

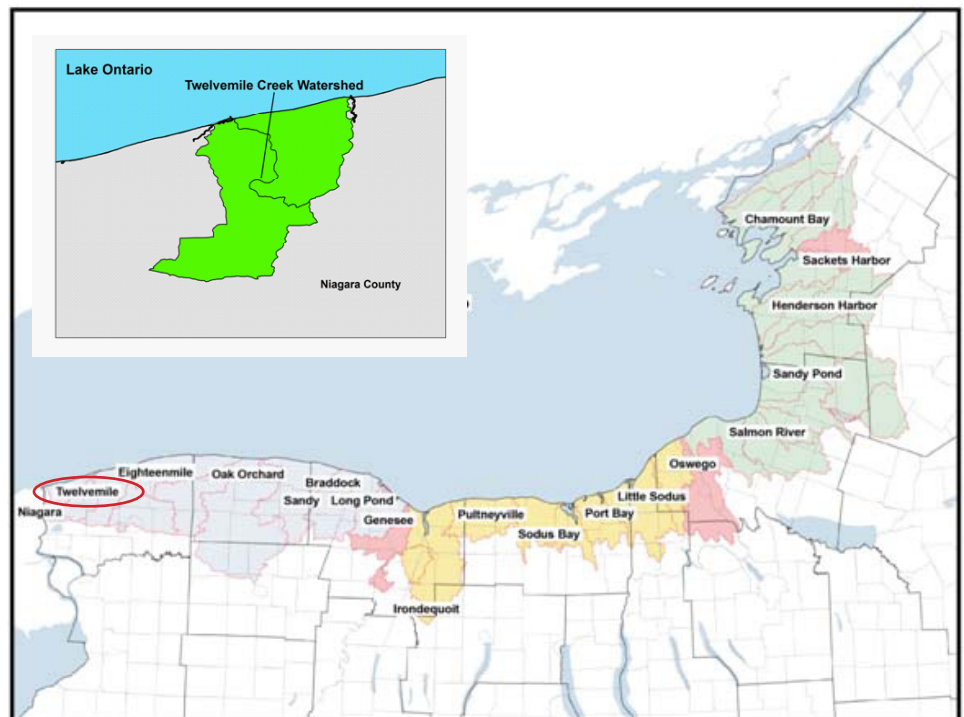
## Twelvemile Creek Niagara County, New York

The east branch of Twelvemile Creek (69 mi<sup>2</sup>) flows through northern Niagara County to its mouth at Lake Ontario 12 miles east of the Niagara River, near the village of Wilson, New York. From fall through spring, good runs of steelhead and brown trout with the occasional Chinook and Coho salmon occur into the creek. Agriculture, especially row crop farming, is predominant within the watershed, though natural protected land is also plentiful. The Wilson-Tuscarora State Park provides a buffer between the creek and agriculture immediately around the mouth of the creek, while upstream farms directly line the creek. Nuisance algae, bacterial abundance, and algal mat development along the southern shoreline of Lake Ontario are major causes of beach closings, fouling the nearshore waters and limiting water recreation. This short report provides a synopsis of data collected monthly from May through September (2003 to 2009) on the water quality of Twelvemile Creek and the lakeside (swimmable depth) of Lake Ontario near the mouth of the creek.

Algae, bacteria, and algal mat are major causes of beach closings, limiting water recreation.



*Wilson Harbor at Twelvemile Creek, New York*



*Map of Lake Ontario. Insert: Twelvemile Creek, New York*

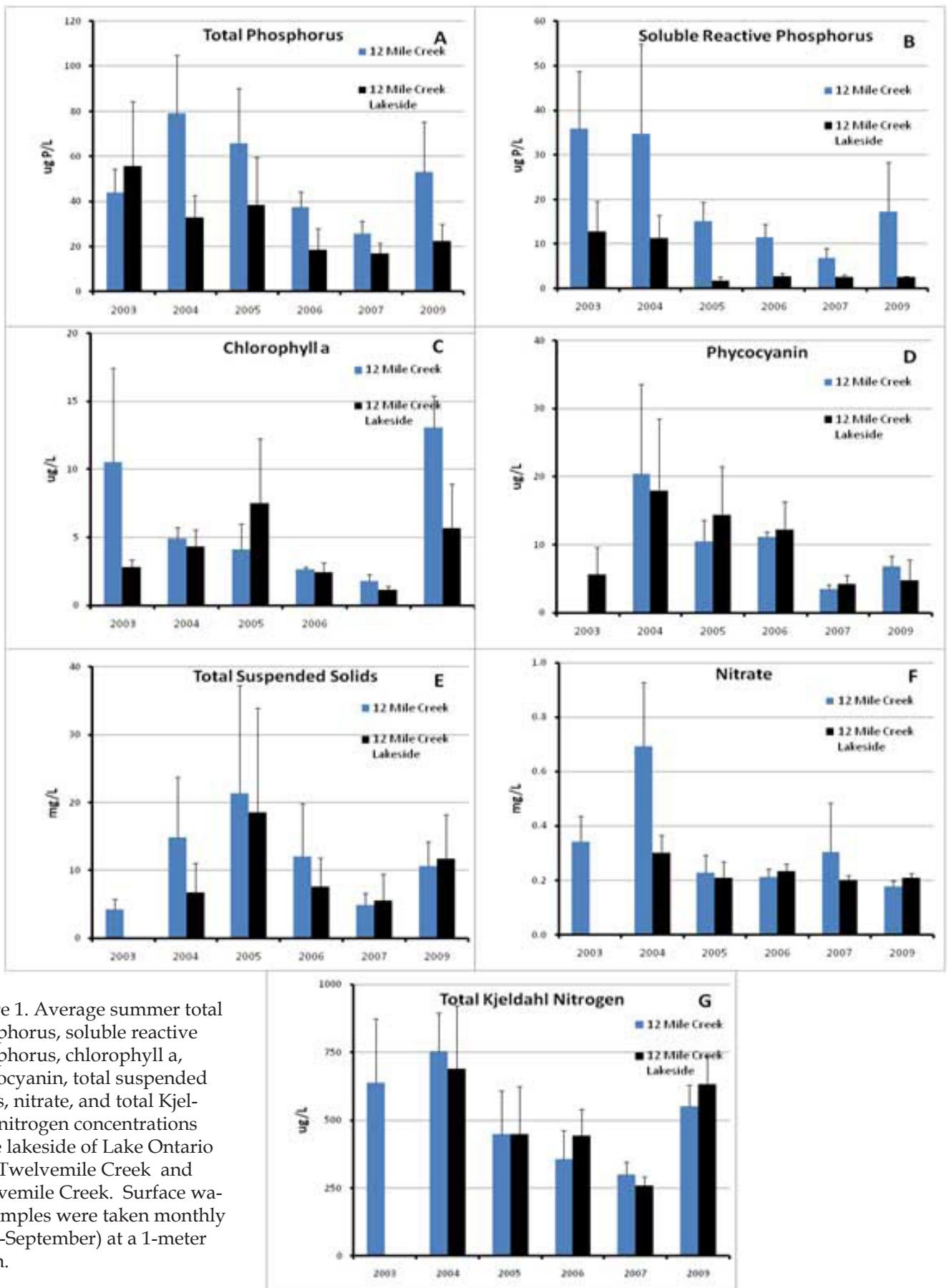


Figure 1. Average summer total phosphorus, soluble reactive phosphorus, chlorophyll a, phycocyanin, total suspended solids, nitrate, and total Kjeldahl nitrogen concentrations at the lakeside of Lake Ontario near Twelvemile Creek and Twelvemile Creek. Surface water samples were taken monthly (May-September) at a 1-meter depth.