



A Summer of Science on the Bay

Every summer on the Bay of Quinte, there's a lot of scientific research happening as part of the Bay of Quinte Remedial Action Plan (BQRAP).

For the BQRAP to meet its goal of removing the Bay of Quinte from the binational Areas of Concern list, it must meet all the criteria outlined for each of the 11 environmental challenges identified for the Bay.

To accomplish this, numerous BQRAP partner agencies are on the water collecting research data for a variety of water quality indicators like: fish populations, wetland habitat, phosphorus levels, algae species, and a host of other water quality indicators.

Over the summer, the BQRAP is producing a series called A Summer of Science on the Bay. It will highlight all the work being done by federal and provincial agencies and local conservation authorities to keep the Bay of health and vibrant ecosystem.

First in the series is the BQRAP Bay of Quinte Long-term Monitoring Program, which is a modification of a pre-existing program called Algae Watch. The program, implemented by Quinte Conservation, is designed to monitor water quality every two weeks from May to October at nine sampling sites around the Bay, from the Murray Canal to Picton Harbour.

A suite of water quality indicators are monitored through the program including: algae species and their concentrations, dissolved oxygen, Ph, depth, temperature, turbidity, and nutrients. The data is collected using a multi-parameter sonde, which is a digital sampling system with calibrated sensors that measure different water quality indicators, providing real time numbers in the field. As well, water samples are taken and sent for additional laboratory analysis to cross check the real time numbers for any anomalies. A Secchi disk (a circular disk with black & white quadrants) is used to measure water clarity, the further down the water column you can see the disk the greater the water clarity.

Collecting this data throughout the summer provides information on how conditions are changing throughout the season. The data, combined with previous year's data, will be used to support the assessment of the environmental challenges as the Bay moves closer to being removed from the Areas of Concern list.

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Using a multi parameter sonde to measure water quality.



Taking a water sample.



Measuring water clarity with a Secchi disk.

Learn about the Long-term Monitoring Program in this video

