



A Partnership to Restore and Protect the Sound

SOUND HEALTH 2001

Status and Trends in the Health of Long Island Sound

Since the federal Clean Water Act became law in 1972, investments in water pollution control programs have led to measurable improvements in the water quality of Long Island Sound. Obvious sources of pollution are now regulated and controlled through permit programs, tidal wetlands are protected, and major efforts to build and improve sewage treatment plants and control industrial discharges have helped to restore degraded waters. With the 1994 Comprehensive Conservation and Management Plan (CCMP) as a guide, programs now focus on the health of the Long Island Sound ecosystem as a whole to attain the goals of clean water and sediments, abundant and diverse fisheries and wildlife, sustainable ecosystems, and multiple commercial and recreational uses.

But just how effective have these efforts been? Is the water cleaner and safer to swim in? Are contaminant concentrations decreasing? Are habitats being protected and restored? Are the fish and shellfish more abundant (and safe to eat)?

Under a new initiative, the Long Island Sound Study (LISS) has developed environmental indicators (specific, measurable markers that help assess the condition of the environment and how it changes over time) to monitor the health of the Sound and to answer these kinds of questions.

ENVIRONMENTAL INDICATORS

Hypoxia
Toxic Contaminants
Pathogens
Habitat Restoration
Fish and Wildlife Populations
Landscape Changes



SUCCESSSES

- In 1998, the LISS adopted a 58.5 percent reduction target for nitrogen loads from human sources to the Sound by 2014, with interim five- and ten-year targets to assure steady progress.
- In 2001, the EPA approved Connecticut's and New York's plan, called a Total Maximum Daily Load (TMDL), for achieving the reductions and allocating responsibility among nitrogen sources.
- As of January 2001, upgrades to sewage treatment plants have decreased nitrogen discharges to the Sound by 19 percent since 1990.
- The severity of hypoxia (lack of oxygen) has decreased in the Sound since the late 1980s.
- Toxic industrial chemical releases in the Sound's watershed have declined 83.5 percent between 1988 and 1998.
- Levels of copper, nickel, lead, and zinc as well as many organic compounds have declined in the monitored harbors of the Sound.
- Since 1993, more than 308 acres of tidal wetland habitat have been restored in Connecticut. Since 1996, New York has restored 65 acres of tidal wetlands. Additional restoration projects are under way in both states.
- As of 2000, 34.9 miles of river migratory corridors have been restored for anadromous fish passage by installing fish ladders and removing dams.

More detailed versions of **Sound Health 2001** are provided at www.epa.gov/region01/eco/lis.

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CHALLENGES

- Both Connecticut and New York have committed millions of dollars to upgrade sewage treatment plants, control polluted runoff, and restore habitat, but more is needed to implement the actions in the CCMP.
- A die-off of lobsters that began in mid-September 1999 and continued through 2000, most severely in the western Sound, has greatly reduced the harvest. Disease outbreaks have hurt both the lobster and oyster fisheries.
- Bluefish, winter flounder, and tautog stocks still remain far below the long-term average and have not yet responded to more stringent fishery management measures that were recently implemented.
- Colonial bird populations such as the piping plover and least tern are still threatened by human intrusion into nesting areas, loss of habitat, and predators.
- Continued development of the watershed can threaten progress made to date.
- Contaminants deposited in sediment from past discharges continue to be a concern.



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WE HAVE MORE WORK TO DO



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While LISS partners are making progress toward the CCMP goals, much remains to be done. Implementing the actions outlined in the CCMP will require:

- a sustained effort and continued funding by all the LISS Management Conference partners.
- expansion of local and citizen efforts to aid in the cleanup of the Sound.
- continued research and monitoring programs to provide data on the status and trends in the health of the Sound.

WHAT CAN YOU DO?

Visit the Long Island Sound Study web site www.epa.gov/region01/eco/lis or call the telephone numbers on the front of this fact sheet to obtain information that can help you protect and restore the Sound. Here are a few simple things you can do in the meantime.

- Scoop up pet waste and dispose of it in the trash or toilet.
- Take household chemicals to a recycling center instead of pouring them down drains or putting them in the trash.
- Learn how to practice environmentally-sound gardening, reducing the effects of overloading the Sound with nutrient-rich runoff.
- Maintain your septic system by having it pumped out every three to five years.
- Get involved in local organizations that monitor land management and participate in efforts to manage growth.
- Use public transportation to reduce smog.

