

Long Island Nitrogen Action Plan (LINAP) – December Newsletter

Long Island Regional Planning Council Update

In this month's issue of the LINAP newsletter, we highlight the ongoing nitrogen reduction-related initiatives that the Long Island Regional Planning Council is leading or a participant.

- **Hempstead Bay (Western Bays) Water Quality Monitoring**
- **Suffolk County Wastewater Management District Feasibility Study**
- **Nitrogen Smart Communities**
- **Long Island Water Quality Information Data System (LIQWIDS)**
- **The Long Island Water Quality Challenge**

Water Quality Monitoring in the South Shore Estuary Reserve Western Bays: A Continuation and Expansion of the Town of Hempstead Bay Study

The [Hempstead Bay Water Quality Monitoring Program](#) provides a framework for monitoring, analysis, and reporting of water quality within the surface waters of Hempstead Bay (informally known as the Western Bays) and its major tributaries. The program – a collaboration among the Long Island Regional Planning Council (LIRPC), Hofstra University and the Town of Hempstead Department of Conservation and Waterways – continues and expands upon the monitoring work that the Town of Hempstead Department of Conservation and Waterways conducted for nearly five decades in the South Shore of Nassau County.

The water quality data derived from samples collected from strategic locations in Hempstead Bay will provide a baseline against which to evaluate changes to nutrient loading. Over the next decade there will be large-scale ecosystem-based and hard-engineered upgrades in the region (e.g. coastal dune restoration, wastewater treatment improvements, etc.). The program includes sampling around the South Shore Water Reclamation Facility (formerly called the Bay Park Sewage Treatment Plant) before major upgrades are completed.

As part of this program, Hofstra University and the Town of Hempstead Department of Conservation and Waterways will also analyze the historic water quality record for spatial and temporal trends in water quality over time and the potential drivers of these trends.



Photo Credit: Kyle Rabin

Suffolk County Wastewater Management District Feasibility Study

The wastewater management district model was identified in the [Long Island Nitrogen Action Plan scope](#) as an important planning mechanism for the counties to consider. Establishing a wastewater management district in Suffolk County would provide the critical administrative and organizational structure to identify, evaluate and manage the wastewater infrastructure needed to improve groundwater and surface water quality. This includes the replacement of outdated cesspools and septic systems with more modern innovative/alternative (I/A) onsite wastewater treatment systems. These state-of-the-art I/A technologies are practical where sewerage is not feasible and have proven to be effective at removing nitrogen.

On October 2, 2018, a resolution was passed unanimously by the Long Island Regional Planning Council (LIRPC) to fund a feasibility study to evaluate the creation of a countywide wastewater management district. To conduct this study, Suffolk County contracted with Raftelis, a leading financial and management consulting firm that specializes in the water and wastewater utility industry. Raftelis was selected after a competitive selection process.

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Nitrogen Smart Communities

As part of LINAP, the NYSDEC and the LIRPC are developing a new program called Nitrogen Smart Communities (NSC). It will begin with a pilot phase in 2020. NSC is a voluntary program that will assist municipalities in Nassau and Suffolk counties in identifying the main sources of nitrogen pollution in their municipality. NSC will help communities take meaningful and effective actions to reduce, prevent or eliminate nitrogen pollution through a coordinated, community specific strategic plan of action.

A Nitrogen Smart Community Action Plan (NSC Action Plan) will help steer a municipality's activities to improve water quality in their community and on Long Island. In some instances, the NSC Action Plan will demonstrate lead- by-example strategies for the broader community. It will also play an important role in the conservation and restoration of natural resources, preservation of public health and increased community resilience in the face of climate change.

The NSC program will assist municipalities by helping them:

- Understand the primary sources of excess nitrogen in their municipality.
- Identify, develop and implement local nitrogen reduction strategies, initiatives and best practices.

Achieve nitrogen reduction goals associated with county subwatershed plans and local For more information [click here](#).



Photo Credit: Kyle Rabin

Long Island Water Quality Information Data System (LIQWIDS)

The Long Island Water Quality Information Data System or LIQWIDS is a system designed to serve as a centralized water quality data portal to allow all interested stakeholders, such as local monitoring groups, non-profits, or governmental agencies, to share water-quality monitoring data on Long Island. LIQWIDS will have a public facing website that features an interactive mapper that enables users to visualize trends in water quality from a variety of groundwater and surface water networks across Long Island.

The LIRPC will be seeking proposals for a consultant to provide direct assistance, coordination, and administration for this initiative. A Request for Proposals will be released in early 2020 and posted on the [LIRPC website](#).

The Long Island Water Quality Challenge

The Long Island Water Quality Challenge promotes project-based learning in Science, Technology, Engineering and Mathematics (STEM) in Long Island schools and helps students in grades 6, 7 and 8 develop a greater understanding of how their classroom curriculum can be applied to protecting Long Island's crucial water resources – with a specific focus on reducing or eliminating nitrogen pollution. This competition also connects students, teachers and communities to the overall LINAP initiative. Student proposals will be evaluated on originality, technical merit, quality of ideas, and practicality. The competition will conclude in the spring of 2020.
