Long Island Watershed Program (LIWP) Newsletter

LONG ISLAND WATERSHED PROGRAM

Last month the DEC established the Long Island Watershed Program along with the announcement of the Long Island Watershed Action Agenda being available for public comment. To read more about the Action Agenda and the watershed program, read last month's special announcement here.

Protecting Long Island's Most Precious Resource: An Interview with Tyrand Fuller

Water is one of Long Island's most valuable natural resources. Unlike many other regions, we rely entirely on a sole-source aquifer system for our drinking water. This underground supply—made up of the Upper Glacial, Magothy, and Lloyd aquifers—is naturally replenished by rainfall. However, growing challenges such as over-pumping, population increase, pollutants, and climate change can stress the aquifer system and public water supply. This edition of the LIWP newsletter features an interview with Tyrand (Ty) Fuller who is the Director of Strategic Initiatives and lead hydrogeologist at Suffolk County Water Authority (SCWA) as well as a member of the regional Long Island Commission for Aquifer Protection (LICAP). In this interview, Ty highlights the water quality and quantity work SCWA implements, as well as LICAP's water conservation and community engagement initiatives.

When asked about the biggest challenges facing the Long Island aquifer system today, Ty was unequivocal. "The biggest challenge right now," he explained, "is the rise of emergent contaminants." He pointed to per- and polyfluoroalkyl substances (PFAS), 1,4-dioxane and pharmaceuticals as top concerns. "These compounds are found in everyday items, whether it's nonstick cookware, pizza boxes, detergents, or perfumes. It is ubiquitous within our environment."

Over the past decade, state and federal regulations have evolved to address emerging contaminants. “SCWA has taken action,” said Ty. “We've done a great job with PFAS, and we’re working to address the newer contaminants that have emerged.” Ty added, “We’ve made significant investments in treatment systems, and we’ve exceeded compliance goals.” In fact, in June SCWA announced that all treated water it supplies to its approximately 1.2 million customers falls below the enforceable contamination standard of four parts per trillion (PPT) for both PFAS and PFOS. This comes a full six years before the federal deadline.

While water quality issues often capture the headlines, Ty emphasized that water quantity is just as critical. “Quantity is always a concern—especially in Suffolk County’s more sensitive coastal areas where freshwater is only available at shallow depths,” he explained.

In an effort to help conserve water, SCWA developed the Water Wise Program as a tool for conservation and public engagement. Water Wise provides a one-on-one consultation between customers and SCWA experts who look at the total daily water use of a customer's home. The program aims to identify and quantify unaccounted water losses and offer recommendations to reduce and conserve water. Water Wise also offers account credits up to $250 for water saving devices such as rain sensors, smart irrigation controllers, low flow shower heads, faucet aerators, leak detecting valves, and more. “People that participate in the Water Wise checkup, have seen significant savings within their water usage. Also with the Water Wise account credits, not only are customers saving money through purchasing these devices, but they're also seeing a reduction of their water bill, which is in turn saving them even more. The program has been extremely effective, said Ty.

Another major advancement has been SCWA’s implementation of a smart metering system. Smart meters are advanced water meters that provide real-time data on water usage, allowing both utilities and customers to monitor consumption more closely. “These meters give us real-time data,” Ty explained. “We’ve used them to detect leaks that residents didn’t even know existed. They also allow us to send water usage comparison reports, so customers can see how their usage stacks up against established thresholds or neighborhood averages.”

While SCWA engages customers directly, regional coordination is equally important. The Long Island Commission for Aquifer Protection (LICAP), a bi-county organization formed in 2013, addresses both quality and quantity issues facing Long Island’s aquifer system and advocates for a coordinated, regional approach to groundwater resources management. Ty is a member of LICAP and explains that “LICAP brings together water suppliers, scientists, engineers, regulators, elected officials, and environmental advocates. It’s one of the first organizations of its kind. Through LICAP, we’ve produced annual State of the Aquifer Reports, held public hearings, and created a Groundwater Management Plan that serves as a roadmap for protection.” Read the State of the Aquifer Reports and Groundwater Management Plan here.

One of LICAP’s standout public initiatives is the Our Water Our Lives conservation campaign. Through a strong social media presence, the campaign engages hundreds of thousands of Long Island residents, delivering practical water-saving tips,

promoting compliance with odd-even lawn watering schedules, and raising awareness through compelling, educational content. It plays a role in shaping public behavior and fostering a culture of conservation across the region. “We’ve also launched a pledge campaign. Thousands of residents have signed on to commit to conserving water,” he said. Interested in pledging? Visit the webpage here.

When asked what single habit Long Islanders could change to help protect the aquifer, Ty didn’t hesitate: reduce irrigation. “Close to 70% of water usage occurs between May and September, and the majority of that is from irrigation systems,” he explained. “At peak hours—between midnight and 6 a.m.—SCWA can be pumping 500,000 gallons per minute!”

He emphasized that overwatering isn’t just bad for the aquifer—it’s bad for lawns. “Grass needs to be stressed to grow deeper roots. Watering too much actually weakens it. Smart irrigation controllers, rain sensors, and adjusting watering times can make a huge difference,” he said.

Smart irrigation controllers, which adjust watering schedules based on local weather conditions, are one of the most exciting water conservation technologies, according to Ty. “People tend to ‘set it and forget it’ with their sprinklers. But having a system that knows it’s going to rain and turns itself off? That’s game changing. These systems connect to your local weather station, and it will turn your irrigation system off if there is a strong chance of rain coming,” he said. “What I can definitely say is the most wasteful habit is when an irrigation system is still running during a rainstorm.” The SCWA Water Wise credits is a great way to incentivize this necessary behavior change. Visit the webpage here to schedule a Water Wise checkup to better understand your water use and where you may be able to conserve.

Planning for the future is already underway. “LICAP is developing a 2050 Drinking Water Report. We're looking far ahead to anticipate challenges and opportunities,” Ty revealed. He envisions even greater coordination between agencies, expansion of conservation campaigns, and broader adoption of water-saving technologies. Ty also sees potential in advanced water reuse. “We should be studying places like Orange County, California, where treated wastewater is re-injected into the aquifer. We need more science, more pilot projects. This could be part of the long-term solution for Long Island.”

Ty’s message is clear: the future of Long Island’s aquifer depends on innovation, collaboration, and an informed public. Through initiatives like LICAP, Water Wise, and Our Water Our Lives, Long Island is building a blueprint for sustainable water management.

Feeling Inspired? Follow These Simple Steps to Conserve Water

Conserving water doesn't require drastic changes; small daily actions can make a significant impact:

1. Be smart with lawn watering – Use smart irrigation controllers and rain sensors to water only when needed.
2. Fix leaks – Even small drips add up. Repair leaky faucets and pipes to save water and reduce waste.
3. Install EPA Water Sense-certified fixtures – High-efficiency toilets, showerheads, and faucets use less water without compromising performance.
4. Use mulch – Mulching garden beds keeps soil moist, reducing the need for frequent watering and helping plants thrive.
5. Choose Native Plants - Native vegetation requires less water and is more resilient to local climate conditions. Learn more at DEC's Sustainable Landscaping webpage here.
6. Water less often – Your lawn doesn't need daily watering. Switch to odd-even watering days during dry periods.
7. Shorten your showers – Showers can consume up to 6.5 gallons per minute—cutting a few minutes can save lots of water.
8. Run full loads only – Only run washers and dishwashers when full to maximize efficiency and reduce water use.
9. Turn off the tap while brushing – You can save more than a gallon per minute just by keeping the water off during brushing.
10. Rethink hose use – Instead of hoses, use a rake, broom, or leaf blower to clear driveways and decks.
11. Use commercial car washes – These are designed to conserve and recycle water—better than washing at home.

By adopting even a few of these habits, homeowners can play a significant in conserving our shared aquifer resources—and often see savings on their water bills too! For more tips and ways to conserve your water usage, visit the Long Island Commission for Aquifer Protection (LICAP)'s Our Water Our Lives webpage.

Connect with Us!

- Want to learn about available and open grant opportunities? Check out the Funding Finder webpage.
- Interested in providing feedback? Reach out to liwaterquality@dec.ny.gov
- Missed last month's edition? Visit the Newsletter Archive to stay up to date!
- Looking to learn more about LIWP? Visit our webpage and click here to sign up to receive our monthly newsletter!