Our Bold Work on Better Water Quality in Long Island Sound

The *Long Island Sound Funders Collaborative* motto is "crossing the bridge while we build it." Since 2013, we have been on a journey together to do just that, tackling a big problem facing the Sound – how to improve water quality in its open waters and harbors.

Even though the Sound is getting cleaner, it still suffers from pollution problems from industry and agriculture, wastewater treatment plants, residential septic systems, and stormwater runoff. Plus, pollution doesn't stick to a border or grantmaking boundary, and the region stretches across 14 counties in Connecticut and New York with millions of people living around it. To really solve these water quality problems, lots of different people and organizations need to work together.

So, where could we have the greatest impact? We looked at some impactful projects from other regions to see what was working there. We identified efforts likely out of the reach of individual funders. We encouraged our grantees to think bigger and aim higher. We decided that our combined foundation dollars should serve as risk capital to get things off the ground even with no guarantee of success. We committed to make big, long-term grants. Of course, we also had to get public and public officials interested, as well as connect with environmental groups, government, and scientists.

Long Island Sound Report Card
First up was the *Long Island Sound Report Card*. In 2014 we piloted the *Report Card* which graded the ecological health of the Sound including five open water areas and two harbors - one in Connecticut and one in New York. Now, every two years, the *Report Card* gathers water quality monitoring data from across the Sound and then assesses that data with methods specially designed for it by experts, giving grades. Data is then shared with elected officials, environmental agencies, and the public.

By 2020, *Report Cards* became an official part of the *Long Island Sound Comprehensive Conservation and Management Plan* - the game plan for conservation in the whole region. Today the *Report Card* still grades those five open water areas and has expanded scoring to 57 harbors to encourage more investment to improve the health of local waters and the Sound. The best part? The *Report* Card is now completely independent of our funding!

Unfied Water Study
As we helped build the *Report Card*, we realized there were challenges in making apples-to-apples comparisons around the Sound. Different groups were collecting data with different methods and timing. In 2017, this led to the design, testing, and expansion of the *Unified Water Study.* It provides common methods, instruments, and solid training and technical assistance, so that everyone measures the same water quality parameters, allowing for comparable data. This allows community scientists all around the Sound to participate in keeping their local waters clean by regularly monitoring them at hundreds of locations. The data is also shared with the

Long Island Sound Partnership, state agencies, and the *US Environmental Protection Agency's* national *Water Quality Exchange*. The *Unified Water Study* now boasts 29 monitoring groups covering 49 bays and harbors. Connecticut and New York public agencies use data from these volunteer monitors as part of their water quality assessments for cleaning up local and regional waters. This successful project is now funded through the *Long Island Sound Partnership* at well over $1M annually.

QuickDrops™

With all this data being generated, the next problem was how to make sure the data was leading to positive change. In 2020, we started funding *QuickDrops™*. A standardized data storage and visualization platform, *QuickDrops™* makes it easy for anyone – whether you're a monitoring group, government agency, educator, or researcher - to access high quality data about Long Island Sound and its harbors. It's a free online tool, with training provided, where data collectors can post, and others can easily find and use that data. *QuickDrops™* works closely with scientists, local monitoring groups, and state and federal managers to make sure it meets their needs. Using the tool is click, point, and go! You can dive deep, but it's also easy for general users.

Organizations can create and post maps and other images to their own websites and prepare reports with QuickDrops™ data visualization tools. Some users have already uploaded years of data, helping them understand baseline conditions and track problems or improvements over time. We know that entering data into the EPA's *Water Quality Exchange* is tricky, but *QuickDrops™* simplifies that process, making it easier to contribute to this important national database. Data from hundreds of locations is already being used by public agencies and even high school research projects.