

Welcome, Housekeeping & Logistics

Curt Johnson, *Connecticut Fund for the Environment/Save the Sound* and the *CT Citizens Advisory Committee (CAC) Co-chair*, welcomed the group at approximately 9:45am. A quorum of approximately 34 CAC members was present.

CAC Policy Committee Update

Sandy Breslin, *Audubon Connecticut*, and Adrienne Esposito, *Citizens Campaign for the Environment*, gave an update on the CAC Policy Committee. They discussed how the results of the November election could change the political climate for Long Island Sound issues. As such, they plan on meeting with new Congressmen around the Sound to introduce them to Long Island Sound issues, with a special emphasis toward forging relationships with Republican members.

The committee also gave an update on the federal budget and the reauthorization of the Long Island Sound Restoration and Stewardship Act. Sandy said they hope to have \$4.5 million for LISS for FY2015. This is approximately the same funding level as last year. Given the political context in which we are living, this is relatively good news. The reauthorization of the Long Island Sound Restoration and Stewardship Act remains on the agenda for 2015.

The policy committee is trying to talk with other National Estuary Programs that have Republicans in their constituency, with the goal of getting more funds for LISS.

Sandy and Adrienne asked the larger CAC to help them identify the federal and state priorities that the policy committee should focus on for 2015. They would like to have a policy committee working session in early 2015. At this meeting, they will discuss the policy goals for 2015. All are welcome to attend. CAC members who expressed an interest in participating included: Curt Johnson, Mickey Weiss, Tim Visel, Marty Garrell, Dan Natchez, Chantal Collier, David Miller and Mike Papa (guest).

Nancy Seligson, *Town of Mamaroneck* and *CAC Co-chair*, said that we should focus on the CCMP signing and rollout. Dave Miller, *NYLCEF*, mentioned how 2016 is the 20th Anniversary of New York's Environmental Bond Act, which focused on infrastructure bonds. He said that we should frame the CCMP rollout with how the CCMP can address infrastructure issues and climate resiliency.

Mark Tedesco, *EPA Long Island Sound Office*, discussed the CCMP update briefly. He thanked the CAC for their comment letter and mentioned how there

are 254 comments that are currently being addressed in the draft CCMP. He said that there is no deadline to finish the CCMP, but would like to have the CCMP signing event in spring 2015. Mark said that there will be a document that addresses the CCMP comments. He also said that by working with a graphic artist, the CCMP will do a better job of more effectively communicating key messages. Before the signing event, there will be additional review by EPA and the States of New York and Connecticut.

The CAC acknowledged Jim Latimer, *EPA*, core team members, and Mark Tedesco, *EPA Long Island Sound Office*, for their considerable contribution to the CCMP effort to date.

Creating Urban Oases: The USFWS New Haven Harbor Watershed Urban Wildlife Refuge Partnership

Sandy Breslin, *Audubon Connecticut*, provided a brief introduction to the Urban Oasis initiative, a program that focuses on both wildlife habitat and water quality to benefit Long Island Sound. Sandy noted that the program in New Haven is one of only eight pilot sites in the nation. Georgia Basso, *U.S. Fish & Wildlife Service and LISS Liaison*, handed out informational postcards about the Urban Oasis Program and provided an overview of the New Haven project, citing its emphasis on reducing turf and enhancing riparian areas through the construction of bioswales, rain gardens, and urban tree planting. All sites in New Haven are within 2 to 5 miles of LIS and were selected using a multi-tiered analysis that included emphasis on important habitats for migratory species of wildlife, species connectivity, and genetic flow.

Collateral benefits of the initiative have included community engagement and the creation of advocates for the importance of maintaining wildlife habitat, and strengthened partnerships between organizations in New Haven working on environmental issues.

Program partners include, in addition to the U.S. Fish and Wildlife Service, Audubon CT, EPA Long Island Sound Study, Common Ground High School, Yale Urban Resources Initiative, Yale Peabody Museum, the City of New Haven, and New Haven Public Schools.

Additional presenters at the meeting included Colleen Murphy-Dunning, Director *Yale Urban Resources Initiative*, Melissa Spear, Executive Director of *Common Ground High School*, two students from Common Ground High School, and Michelle Frankel, Director of *Audubon Greenwich*.

All partners acknowledged and thanked the CAC and the Long Island Sound Futures Fund for critical financial support for this initiative.

For more information:

<http://www.fws.gov/refuges/vision/urbanwildliferefugepartnerships.html>

If you would like a copy of the PowerPoint presentations, contact:

Judy.Preston@uconn.edu

Schoolyard Habitat Project Guide:

<http://www.fws.gov/cno/pdf/HabitatGuideColor.pdf>

Cape Cod 208 Plan

Curt provided a brief introduction to the Cape Cod 208 Plan, introducing it as a multi-tiered and phased approach to identify the most cost effective ways to deal with the age-old issue of wastewater.

Via webinar, Johanna Hunter, EPA Region 1, explained the significance of the update of the 1978 Section 208 Water Quality Management Plan for Cape Cod (208 Plan Update). The 208 Plan is a comprehensive effort to identify solutions to wastewater pollution in the Cape region.

<http://watersheds.capecodcommission.org>

Johanna provided the context of the problem, including 130,000 homes on septic, 80% sewage entering groundwater, public concerns about sewerage, threats to shell fishing and tourism. The area encompasses 15 towns that adhere to the concept of “home rule”. The 208 initiative has identified both sub-watershed sources of nitrogen pollution as well as highlighting technologies across that are integrated, cost effective, sustainable, and will build in growth as a category. The plan includes diverse technologies and multiple solutions, high stakeholder engagement, is watershed-based, and will incorporate adaptive technology development with pilot projects and progress monitoring.

Massachusetts DEP and EPA are coordinating the program. An important goal is to maximize the benefits of previous town plans and support and expedite watershed solutions under these existing plans. The plan looks at the site, neighborhood, watershed and Cape-wide scale, addressing remediation, reduction, and prevention. Multiple potential tools have been identified that will be provided to communities as a toolbox of solutions.

CAC Questions/Comments: Tim Visel asked a question about the benthic flux as another source of nitrogen, and if there is a process in 208 planning process to address this. Johanna Hunter responded that she would have to refer that to other regional staff. Tedesco reported that benthic flux is calculated in the Long Island Sound water quality models and field measurements were made in Long

Island Sound to set those rates. Tedesco did add that the LIS field data were not comprehensive and a priority is to expand those measurements. Adrienne noted that like the MA 208 program, Suffolk County is interested in testing new technologies for nitrogen removal at on-site wastewater treatment systems. Adrienne reported on 19 new technologies to remove nitrogen from on-site wastewater treatment systems that will be tested in Suffolk County on Long Island that will be going in this spring; the health department will approve according to the results. The problem in the northeast is that there is no true data-sharing going on; different states use different protocols for accepting new on-site technologies for use and won't accept results from other states. EPA's leadership is needed to push for a solution to this. In Connecticut the authority resides in the Department of Public Health, which regulates septic, not the DEEP. Questions were asked about the details of implementation at the local level; the plan will deliver a toolbox of solutions that communities can use. The goal is for citizens/residents to speak with their wallets (not the seasonal or tourist population). Some very creative local media has been used to help residents understand the issues and solutions, and models are being employed, including the integration of social and economic variables. The transferability of this initiative is huge; there is an opportunity to engage the bi-state LIS caucus to bring state lawmakers together.

Robert Burg, Communications Coordinator, *NEIWPCC*, provided lunchtime viewing of a number of short video clips created by a LISS summer intern highlighting the significant ecological resources of LIS Stewardship Areas. The videos are on LISS's YouTube Channel at:

<https://www.youtube.com/user/LIShealth>

National Fisheries Issues and LIS

Chris Cryder, Special Projects Coordinator, *CT Fund for the Environment*, provided background on New England's protected waters, identifying the 5 habitat management areas that exist but are threatened by a fishing industry proposal to reduce them by 70%. The New England Fisheries Management Council is responsible for examining the possibility of re-opening these management areas.

These waters are essential to the protection of ocean fish whose numbers have plummeted, including cod and haddock, as well as cold water corals. Public comments are being gathered to the omnibus Environmental Impact statement. One hundred and thirty eight scientists have signed a letter stating the need for essential fish habitats to continue to remain protected. Chris and CFE asked for CAC support by signing a habitat amendment letter that would offer a range of alternatives to reducing habitat protection. Interested members should contact Tyler Archer at CFE tarcher@ctenvironment.org.

CAC Comments: Commercial fishing interests are very strong: the closer you can get to marine reserves, the better for fisheries. A key challenge is the divide between mid-Atlantic and New England fisheries that both have jurisdiction in LIS.

Nitrogen Next Step Introduction and EPA Petition

Chantal Collier, *Long Island Sound Program Director for TNC*, provided an overview of TNC interest and action in water quality issues facing LIS, particularly concerning nitrogen. The Conservancy has purchased 3500 acres in Great South Bay on LI and working with Ivan Valiela has determined that the nitrogen loading into Great South Bay. The Conservancy is also studying sea level rise on LIS marshes and has developed the coastal resilience-modeling tool to identify the impacts of SLR to LIS coastal landowners, municipalities, and businesses. Additional work on salt marshes (*Linda Deegan et al, Nature, 2012*) has revealed failing root systems of marsh grasses associated with high nutrient levels, especially nitrogen. This has led to eroding banks and creek widening. Sea grass research has looked into the driving factors for the decline of these plants in LIS an up to Cape Cod. High levels of nitrogen have been found in sea grass leaf tissues. Sites studied in LIS include the lower Saugatuck River and Mystic River in Connecticut and East Harbor on Fishers Island, New York. For more information:

<http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/massachusetts/explore/ma-seagrass-research-and-restoration-initiative.xml>

CAC Comments: Importance of knowing the relative contributions and source of nonpoint pollution in order to understand what to focus on. How do we know that it's nitrogen in the salt marsh that is doing the damage? The CCMP has an aggressive protection target for eelgrass in the revised CCMP; we need healthy eelgrass communities before we can expect them to expand range. A question was raised as to how quickly water quality might respond to nitrogen reduction. Mickey Weiss, *Project Oceanology*, cited the example of Mumford Cove; once sewage discharge was re-routed to the Thames River, the problem of sea grass decline disappeared. Question also asked how to determine the groundwater/surface divide for nitrogen contributions, and if turf fertilizer components could be determined. The topic of benthic flux returned; Adrienne reported that it is the second largest cause of nitrogen loading (27%), behind wastewater, in a LI site study. Mark Tedesco commented that benthic flux is part of the LIS model; more data would be useful to estimate how it varies among embayments.

Localized Nitrogen Sources: A Progress Report

Curt Johnson reported that CFE/STS is filing a petition by January 15th to EPA, explaining that we're at a change point with LIS nitrogen reduction. New York wastewater plants have done a lot and are very close to meeting the 58.5 %

reduction target. The period of time to comply with the TMDL officially ended this past August in CT and will end in summer 2017 in NY. Key points of the petition are: The TMDL is nearly complete and will not meet water quality standards for LIS. Recent research reflects that local embayments, even in the eastern Sound, are suffering from hypoxia. Marsh loss has been linked to excess nitrogen. Dense blooms of toxic algae in Northport Harbor in recent years are believed to be associated with excess nitrogen. We don't know local sources of nitrogen well; there are many more sources now than we were aware of in 2000, especially septic systems in Long Island and eastern Connecticut. We need a new enforceable reduction plan to identify these sources and mandate reductions from sources that we did not have knowledge of in 2000. A draft of the petition will be available by the end of next week. The policy committee will be discussing this in January. The petition will go to EPA regions 1 and 2.

CAC Comments: Chesapeake Bay has done a lot on this; a lot of information exists. How much nitrogen is coming from underground piping/sewage collection systems that fail during wet weather? This is not just about EPA; EPA is being asked to be the ringleader and go-between, with Chesapeake Bay as a good model. The USGS should be involved as well because of sulfite acidic soil (black mayonnaise) that is a significant contributor of nitrogen recycling. The Army Corp should also be involved.

Announcements

Suggested topics for next/future CAC meeting:

- Micro beads pollution (Adrienne)
- We need one meeting with congressional representatives at the meeting
- Nancy Seligson offered to present what her community is doing – the toolbox that they are using to address environmental issues related to LIS in her community
- TNC should be invited to the June Meeting in 2015 to give the results of what Chantal reported on at this meeting
- Beach Closure Standards

Adjourn

The meeting adjourned at approximately 2:30 pm. The next CAC meeting will be held on Thursday, March 12th, 2015 in NY.

For additional information on the CAC, visit:

<http://longislandsoundstudy.net/about/committees/citizens-advisory-committee/>

Long Island Sound Study
Citizens Advisory Committee
Thursday, December 11, 2014
Housatonic Community College, Bridgeport, CT
Meeting Summary