 2010 SSER meeting minutes. There were no comments. Prior to the meeting a typographical error and SSERC member Cornelia Schlenk's misspelled name were corrected and e-mailed to SSERC members.

R. Grover asked when The Nature Conservancy's Great South Bay report would be completed. **C. LoBue** answered that he has not heard from DOS on the release date for the report. **F. Anders** will find out more information.

Update: A report on the status of the document will be presented at the next Council meeting.

Motion by Ken Budny to approve the September 28, 2010 Council meeting minutes, with corrections as noted, seconded by Robert Grover, carried.

F. Anders asked for comments on the DOS/SSER Office report. There were none.

F. Anders: At the September 28, 2010 SSERC meeting, the proposed SSE amendment to the NYS Coastal Management Program had been discussed. The amendment, which addresses habitat restoration, water quality improvements and climate change adaptation, will offer more protection for the SSE through federal and state consistency. The amendment development process has begun: internal DOS Technical Teams were formed and data collection began. DOS anticipates a role for SSERC members in the SSE amendment work. SSERC members have been asked to serve on work groups that address the three issue areas. Work group members will be contacted by each group's lead person, or "shepherd". An initial meeting of all three work groups will occur in May. Some work group meetings will be conducted by conference call due to travel restrictions and budgets. DOS will begin to contact SSERC members more frequently to provide updates on work group progress and other SSER information.

Update: SSE Amendment work groups met with the Technical Team shepherds on May 24, 2011 in Hauppauge. The meeting discussion will be reviewed at the next SSERC meeting.

W. Wise inquired on how SSERC and SSER activities would be affected now that the NYS budget is being resolved, and if the Ocean and Great Lakes Ecosystem Conservation Council will continue. **F. Anders** said the NYS budget for the SSER is the same as last year and DOS will involve SSERC members in SSER spending decisions. SSER funding, projects and spending will be discussed in more detail at the next SSERC meeting. Regarding the Ocean and Great Lakes Ecosystem Conservation Council (OGLECC), the Governor has formed a commission to review state agency activities for any opportunities for cost-saving consolidations. In terms of the NYS budget, DOS appears to be fine but it is uncertain how OGLECC might be affected.

T. Marquardt asked about the possibility of hiring a new SSER Director. **F. Anders** stated that hiring a director at this time was not possible because of the state hiring freeze, and furthermore, a Secretary of State still has not been appointed.

Update: The new Secretary of State is Cesar A. Perales. Secretary Perales was confirmed on June 7, 2011. For additional information:

<http://www.dos.state.ny.us/about/sos/sosmain.html>

B. Foley asked about designating the SSE as an Estuary of National Significance and if there had been any follow-up in pursuing this status, as suggested by **R. Weltner** at the September 2010 SSERC meeting. He recommended

the SSERC consider pursuing the Estuary of National Significance designation for the South Shore Estuary. DOS/SSER Office will follow-up.

III. Information Transfer Presentations

Water Quality - William Wise, Associate Director, Stony Brook University, School of Marine and Atmospheric Sciences (SoMAS):

W. Wise presented two PowerPoints: **1. Progress of the NYSDOS/SUNY SoMAS Great South Bay Monitoring Project**, and; **2. Update on the NYSDOS/SUNY SoMAS SSER Western Bays TMDL Project**. Both PowerPoints can be accessed on the SSERC website at www.estuary.cog.ny.us.

1. The **Great South Bay (GSB) Monitoring Project** goal is to "create an ecosystem model that accurately represents the spatial-temporal variability and critical food web components of GSB and apply it to evaluate management options." The Great South Bay project site can be accessed at: <http://po.msrc.sunysb.edu/GSB> .

After showing the slide depicting the impact of the invasive tunicate *Didemnum* (Slide #14), a short discussion ensued about this species. It grows rapidly and fouls marine habitats. For example, it grows on seagrass blades and smothers underwater species like algae and shellfish. GSB may not be a good habitat for *Didemnum*, and we should not assume this species will impact GSB as it has in Long Island Sound. *Didemnum* has few predators and its impact is unknown. No work has occurred to mitigate this species in GSB.

"*Didemnum vexillum* colonies alter marine habitats and threaten to interfere with fishing, aquaculture, and other coastal and offshore activities." <http://woodshole.er.usgs.gov/project-pages/stellwagen/didemnum/>

SoMAS tagged blue crabs (a hard clam predator) with acoustic receivers and tracked their movement. Carmans River is the focal point for this work. Tracking blue crabs will document this species' seasonal movement in GSB. There has been much interest in blue crabs, as their population numbers have increased dramatically over the past 10-15 years. From the data acquired in tracking blue crabs, researchers will learn what areas of GSB are the important habitat areas for them during certain times of the year. The movement of white perch was also tracked. More fish were found down-river as the water temperature decreased. **K. Budny** asked if any fish had been seen using the Carmans River fish ladder. **W. Wise** did not have that information.

DOS funded the purchase of Acoustic Doppler Current Profiler equipment for SoMAS. Short discussion ensued on the GSB buoy. On October 6th, 2010 SoMAS deployed GSB #1 buoy south of Sayville at 40° 41.6'N, 73° 05.1'W. This buoy reports wind speed and direction, air temperature and humidity, photosynthetically active radiation (PAR), water temperature and salinity, chlorophyll-a fluorescence and turbidity. The distance between the buoy and the float is approximately 20 feet. The data buoy is tethered to a float for two reasons: a) the water in the bay is very shallow, especially at low tide. Having the buoy anchored directly to the bottom would likely result in the anchor chain becoming badly twisted and contorted during storms, possibly damaging it. Having the float bounce around on the surface does not put nearly as much strain on the chain; and b) If the data buoy needs to be brought to shore for service/repairs, it can just be unhooked from the float and towed to shore, leaving the float in place to mark the deployment site. Without the float, the buoy would have to be decoupled from the anchor chain and then the anchor would have to be located again. The entire buoy is about the same size as a US Coast Guard buoy. Information about the buoy and real-time data can be accessed at <http://po.msrc.sunysb.edu/GSB> .

There are two projects that are designed to be interactive with each other. The instruments that SoMAS has field-installed to monitor the environment of GSB constitute the GSB Environmental Observing System (or Observatory). All of the equipment was purchased with funds provided by NYS DOS. The GSB Ecosystem Study is the second project, and it involves building a computer model to simulate how certain aspects of the ecosystem of the GSB operate. Data provided from the observing system will allow SoMAS

to run and fine-tune the model's specifications to make them maximally representative of actual conditions in the GSB. The funding for development of this model was also provided entirely by NYS DOS.

The GSB Ecosystem Study goals are to conduct research and monitoring to fill in data and knowledge gaps and allow a better understanding of GSB and shallow, lagoonal systems; to create an ecosystem model that accurately represents the spatial-temporal variability of critical physical, chemical, and food web components of GSB; and to apply knowledge and understanding of the bay ecosystem to examine management and restoration alternatives.

W. Wise noted that the GSB Ecosystem Study website is not available at present, but should be ready by end of June. **W. Wise** will notify the SSER Office when this website is available. The SSERC will then be notified.

After viewing slides #6 and #7 which noted the impact of Ctenophores on hard clam larvae, **R. Groh** questioned the time of year when Ctenophores (comb jellies) are most prevalent. **W. Wise** explained Ctenophores are prevalent earlier in the season, around June.

2. The **SSER Western Bays TMDL Project** is a three year study consisting of seven tasks, including: Review of historical water quality data; collecting new tide-adjusted bathymetry; updating existing hydrodynamic model with high resolution bathymetry; surveying pelagic water column; collecting/analyzing sediment samples; estimating marsh subsidence; and assessing factors affecting winter flounder.

M. Dolan Murphy asked if the Town of Hempstead collected bottom water quality data. **W. Wise** replied sometimes, but most often only surface water quality data is collected by the Town.

W. Wise stated that the ultimate project goal is to develop a TMDL for the Western Bays using data that adheres to a Quality Assurance Project Plan (QAPP). Presently, SoMAS is working with NYSDEC in preparing the QAPP.

C. LoBue asked if wind speed data was included in the Task 3 model, slide #18, showing the trace of water parcels released from Bay Park and Long Beach outfalls. **W. Wise** replied that only tidal data is included in the Task 3 model. The primary sampling sites are Hewlett, Middle, and East bays, and Jones Inlet. Hewlett Bay showed decreased dissolved oxygen and was more prone to significant phytoplankton blooms.

W. Wise clarified that the slide showing a 15- foot drop in groundwater levels correctly showed the drop in the groundwater table occurring in Nassau County over a 30-40 year period. The data/information collected through the Western Bays TMDL project must be made available to the scientific/technical communities. Researchers and resource managers can determine how best to use the data, determine what decisions are required regarding TMDL implementation and how to address the nitrogen overload.

W. Wise noted that shellfish communities will not be studied as part of this project. **B. Wise** thanked DOS for funding this project. **F. Anders** reminded all that it was a SSERC decision to fund this project.

Climate Change – Linda Sohl, Ph.D., Center for Climate Systems Research/NASA Goddard Institute for Space Studies at Columbia University:

Dr. Sohl presented **Climate Change in the NY Metro Area and Long Island: Understanding Impacts and Managing Risks**. The PowerPoint of the presentation can be accessed on the SSERC website at www.estuary.cog.ny.us.

Dr. Sohl is a representative of the Consortium on Climate Risk in the Urban Northeast (CCRUN), a NOAA Regional Integrated Sciences and Assessments (RISA) Project. CCRUN encompasses the Boston-to-Philadelphia corridor and serves stakeholder needs in assessing and managing risks from climate variability and change. CCRUN researchers aim to use targeted climate-risk information to address the complex challenges associated with densely populated,

highly interconnected urban areas, including urban heat islands, poor air quality, intense coastal development, multifunctional settlement along inland waterways, integrated infrastructure systems, complex overlapping institutional jurisdictions, and highly diverse and in some cases fragile socio-economic communities. Vulnerability and adaptation assessments target three primary sectors: coasts, health, and water.

W. Wise asked if CCRUN's planning is primarily for use by municipalities. **Dr. Sohl** replied that it can be used by anyone who needs to make decisions on climate change. **W. Wise** inquired if there were any existing programs to aid a town or municipality in producing a climate change adaptation plan. **F. Anders** noted that Local Governments for Sustainability (www.iclei.org) does not provide funding assistance, but provides planning assistance. NOAA Coastal Services Center and Sea Grant might also provide assistance. DOS anticipates the availability of EPF funding for climate change planning. **R. Grover** informed the SSERC of a paper by J.R. Houston and R.G. Dean on the deceleration of sea level rise which will be in the next issue of *The Journal of Coastal Research*. The report can be accessed at <http://www.jcronline.org/doi/pdf/10.2112/JCOASTRES-D-10-00157.1>.

Dr. Sohl noted that the top three issues with which communities should be concerned are flooding, coastal issues and temperature. Temperature can affect the distribution of insect pests which can lead to public health issues. **P. Bowie** asked if there was any data for local temperature warming, and if the models were broad in scope. **Dr. Sohl** said more detailed spatial studies will be available. Public health data can also provide temperature data. It is expected to expand the project's scope by researching where more data can be accessed and including it in the overall project.

NYS Sea Level Rise Task Force – Fred Anders, NYS DOS, Bureau Chief Natural Resources Management Bureau/ Task Force Steering Committee:

F Anders presented an overview of the **NYS Sea Level Rise Task Force Report**. The PowerPoint presentation can be accessed on the SSERC website at www.estuary.cog.ny.us.

The NYS Sea Level Rise Task Force (SLR TF) was created in 2007 by the NYS Legislature. The SLR TF, chaired by the DEC, was charged with evaluating ways to protect coastal ecosystems and increase community resilience. The final report was presented to the Governor on January 1, 2011. There has not been any activity regarding the report to date. Other initiatives to help NYS prepare for climate change include the NYS Climate Action Plan, PlaNYC 2030 and the NYS ClimAid Report. There are 14 recommendations listed in the NYS SLR TF report which can be accessed on the NYSDEC website at: http://www.dec.ny.gov/docs/administration_pdf/slrffinalrep.pdf.

F. Anders noted that there is a need to identify areas of greatest vulnerability and areas that will become more vulnerable. Mapping and the identification of wetland migration areas should be completed. We should be concerned with how we can best address future vulnerability. Dependence on hard shore protection should be reduced and shifted to land use practices. The availability of Federal level funding for sea level rise (SLR) is minimal. More funding mechanisms and research/monitoring for SLR need to be developed.

Responding to questions from SSERC members, **F. Anders** explained that, to date, there has been no feedback from the Governor's office regarding the SLR TF report. There is an interagency working group, composed of DOS, DEC, NYSERDA, and SOEM that has begun discussion on how to collectively advance some of the recommendations of the report, but, to date, no specific actions have been taken. **B. Foley** asked if OPRHP and DOT were part of the working group. **F. Anders** stated that the interagency working group plans to invite both OPRHP and DOT to be a part of the discussions.

T. Marquardt asked if DEC anticipates any changes in managing its regulatory program. The Town of Islip is incorporating sea level rise considerations into planning projects. He asked if DEC will now direct towns and municipalities to address sea level rise. **C. deQuillfeldt** responded that DEC is trying to move away from 'hard' solutions and encourage people not to use these hard shoreline practices, as these practices do not allow wetlands to retreat. **F. Anders** said that it is up to DEC to determine if they will eventually address sea level rise in

regulations. **T. Carrano** asked **C. deQuillfeldt** if his statement referred to bulkhead replacement. **C. deQuillfeldt** noted that DEC is not telling people not to replace bulkheads, but to possibly relocate them.

IV. SSERC Citizens Advisory Committee (CAC) Report – Maureen Dolan Murphy, Chair

At the November 2010 meeting the CAC agreed to send a letter to the Secretary of State requesting support regarding the reactivation of the SSERC Technical Advisory Committee (TAC) and requesting that the CAC be granted a seat on the TAC. A response was received from the Secretary of State on February 21, 2011. In addition, at the November 2010 meeting the CAC agreed to send a letter to newly elected members of the State Legislature, congratulating them on their election, and introducing them to the SSER CAC and projects. A response was received February 11, 2011 from Alfred C. Graf, 5th Assembly District. The January 2011 CAC meeting was cancelled due to inclement weather. The CAC met March 8, 2011. Dr. Chris Gobler delivered a presentation about red tide and his work in the Western Bays. Dr. Art Kopelman reported on the 2010 whale season. The venue for future CAC meetings may move to Dowling College, and Dr. John Tanacredi, Chair, Department of Earth and Marine Science and member of the CAC, has approved the use of a room at the college. M. Dolan Murphy thanked **W. Wise** for providing the CAC with a speaker phone to use at CAC meetings, allowing DOS staff to call in from Albany. DOS has provided the CAC with a new letterhead format. **M. Eagan** will restore the annual boat tour, and the CAC will co-host the event. The tour is tentatively scheduled for June, and M. Dolan Murphy will contact everyone when the date is finalized. The CAC requested an update from DOS regarding the progress of the Stewardship Award.

F. Anders reported that the Stewardship Award work was delayed as staff concentrated on the Implementation Status Report (ISR). More information has been collected for inclusion in the ISR over the winter. DOS completed a new Stewardship Award nomination form and the eligibility criteria are being expanded to include more groups. More explicit criteria have been added to the nomination form. DOS staff will continue with the Stewardship Award effort once the ISR is complete. DOS anticipates opening the award for nominations on Earth Day and presenting the award during Coast Week. DOS hopes to obtain more public relations exposure through the Stewardship Award Program.

Update: The SSERC and the SSERC CAC reviewed the DOS proposed changes to the award. There were no comments.

V. New Business

Mastic Beach Drainage Problem

R. DeBona displayed a 1940s map that depicted marshland near Sheep's Pen Creek off of Riviera Drive in Mastic Beach that have recently become mudflats. He requested, on behalf of the Mastic Beach Property Owners Association (MBPOA), guidance on how to address a crushed drainage pipe/wetlands loss/erosion situation at this site. The site was originally designated for housing. Due to the damaged culverts/drainage pipes, there is no place for runoff to drain. The paved section of road along Riviera Drive becomes unpaved; at this point vehicular traffic tends to move into the edge of the mudflats/wetland to avoid hitting potholes. This is causing the erosion and wetlands loss. Some of the land where the damage has occurred is owned by the MBPOA, some is owned by Suffolk County, and some privately owned. **C. deQuillfeldt** commented that the State cannot force anyone to make the repairs. **T. Carrano** (for J. Kassner) noted the site needs curbing on the road to contain runoff. **C. deQuillfeldt** said the site is a breeding area for mosquitoes and larvacides may be used there. The old culverts tie into Suffolk County drainage ditches which help keep drainage flowing for vector control. **L. Fischer** suggested that **R. DeBona** contact Dominick Ninivaggi at Suffolk County DPW Vector Control for assistance. **R. DeBona** reported that the MBPOA is willing to purchase the necessary items to block the section of unpaved road from vehicular traffic in an effort to stop further erosion and wetland damage.

Motion by W. Wise for the SSERC to send a letter to the appropriate contacts, describing the wetland loss/damaged culverts/drainage situation at the Mastic Beach location and requesting that the problem be addressed and situation rectified; seconded by C. LoBue; carried.

Update: Subsequent to the SSERC meeting, the DOS contacted R. DeBona, DEC, and TNC for additional information in order to prepare the letter. It was learned that road ownership was being legally researched by Brookhaven, that Suffolk Co. is ready to repair the road once the owner gives approval.

Nitrogen-loading to Great South Bay

C. LoBue distributed copies of *Nitrogen Loading to Great South Bay: Report on Phase 2, Management Scenarios, March 2011; Prepared for The Nature Conservancy by Erin Kinney and Ivan Valiela of The Ecosystem Center, Woods Hole, MA.* The report focuses on the sources and levels of nitrogen to Great South Bay. Report workshops were held in Sayville in November 2010 and February 2011. The Nature Conservancy also plans to schedule a training session for people specifically interested in running their own scenarios using the models developed by Valiela and Kinney.

Suffolk County has completed its draft *Comprehensive Water Resources Management Plan* which is posted online at:

<http://www.suffolkcountyny.gov/departments/healthservices/environmentalquality/CWRMPSC.aspx>.

Managing wastewater, as a source of nitrogen, is a priority issue in Suffolk County.

R. Grover asked how the large amounts of nitrogen are entering the Magothy aquifer. **C. LoBue** replied that the information is included in the report (Suffolk County Comprehensive Water Resources Management Plan).

SoMAS Lecture Series

W. Wise reminded the SSERC that SUNY SoMAS hosts a lecture series at the Southampton campus on the first Friday of each month. The Annual Environmental Symposium is scheduled for April 1, 2011. He will speak on *The History of the Menhaden Fishery in New York* on May 6, 2011. Events are posted at:

http://www.somas.stonybrook.edu/news_events/SBSLSs11.html .

Public Comment

N. Solomon announced that Long Island Traditions is conducting the research on historic boat yards and boat builders for an exhibit. Any information is appreciated.

Other:

T. Marquardt informed the SSERC that the Town of Islip's current Council designee, Eugene Murphy, is retiring and asked the SSER Office staff for the procedure to name David Genaway, Commissioner of Town of Islip Planning Department, as a replacement. SSER Office staff will find out the procedure and inform T. Marquardt.

Update: SSER Office sent an e-mail to T. Marquardt on April 8, 2011 with instructions to inform the SSERC Chair, NYS Secretary of State Cesar A. Peralas, of this change; reminder e-mail sent on June 28, 2011.

Motion to adjourn the SSER Council meeting at 2:31 p.m. by Ken Budny, seconded by Nancy Kearney; carried.