SoundMatters

NEWS FROM THE LONG ISLAND SOUND STUDY

Winter 2021

Welcome to the Winter 2021 issue of Long Island Sound Study's e-newsletter. The newsletter has a new name, *Sound Matters*, changed to reflect the focus on projects and initiatives of the Long Island Sound Study (LISS) that matter in the efforts to restore Long Island Sound. With funding for Long Island Sound restoration efforts at an all-time high (see the first news item), there has never been a better time to inform citizens about the progress, and the challenges ahead, in achieving cleaner waters, thriving habitats, abundant wildlife, and resilient coastal communities. Our original e-newsletter, *Sound Bytes,* started in 2007, but the name isn't entirely going away. We will use it as a heading to highlight brief items with links to the LISS and other websites. Expect *Sound Matters* to appear quarterly, for now, with possible increased frequency in the future.

Mark A. Tedesco, *Director*
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LISS NEWS

LISS Funding Reaches Record $31.1 Million

The shoaling (building up of sand) at the inlet at Flax Pond in Old Field, NY has reduced water flow at low tide and negatively impacted ecosystem health, water quality, access, and recreational opportunities at the pond. EPA funds in the 2020 LISS work plan will address the shoaling by excavating and removing the sand at the inlet in order to increase tidal flushing, reduce possible hypoxic events, and improve tidal wetland health.

From 2010-2015, with one exception, the federal funding appropriation to support the Long Island Sound Study program was less than $4.6 million a year. But since the adoption of the Study's new Comprehensive Conservation and Management Plan in 2015, the appropriations, with the support from the region's members of Congress who make up the Long Island Sound Congressional Caucus, have been significantly growing each year. This January, with the reauthorization of the federal Clean Water Act, the program's support reached an all-time high of $31.1 million. On Jan. 21, the Management Committee met via Microsoft Teams to discuss how the money will be used to fund LISS projects for the next fiscal year beginning Oct. 1. A final decision on the budget is expected in the spring. In the meantime, you can review how last year's appropriation of $21 million is being used for current projects in the Study's work plan.

Report Highlights 15 years of Futures Fund Accomplishments

Just over 15 years ago the first Long Island Sound Futures Fund awards were announced at a ceremony held at SUNY-Maritime's waterfront campus in the Bronx, overlooking the Whitestone and Throgs Neck bridges and Long Island Sound. Among the guests was then CTDEEP Commissioner Gina McCarthy, who later served as EPA Administrator and now serves as the first White House National Climate Advisor. Since 2005, the size of the Futures Fund has grown from $1 million for 28 grants to $3.8 million for 38 grants in 2020 (announced in a virtual ceremony over Zoom on Dec. 7). While the funding has increased, thanks to LISS's increased federal support, the Futures Fund's focus remains the same: to provide grants to local communities, non-governmental organizations, and universities who are implementing projects that help fulfill the goals of the Study's Comprehensive Conservation and Management Plan. To date, the Futures Fund has invested a total of $23 million for projects that have reconnected 105 river miles for fish passage, restored 773 acres of critical fish and wildlife habitat, treated 212 million gallons of stormwater pollution, and educated and engaged millions of people about the value of Long Island. The National Fish and Wildlife Foundation, which has managed the grant program since its founding, has recently published a 15-year retrospective. It includes project descriptions, great photos, and stats showing how the program has made a difference in improving the health of the Sound. The report is available in the Sound Spotlight section of the LISS website.

Hypoxic Area is Down, Continuing Positive Trend

As a result of the Covid-19 pandemic, a lot of the work for Long Island Sound has been moved to home offices, and meetings are being held by Zoom and other video conference systems. But there is still work needed to get done "out in the field," and that includes water quality monitoring to assess the health of the Sound.

Matt Lyman, a CTDEEP environmental analyst, operating the controls to raise and lower the water collection equipment, and a “vertical profiler” so water samples can be collected at multiple locations in the water column.

While this month was an exception–water quality monitoring conducted by the CT Department of Energy and Environmental Protection on board its research vessel was canceled out of an abundance of caution over the current Covid-19 positivity rate and other factors–CTDEEP and Interstate Environmental Commission, its partner in conducting Sound-wide monitoring for the Long Island Sound Study, have generally been out sampling. This was particularly important during the summer season, a critical time to assess the Sound's water quality for hypoxia, or oxygen-depleted waters, which can cause harm to wildlife, including inducing inducing fish kills. While hypoxia did occur, the extent of the hypoxic area was less than the previous year, and the five-year average continues to show a long-term trend of improved water quality conditions. A Sound Spotlight article provides an overview of the 2020 summer season, while the Extent of Hypoxia Ecosystem Target shows the long-term trend.

SOUND BYTES

Hydrilla is a fast-spreading invasive underwater plant that can interfere with boating, fishing, and swimming, outcompete native plants, and lead to decreased oxygen levels. This video trailer produced by the Connecticut Resource Conservation and Development shows how it is causing havoc on the Connecticut River. The full documentary video is here.

- UConn scientists Michael Whitney and Penny Vlahos recently published a paper that documents how dissolved oxygen levels in Long Island Sound are improving in response to reduced nutrient levels. It is one of the first peer-reviewed papers documenting these improving trends in Long Island Sound and is one of the few documented recoveries to a nutrient-caused hypoxic coastal system worldwide. The article's abstract appears on the American Chemical Society website.

- LISS is currently working on a report highlighting the progress made from 2015-2019 in implementing the Comprehensive Conservation and Management Plan. We'll discuss that report in a future newsletter issue. In the meantime, an updated set of Implementation Actions for 2020-2024 has just been posted on the LISS website, available in the media center.
- Congress repealed a federal law requiring that Plum Island, a Long Island Sound Stewardship Area, be sold to the highest bidder. The move is a critical step in efforts to protect the natural resources of the 840-acre island, See Save the Sound news release.
- Judy Preston, the Study's outreach coordinator in Connecticut, is a master gardener who hosts "Gardening for Good," an internet radio show that makes the connection between sound gardening practices and improving water quality for Long Island Sound. Since its premiere last February, the show has been listened to over 50,000 times. Catch the latest shows on the ICRV stream.
- ***Research and Intern Openings:*** EPA is hiring for a Long Island Sound Study Research Fellowship, a one-year position. See notice here. NEIWPCC is hiring a Communications Intern for the EPA Long Island Sound Office. The listing is on the NEIWPCC website.

FOCUS ON LISS INDICATORS

Black Sea Bass Populations Increasing Rapidly in the Sound

A black sea bass being measured on board the Research Vessel John Dempsey as part of the CTDEEP's Long Island Sound Trawl Survey. After being counted, weighed and measured for length the fish in the survey are returned to the Sound.

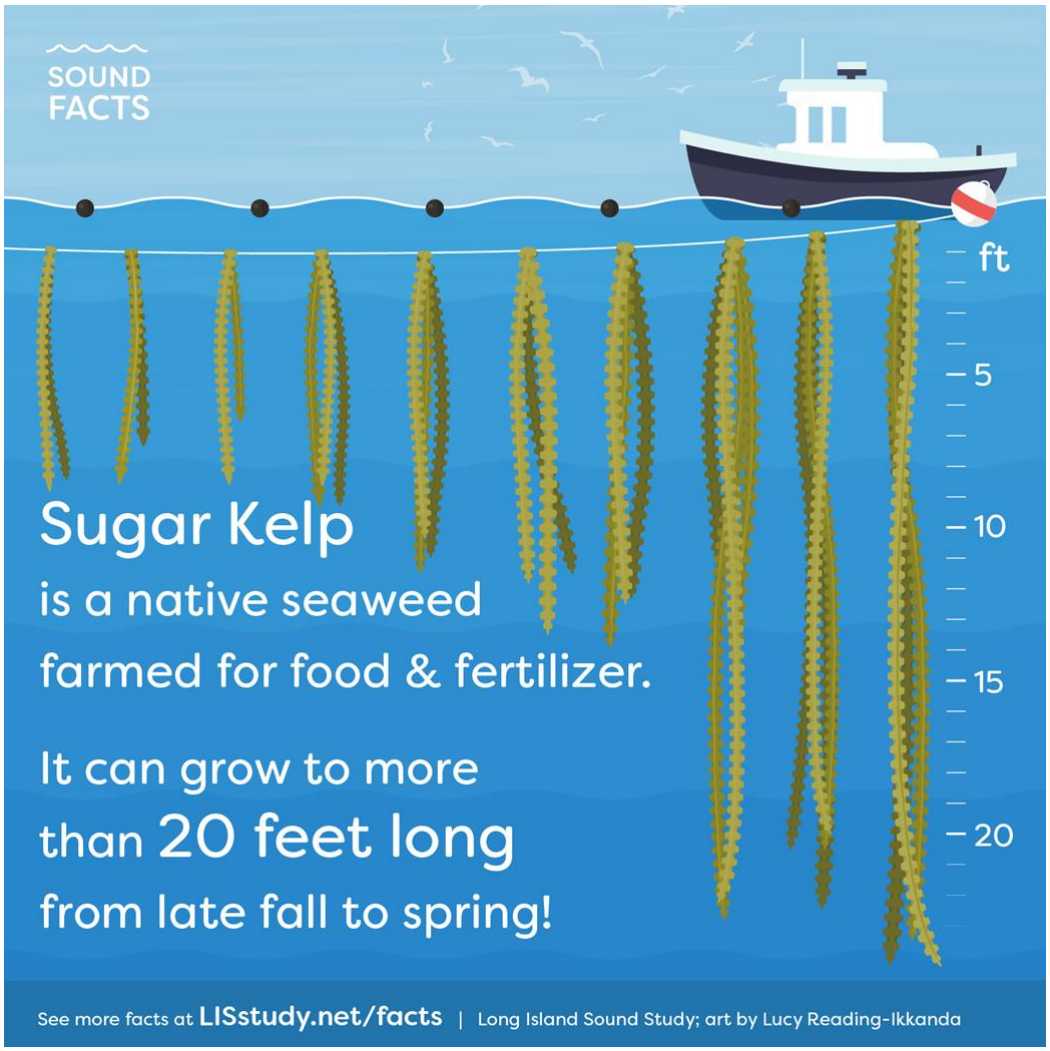
The Long Island Sound Study Ecosystem Targets and Supporting Indicators presentation on the LISS website tracks a set of indicators to measure the health of the Sound, and to assess whether LISS is meeting management targets to help achieve restoration goals. In each issue of Sound Matters, we plan to highlight the latest trends in one of the indicators or targets.

Black Sea Bass: The abundance of commercially and recreationally important game fish depends on quality habitat and successful fishery management, but also can be an indicator of a changing climate. Most recently, LISS has added a new species to track, black sea bass (*Centropristis striata*), which has become increasingly more abundant in the Sound. Black sea bass, a warm-water species historically found south of the Sound, may be experiencing a shift, or expansion, in geographic range, along with other warm-water species, due to increasing water temperatures. The increase in black sea bass (by more than 1,000 percent over the past decade in the Long Island Sound Trawl Survey) is welcome to anglers since it is a valued game fish, however, there are ecological consequences associated with this change in the Sound. The black sea bass indicator is part of the Game Fish indicators on the LISS website. Learn more about why black sea bass has been added to the indicator presentation in Sound Spotlight. LISS also has an indicator on the trends

of Warm Water/Cold Water Fish in the climate change section. And research by the NOAA Milford Lab on juvenile fish communities in rock reef habitats is also finding a rise in warm water species, including juvenile sea bass.

SOUND FACT

Winter is Growing Season for Sugar Kelp!



Sugar Kelp is a brown seaweed that grows rapidly in the winter. It potentially could have significant economic as well as ecological benefits to the region. LISS has recently added kelp to **Sound Facts**, a series of graphics highlighting interesting facts about Long Island Sound. Sound Facts is on our social media networks and posted on the LISS website. From the website post, you can read facts about the plant and learn

about recent and past projects the Study has funded to assess the viability of growing kelp for the purpose of removing nitrogen pollution. See it here.

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