

Periodically around town I hear, "Oh, we don't use the beach. The water's too dirty." That always shocks me. Countless people, my family included, regularly swim, sail and kayak in Darien's beautiful waters. But I quess I understand some of the concern.

Our coast presents some mixed signals. It's about four miles long with intriguing coves and inlets, beautiful sands, sea grasses and Maine-like rocky coastlines, but it's also subject to periodic beach closures after heavy rains and the waters can appear silty with local sediment. So, what exactly is the level of our coastal water quality?

In 2017, the Darien Advisory Commission on Coastal Waters (the town's harbor commission, of which I'm a member) thought we should know. It was good timing because the Connecticut Fund for the Environment/ Save the Sound was starting a coastal water quality monitoring program called the Unified Water Study (UWS). UWS is a regional effort to scientifically monitor the ecological health of Long Island Sound's bays and harbors. Key indicators such as Dissolved Oxygen, Chlorophyll a, Turbidity, Temperature, Salinity, and Macroalgae (seaweed) are to be monitored by local volunteers and annually published on-line. The effort supplements Save the Sound's existing EPA-funded Long Island Sound Report Card, which grades the health of the Sound's open waters.

With the support of Darien's Board of Selectman, our Commission signed up to the UWS program and is now into its third season. We've regularly monitored Darien and Cove Harbors (home to Pear Tree Point and Weed

beaches), and this season we've added Scott Cove/Ziegler's Cove. The in-town support has been wonderful. Eight volunteer residents and two high school students meet every other Saturday at 6am from May through October to electronically measure water conditions at twelve pre-determined sites in our harbors. The Darien Boat Club provides a motor boat and we calibrate and store our instruments at the Darien Nature Center. We send our findings to the town and to Save the Sound for inclusion in the study. UWS scientists will statistically adjust the data and begin publishing the annual results starting in 2020/21.

While the study's first results aren't yet available, there are positive things happening in Darien's waters today. The beaches are thriving, and we have a diligent town Health Department monitoring run-off conditions to ensure that residents swim in clean, safe water. On the larger scale, as reported by the Long Island Sound Report Card 2018, we are seeing improved water quality in western Long Island Sound due to nitrogen reduction measures at New York City waste water plants. In fact, over the last several summers, menhaden schools have surged and brought humpback and minke whales and pods of porpoises into the Sound. These are wonderful trends. They make it even more imperative that we measure and track our local water conditions for the sake of our town's own waterfront and for our collective responsibility in the region. Our data should help determine and implement best-in-practice stewardship measures for Darien's watersheds and coastal water



