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Sound Bytes



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NEWS FROM THE LONG ISLAND SOUND STUDY

Fall 2019

LISS NEWS

\$2.6 Million in Grants Awarded to Improve the Health of Long Island Sound

The Long Island Sound Futures Fund (LISSFF) provides grants to local groups aiming to restore and protect Long Island Sound. During an event held on November 4 at the University of Bridgeport, the National Fish and Wildlife Foundation (NFWF) and the Long Island Sound Study (LISS) announced \$2.6 million in funding for 35 conservation projects from across New York. Connecticut. Massachusetts. and Vermont.

The event was attended by US Sen. Richard Blumenthal and US Rep. Jim Himes, both of whom offered remarks in support of the LISSFF grantees' ongoing conservation efforts. Also speaking at the event were New England US EPA Regional Administrator Dennis Deziel, Betsey Wingfield, the Deputy Commissioner of Environmental Quality at the Connecticut Department of Energy and Environmental Protection, Shanté Hanks, the Deputy Commissioner of the Connecticut Department of Housing, and Mark Tedesco, Director of EPA's Long Island Sound Office.

Hanks, representing one of this year's funded projects, cited the importance of collaboration in helping projects advance. "The Resilient Bridgeport Green Infrastructure Project in Seaside Park is a great example of how the EPA



US Sen. Richard Blumenthal speaking at the Futures Fund grant award ceremony. New England EPA Regional Administrator Dennis Deziel (left) and EPA Long Island Sound Office Director Mark Tedesco (center) are seated.

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Long Island Sound Study via Long Island Sound Future's Fund supports partner organizations to accomplish mutual objectives for stormwater treatment, resiliency, and environmental justice in Long Island Sound communities," said Hanks. "With this grant, we will bring together funding from the US Department of Housing and Urban Development's Disaster Resilience Program and the US EPA to achieve coastal resilience for Connecticut " After the event Rebecca French from the Connecticut Department of Housing provided interested attendees a tour of the area by Seaside Park that will be

redeveloped though this project to improve stormwater management and coastal flooding resiliency.

The Long Island Sound Study initiated the LISFF in 2005 through EPA's Long Island Sound Office and NFWF. To date, the Futures Fund has invested \$22 million in 451 projects. The program has generated an additional \$39 million in grantee match, for a total conservation impact of \$62 million for regional and local projects. The projects have reconnected 176 miles of river for fish passage, restored 1,114 acres of critical fish and wildlife habitat and open space, treated 212 million gallons of stormwater pollution, and educated and engaged 4.9 million people in protection and restoration of the Sound.

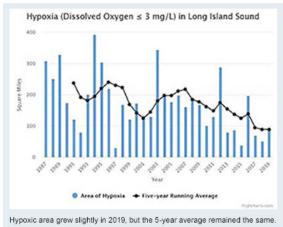
Read descriptions of all 35 projects at the Long Island Sound Study website.

Area of 'Dead Zone' Increases Slightly in Long Island Sound

A key indicator of water quality in Long Island Sound – the maximum area of hypoxic or oxygen-depleted water – grew slightly worse during the summer of 2019 compared to summer 2018, according to water samples collected from June to September by the Connecticut Department of Energy and Environmental Protection (CTDEEP) and the Interstate Environmental Commission (IEC). But despite the small increase, the five-year rolling average in the hypoxic area, LISS's standard to measure long-term progress, remained the same.

The 2019 area of hypoxia was 89 square miles, an increase from 52 square miles in 2018. The 2019 five-year rolling average of the maximum area of hypoxic waters (2015-2019) also happens to be 89 square miles, and is the same as the 2018 rolling average (2014-2018). The current five-year average of the hypoxic area represents a 63 percent decline from 1992-1996 when the average hypoxic area was 240 square miles.

Hypoxia occurs in coastal waters when the bottom waters lack sufficient oxygen to support marine life. Often called a "dead zone," the area of hypoxic water is an important water quality indicator. Hypoxia usually occurs in the summer in bottom waters when the more oxygenated surface waters heat up and become less dense, making it harder for surface waters to mix with the denser, less oxygenated bottom layers. In assessing trends, LISS uses the



five-year rolling average because conditions in any given year could be impacted by variable factors, such as extreme changes in heat or precipitation, which would be hard to compare to the normal conditions over a long period of time. Hypoxia in the western Sound also appeared more intense (lower oxygen concentrations) in 2019, perhaps due to the hot and wet summer weather.

LISS and its partners have had a major goal since the 1980s to reduce the area and severity of hypoxia in the bottom waters of Long Island Sound. EPA and the states of Connecticut and New York, working with municipalities, are implementing a program to reduce nitrogen, a nutrient that in excess leads to the conditions

that result in hypoxia.

More information about efforts to improve water quality in the Sound are available in the hypoxia and nitrogen Ecosystem Target web pages on the LISS website.

Summer Social Media Campaign Reaches Large Audience



Students at the St. Thomas's Day School in New Haven with their science teacher Josiah Venter hold up reusable water bottles with "Protect Our Wildlife" stickers on them

Long Island Sound Study's third #DontTrashLISound social media campaign continued to be a success in helping to raise understanding of the dangers of marine debris in Long Island Sound to wildlife. The social media posts running from early August to mid-September were viewed more than 135,000 times on Facebook, Twitter, and Instagram, engaging a wide audience with comments, shares and likes.

This summer's campaign also included beach cleanups and information events in Connecticut and New York, and the distribution of thousands of "Protect Our Wildlife" stickers that also contained a message to "Break the Single-Use

Plastic Habit." The campaign was organized by the New England Interstate Water Pollution Control Commission with support from the Connecticut and New York Sea Grant Programs, Mystic Aquarium, The Nature Conservancy-CT, SoundWaters, and the Long Island Sound Citizens Advisory Committee.

Management Committee Meeting Held in Port Jefferson, NY



After the meeting, Managemement Committee members and staff reviewed notes on board the Port Jefferson to Bridgeport ferry, including (I-r): Koon Tang, New York State Department of Conservation Bureau Director; Susan Van Patten, NYSDEC Watershed Section B Section Chief, Division of Water; Phil Trowbridge, Assistant Director for Water Planning Programs, Connecticut Department of Energy and Protection; and Kelly Streich, CTDEEP technical coordinator for the Long Island Sound Study. Photo Credit: Richard Friesner.

October 2020

LISS held a two-day Management Committee meeting in Port Jefferson on October 23 and 24 to begin planning and choosing budget priorities for the federal fiscal year beginning Oct. 1, 2020. The meeting of representatives from federal and state agencies, interstate commissions, academic institutions, and local government and environmental organizations also included discussions to update the Implementation Actions of LISS's Comprehensive Conservation and Management Plan. The funding for the Long Island Sound Study budget is authorized by the federal government through the EPA as part of the Long Island Sound Restoration Act. LISS's budget has grown in recent years from \$4.6 million in 2016 to \$14.6 million in the current fiscal year. The federal government has yet to approve a budget for the fiscal year beginning in

Read LISS's current work plan to find information about current projects that are being implemented to achieve the goals under the Comprehensive Conservation and Management Plan.

LIS Scientists Lead Coastal Waters Hypoxic Session at CERF Conference



UConn Marine Scientist Jim O'Donnell at a recent Long Island Sound Citizens Advisory Committee meeting.

On Nov. 7, Jim Ammerman, LISS's science coordinator, and University of Connecticut marine scientist Jim O'Donnell, co-chair of the LISS Science and Technical Advisory Committee, convened a session at the 2019 meeting of the Coastal and Estuarine Research Federation (CERF) in Mobile, Alabama, entitled: Increasing Coastal and Estuarine Hypoxia: Causes, Responses, and Remedies. The session included a variety of talks on estuarine hypoxia issues in Long Island Sound, Jamaica Bay in Queens, Chesapeake Bay, two Gulf of Mexico sounds, and the host estuary, Mobile Bay. For some estuaries, as discussed in the session, decreased nitrogen loading is improving oxygen concentrations, but the connection between the two is complicated by water stratification, which acts as a barrier to water mixing, other physical drivers, and

climate change stressors such as sea level rise. A key takeaway message at the session was that hypoxia will continue to be a consequence of eutrophication – the process leading to the depletion of oxygen that starts when a body of water becomes enriched in nutrients such as nitrogen – and an important concern to estuarine scientists and managers.

Perez-Viscasillas Joins the Long Island Sound Study



Long Island Sound Study has a new outreach coordinator for New York. Jimena Perez-Viscasillas started in September at New York Sea Grant's office on the campus of Stony Brook University. She brings experience in using social science methods for developing and implementing community engagement programs in North Carolina. A native of Puerto Rico, Perez-Viscasillas has a bachelor's degree in biology from the University of Puerto Rico-Mayaguez

and a master's degree in Environmental Management Ecosystem Science and Conservation from Duke University's Nicholas School of the Environment. Her responsibilities include managing the Sound Stewards program, which brings students to Long Island Sound Stewardship sites for hands-on activities, and the New York portion of the Long Island Sound Mentor Teachers Program. Her position is funded through a cooperative agreement between EPA and New York Sea Grant. Welcome aboard Jimena!

AROUND THE SOUND

Bronx River Alliance Joins the Unified Water Study



Diana Fu, left and Toniann German, right, of the Bronx River Alliance, monitoring water quality at the mouth of the Bronx River where it meets the East River. Photo Credit: Bronx River Alliance.

This year, the Bronx River Alliance joined the Unified Water Study (UWS), an initiative led by Save the Sound, as part of the Sound-wide collaborative project to monitor water quality in bays, harbors, coves, and other coastal waters of the Sound.

As part of the study, the Bronx River Alliance's Ecology and Research teams from May to October set out at dawn to measure water temperature, salinity, dissolved oxygen levels, water clarity and chlorophyll a levels at six sampling stations in the lower Bronx River and the East River, a tidal strait that flows into Long Island Sound as well as New York Harbor. This information helps resource managers

and scientists better understand summer conditions that causes fish kills and what can be done to help prevent them. The 2019 sampling recorded oxygen levels in the Bronx River high enough to support the diverse fish and wildlife species the Bronx River Alliance and New York City Department of Parks and Recreation are working hard to restore and protect.

The Bronx River Alliance, a partnership dedicated to protect, improve, and restore the Bronx River corridor and greenway, is planning to continue with the Unified Water Study next year. The UWS was launched in 2017 by Save the Sound with funding from the Long Island Sound Study. More than 20 organizations, including citizen volunteer groups, are part of the UWS, monitoring over 35 harbors, bays, and other coastal waters. For more information about the UWS, visit the Save the Sound website.

Sign to Commemorate Noroton River Fishway Project Unveiled



Despite a strong nor'easter on Oct. 16, Save the Sound and the Darien Land Trust held the sign dedication event. Pictured, left to right, are: Save the Sound President, Curt Johnson; Darien Land Trust Executive Director, Beth Harmon; Save the Sound Director of Ecological Restoration, Gwen Macdonald; and Past Darien Land Trust President and current Trustee, Flip Huffard. Photo Credit: Save the Sound.

For the first time in over 70 years fish on the Noroton River can pass through a culvert underneath the I-95 culvert between Stamford and Darien thanks to a new fishway improving stream flow. The project to install ladder-like baffles inside the culvert for fish to swim in slower, deeper water, was completed in 2018. On Oct.16 this year a new sign was installed to commemorate the achievement by project partners Save the Sound and Darien Land Trust at Olson Woods Pond. The pond is where fish such as alewives can now find habitat seven miles upstream from the culvert.

Alewives are migratory fish.They mature in the ocean, but after 3-5 years return to freshwater river habitat in the spring to reproduce. To help encourage fish populations to return to Olson Woods Pond, the Connecticut

Department of Energy and Environmental Protection stocked the pond with alewives in 2018 and 2019.

AROUND THE WEB

Audubon New York Highlights LIS Work in Season-End Coast Summary



Audubon New York staff at a recent outreach event. Photo from Audubon New York website.

the Long Island Sound Futures Fund.

Check out the web page here.

Audubon New York recently posted its season-end coast summary on its website. The report highlighted successful efforts to protect piping plovers, a shorebird that is at risk of extinction, and outreach projects to raise awareness to beachgoers about how human disturbances can damage bird habitat and on what they can do to protect shorebirds.

This summer Audubon's "Be a Good Egg" campaign included 20 outreach events in which 4,029 beachgoers signed a pledge to protect beachnesting birds, surpassing the annual goal of 3,000. The program is operated with funding support from

Two Long Island Sound Projects Highlighted in EPA Newsletter

EPA's latest issue of its Trash Free Waters newsletter highlighted two Long Island Sound-related projects – the #DontTrashLISound social media campaign sponsored by the Long Island Sound Study, and the Project Waste initiative conducted the Bronx River Alliance. Project Waste involves youth collecting and categorizing litter found in the Bronx River. The youth then identify the sources in communities where the trash is coming from in order to develop a trash prevention plan.

Read the newsletter here.



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