Long Pond, located on Lake Ontario near Rochester, New York, is surrounded by a mix of residential development, state park, and protected wildlife areas. Land use within the watershed is a mix of suburbia, including the Village of Spencerport, and agriculture. The waters of Long Pond are considered hypereutrophic, meaning it is very productive due to high nutrient loading. This productivity is likely due to nonpoint sources and the point source represented by the Spencerport Sewage Treatment Plant which releases advanced secondary sewage effluent into a tributary of Long Pond (Makarewicz 2000). Nuisance algae, bacterial abundance, and algal mat development near Long Pond along the southern shoreline of Lake Ontario were evident. This short report provides a synopsis of data collected monthly from May through September (2003 to 2009) on the water quality of Long Pond and the lakeside (swimmable depth) of Lake Ontario near the mouth of the pond.

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Figure 1. Average (+S.E) summer total phosphorus, soluble reactive phosphorus, chlorophyll a, phycocyanin, total suspended solids, nitrate, and total Kjeldahl nitrogen concentrations at the lakeside of Lake Ontario near Long Pond and at Long Pond. Lakeside surface water samples were taken monthly (May-September) at a 1-meter depth.