

ONONDAGA COUNTY ONONDAGA LAKE MONITORING BUOY

On April 4, 2000, Onondaga County deployed the first fully automated Lake Monitoring Buoy to provide continuous monitoring of the water quality of Onondaga Lake. The public can access the data obtained by the buoy through the County's Lake Improvement Project Web site at "<http://www.lake.onondaga.ny.us/ol3301.htm>" or through the Onondaga County government web page at "<http://www.ongov.net/WEP/we1501.htm>".

Equipped with a telemetry system, the buoy continuously collects and transmits data from four different water depths at the buoy site which is located approximately 1.5-miles north west of the Carousel Mall in the area scientists refer to as the South Deep basin.

The buoy monitors the lake waters at depths of 2, 6, 12, and 15-meters. A variety of parameters are monitored. These parameters are important indicators on the status of the lake's water quality and the lake's ability to support fish and other biota. Temperature, dissolved oxygen concentrations, pH, oxidation-reduction potential, and salinity are measured every 15-minutes and transmitted to a computer at the County's Metropolitan Syracuse Wastewater Treatment Plant where it is immediately converted, via computer software, and posted to the web site.

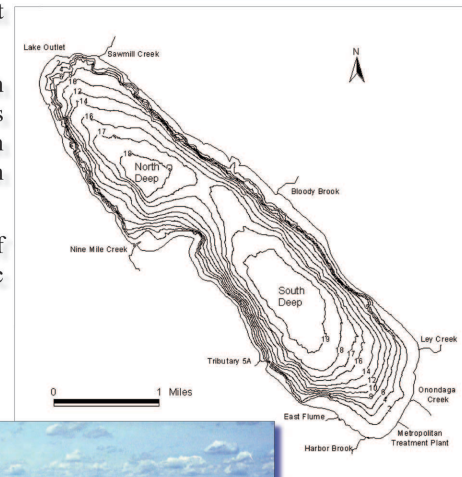
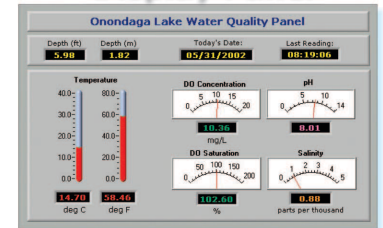
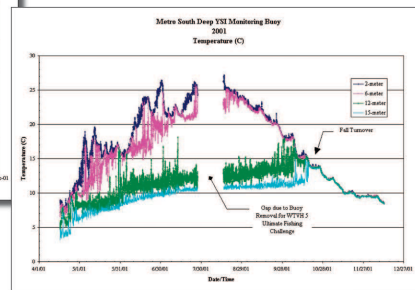
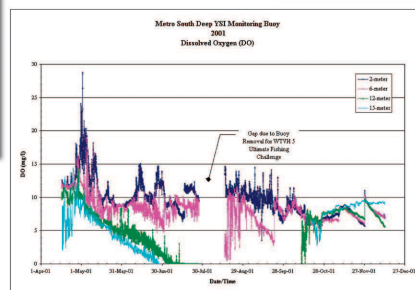
Deployment



This state-of-the-art buoy system was purchased by the County's Department of Water Environment Protection with a \$25,000 grant from the County Executive's Technology Venture Capital Program. Purchase of the Buoy allows the County to collect water quality data on a continuous basis without deployment of staff and equipment with an estimated cost savings of \$5000 per year. Most importantly, the buoy will allow data collection to occur when weather conditions may be prohibitive to conducting "on-lake" data collection.

This buoy adds to the County's already extensive monitoring program which includes year-round field sampling of the water quality of the lake and its tributaries during storm and dry conditions, as well as collection of fish, aquatic plants, phytoplankton, zooplankton, and macroinvertebrates.

BUOY DATA



South Deep Buoy Station

