

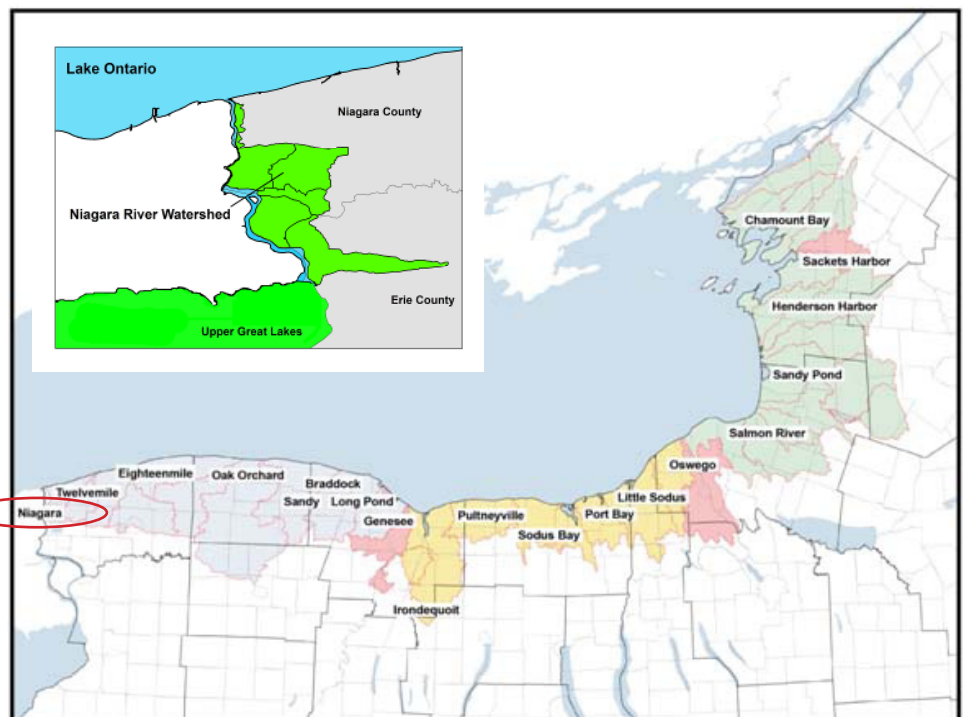
Niagara River Niagara County, New York

The Niagara River carries water from Lake Erie to Lake Ontario and is the major source of Lake Ontario's water volume. Famous for the immense Niagara Falls, the 36-mile river is used by over 1 million people in the United States and Canada for functions including drinking water, recreation, and hydropower (Niagara Parks 2009). The Niagara River drains the entire upper Great Lake system into the final lake, Lake Ontario, and due to this huge volume of water has a large potential to change Lake Ontario's water quality. 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 the Niagara River and the lakeside (swimmable depth, surface sample at a 1-m depth) of Lake Ontario near the mouth of the river.

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Lower Niagara River



Map of Lake Ontario. Insert: Lower Niagara River

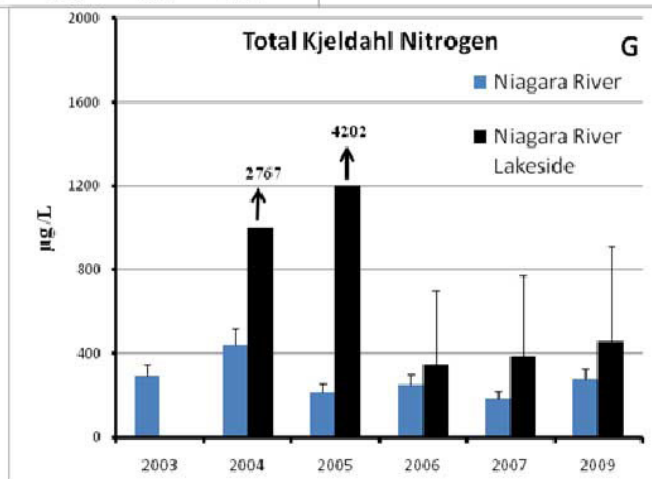
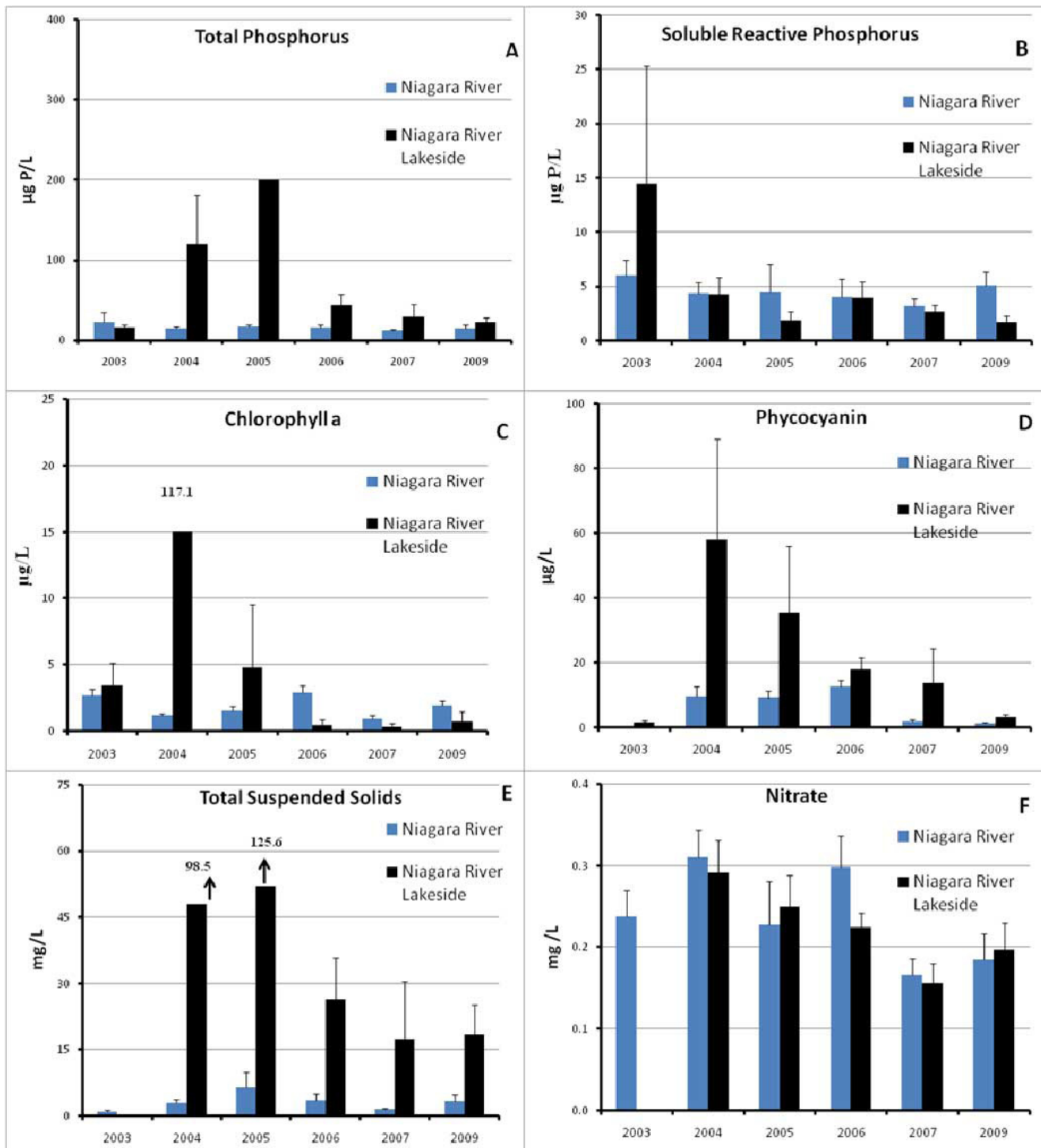


Figure 1. Average summer (+SE) total phosphorus, soluble reactive phosphorus, chlorophyll a, phycocyanin, total suspended solids, nitrate, and total Kjeldahl nitrogen concentrations in the Niagara River and at the lakeside of Lake Ontario east of the river. Surface water samples were taken monthly (May-September) at a 1-meter depth.