



Environment
Canada

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Nutrients in Lake Ontario

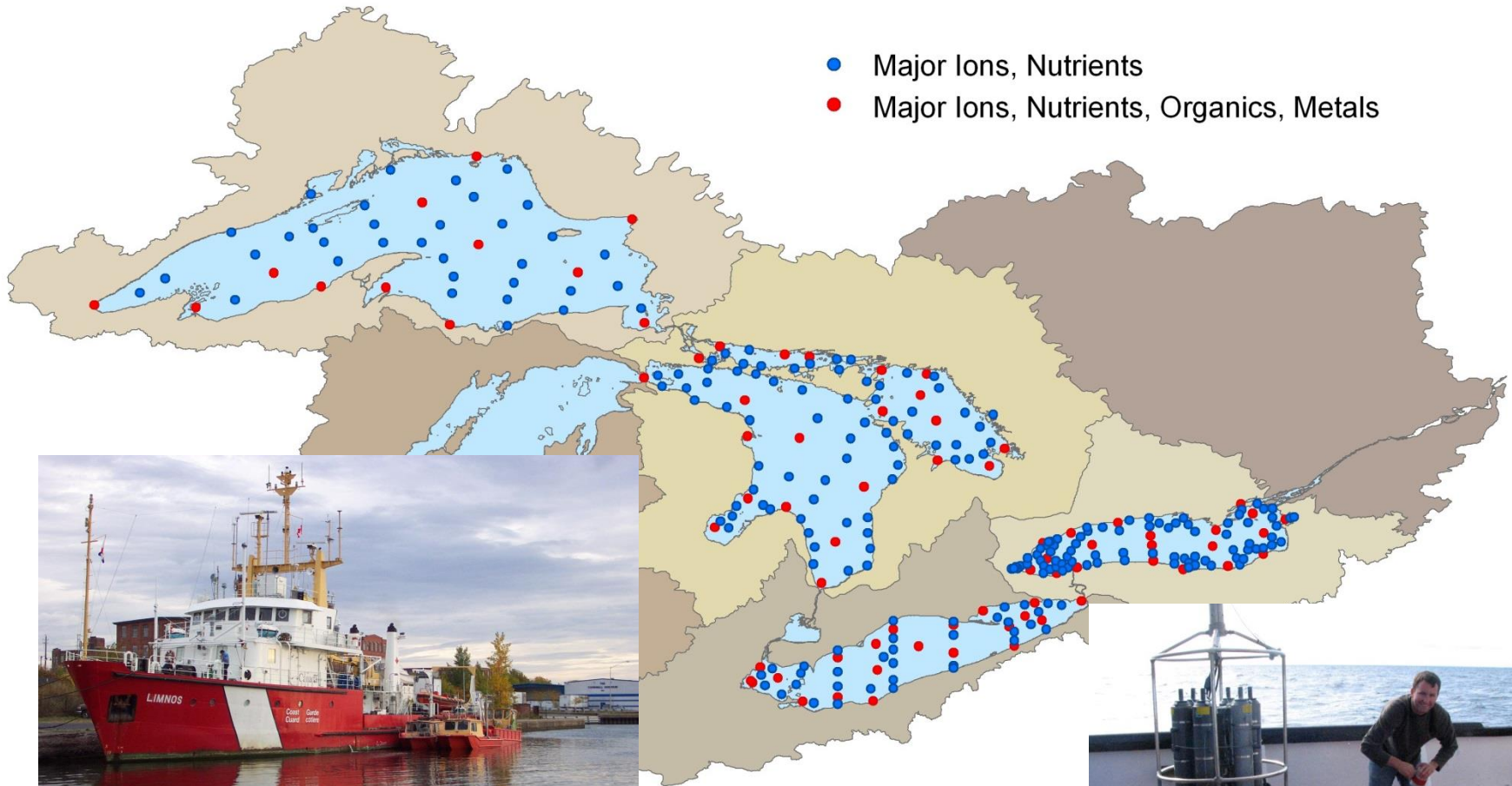


Alice Dove

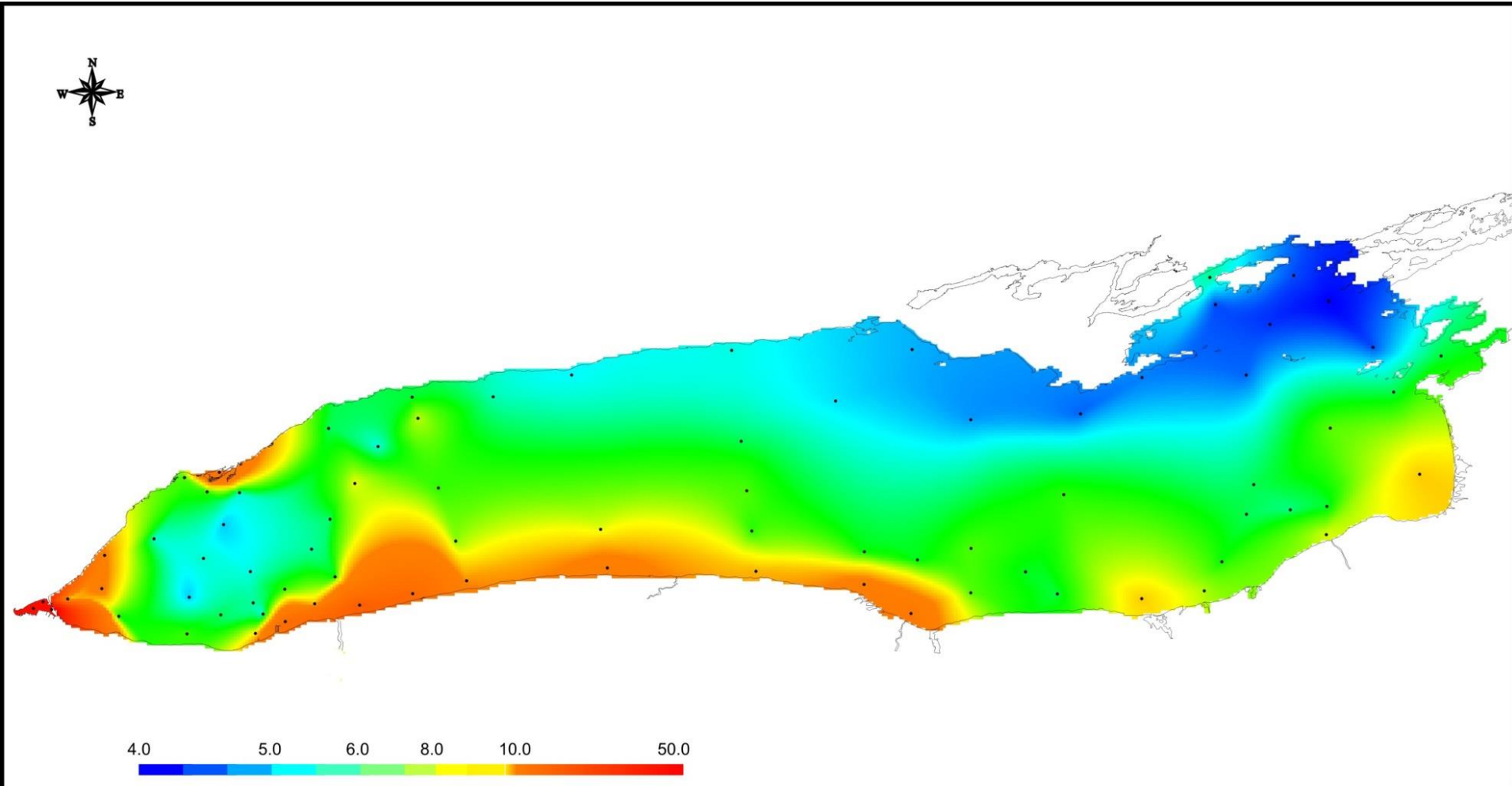
Environment and Climate Change Canada
Water Quality Monitoring and Surveillance Division

Toronto RAP Science Seminar
November 29, 2017

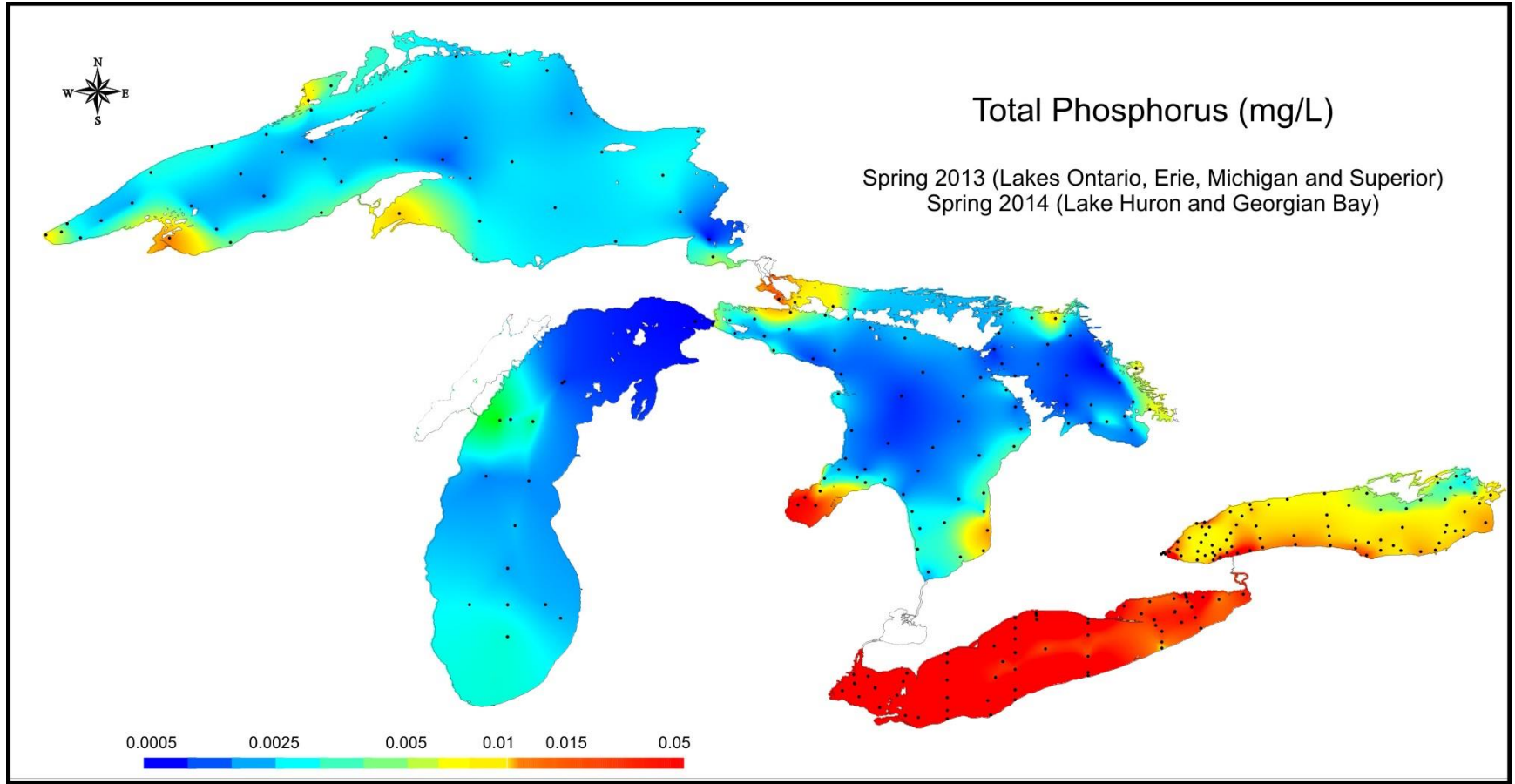
Great Lakes Surveillance Program



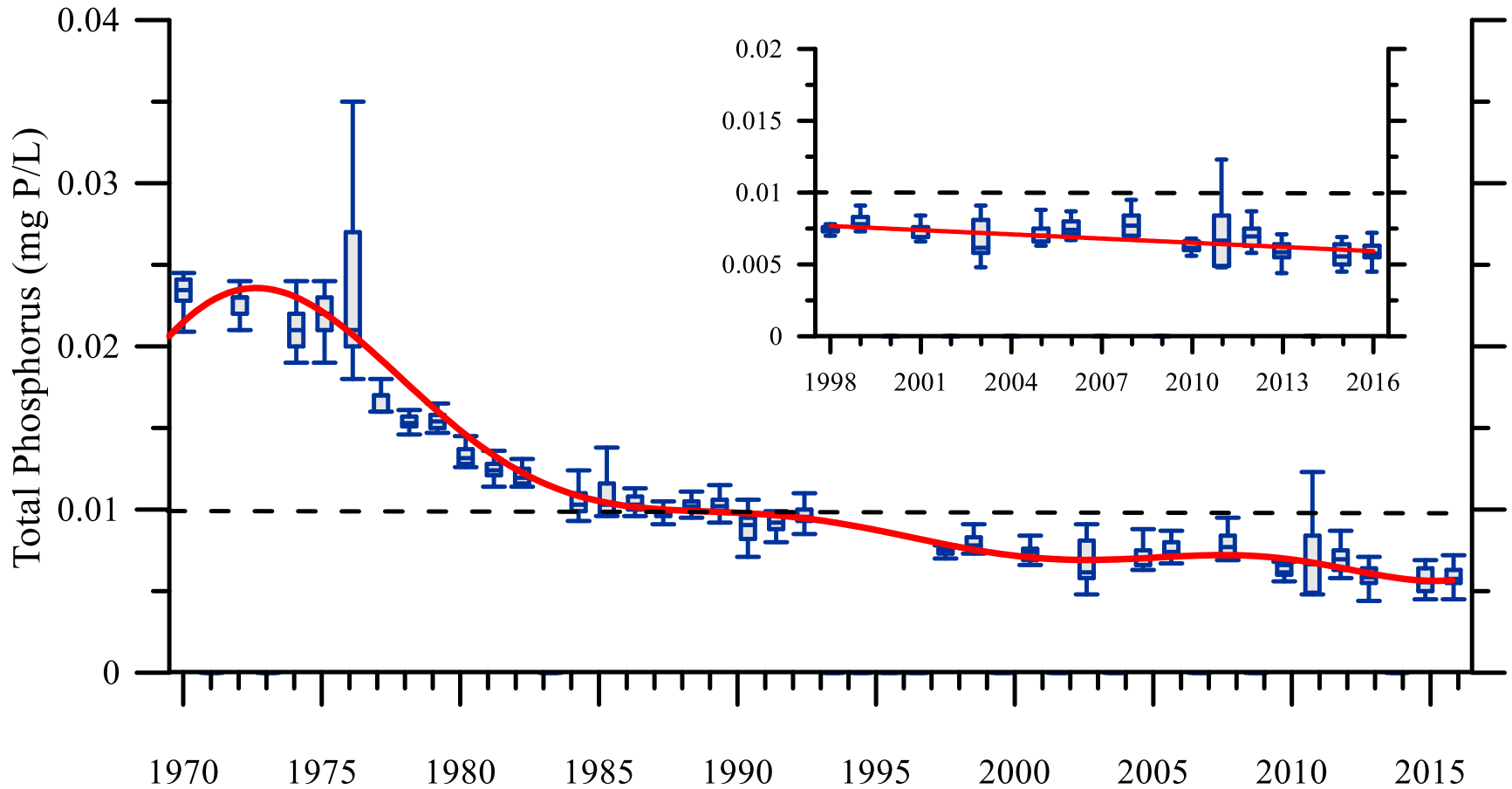
Lake Ontario Total Phosphorus 2013 (ug/L)



Great Lakes TP (2013-2014)

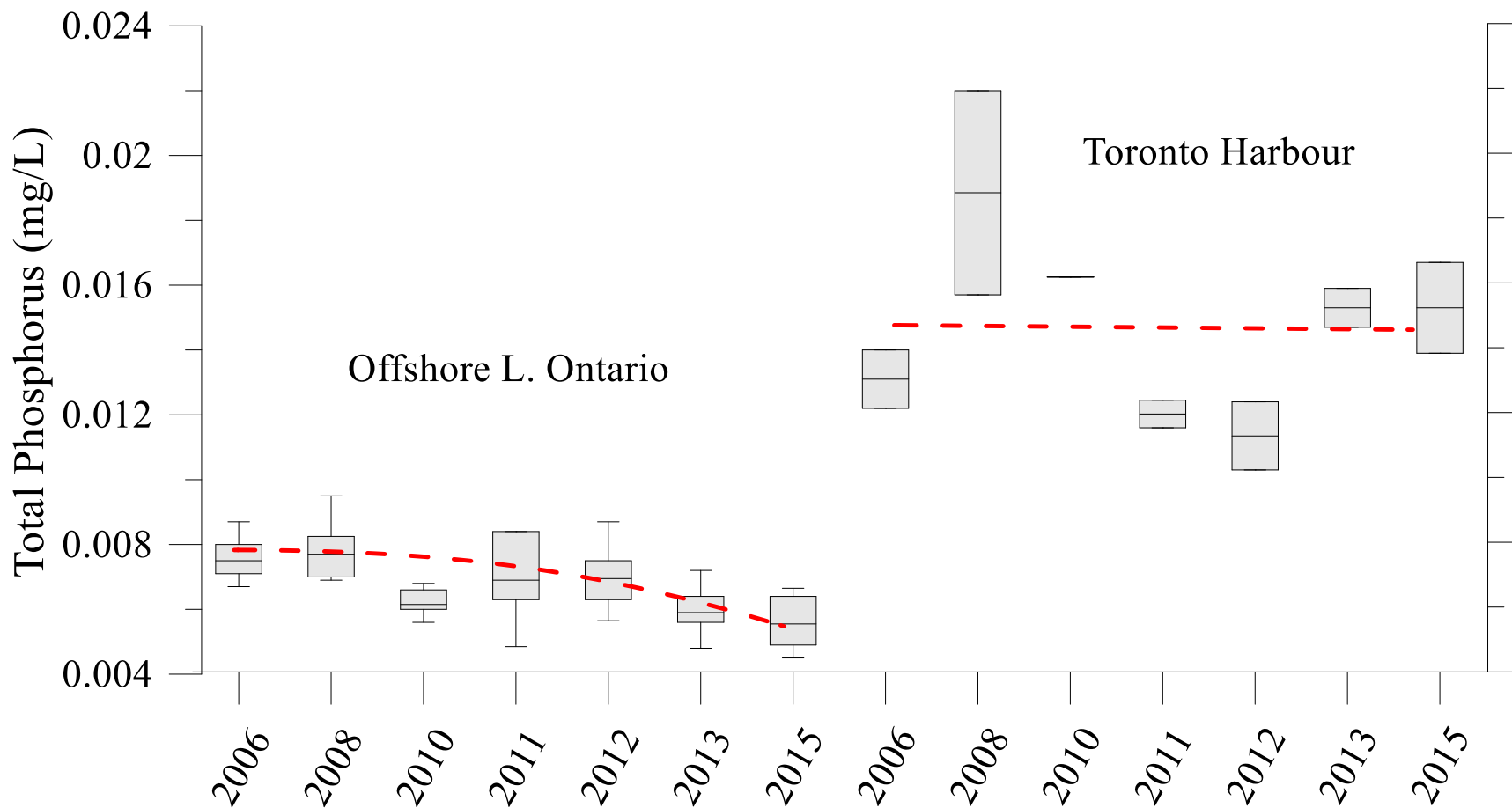


Lake Ontario Total Phosphorus Trend



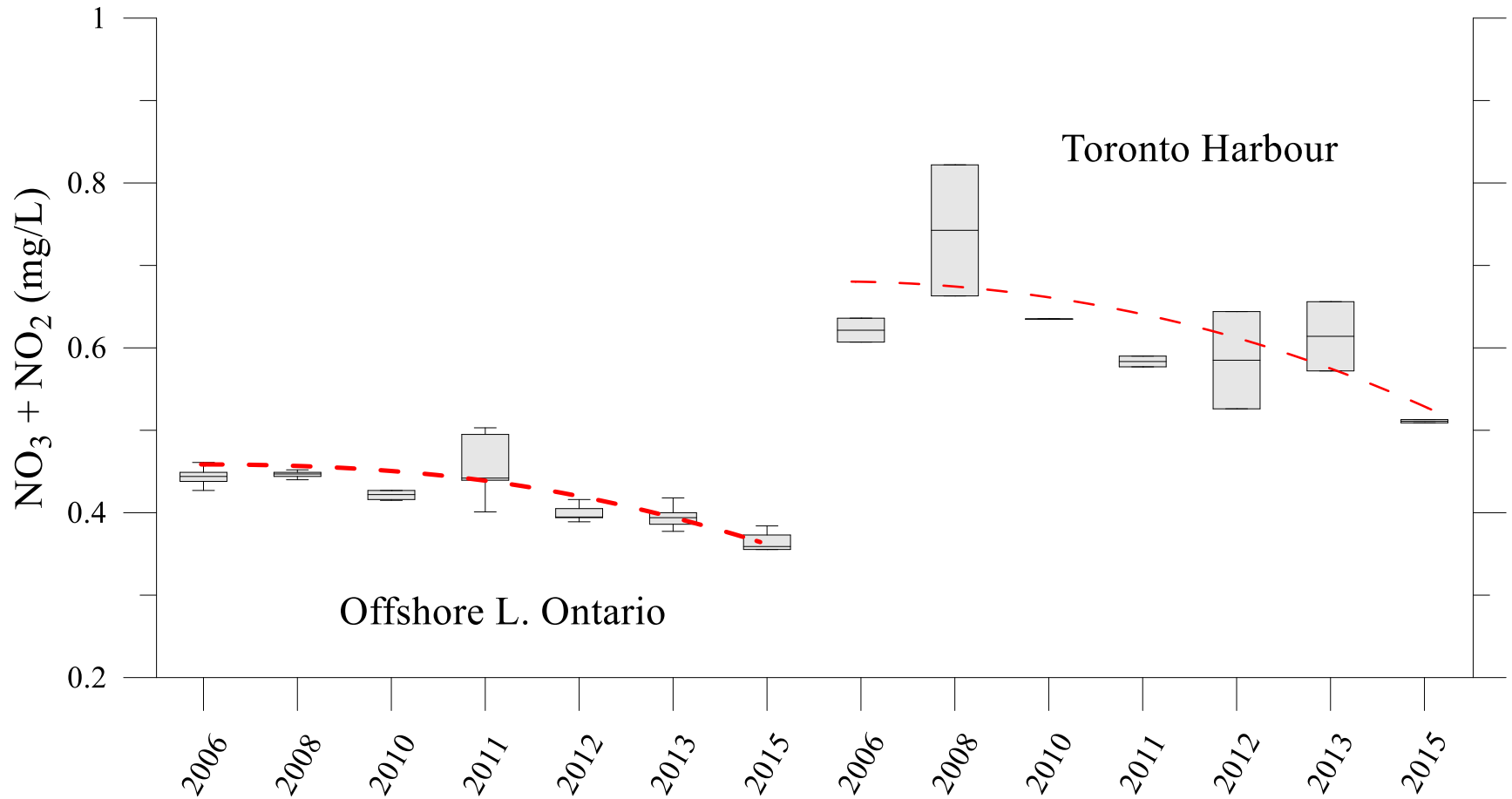
Total Phosphorus

spring, surface

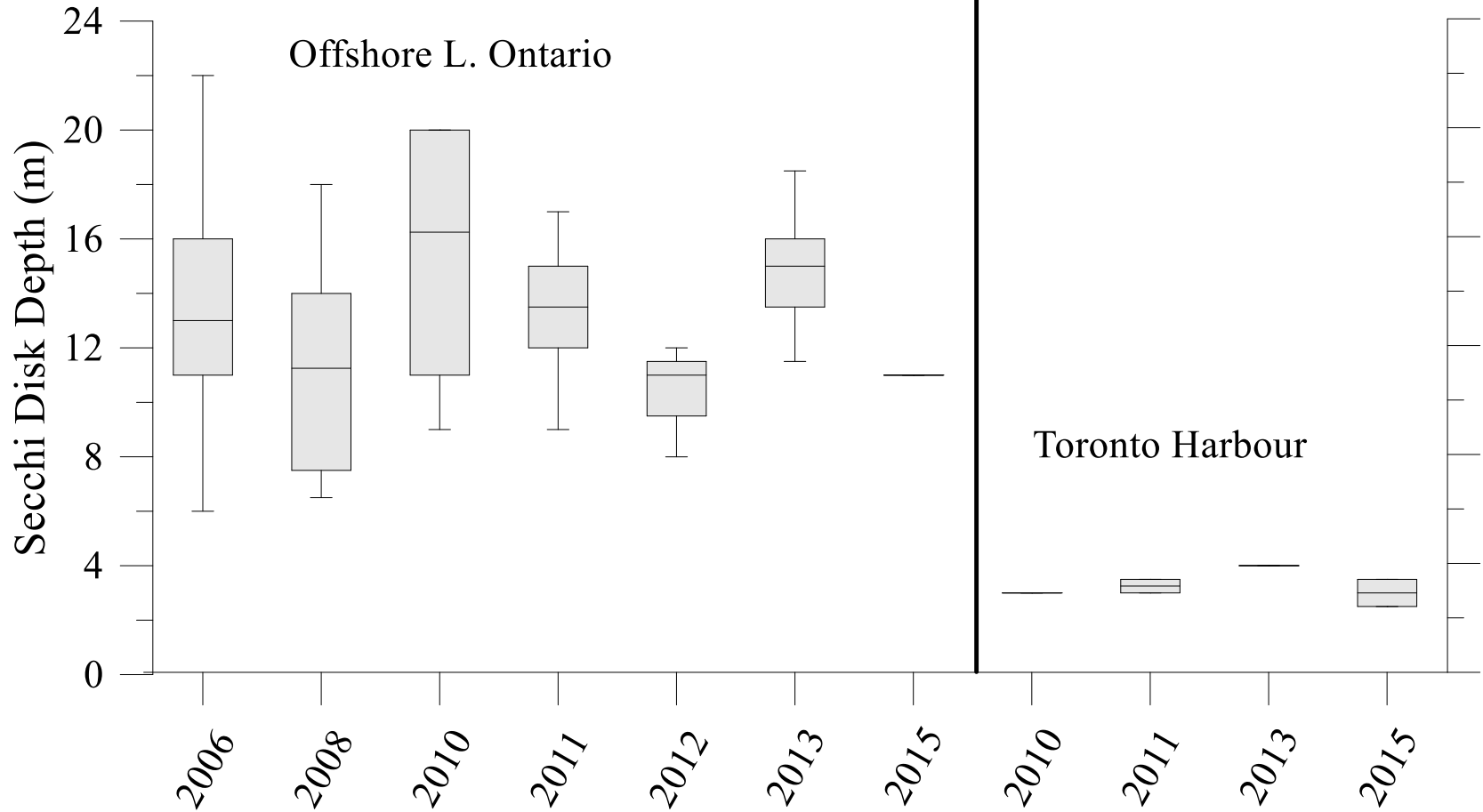


Nitrate plus nitrite

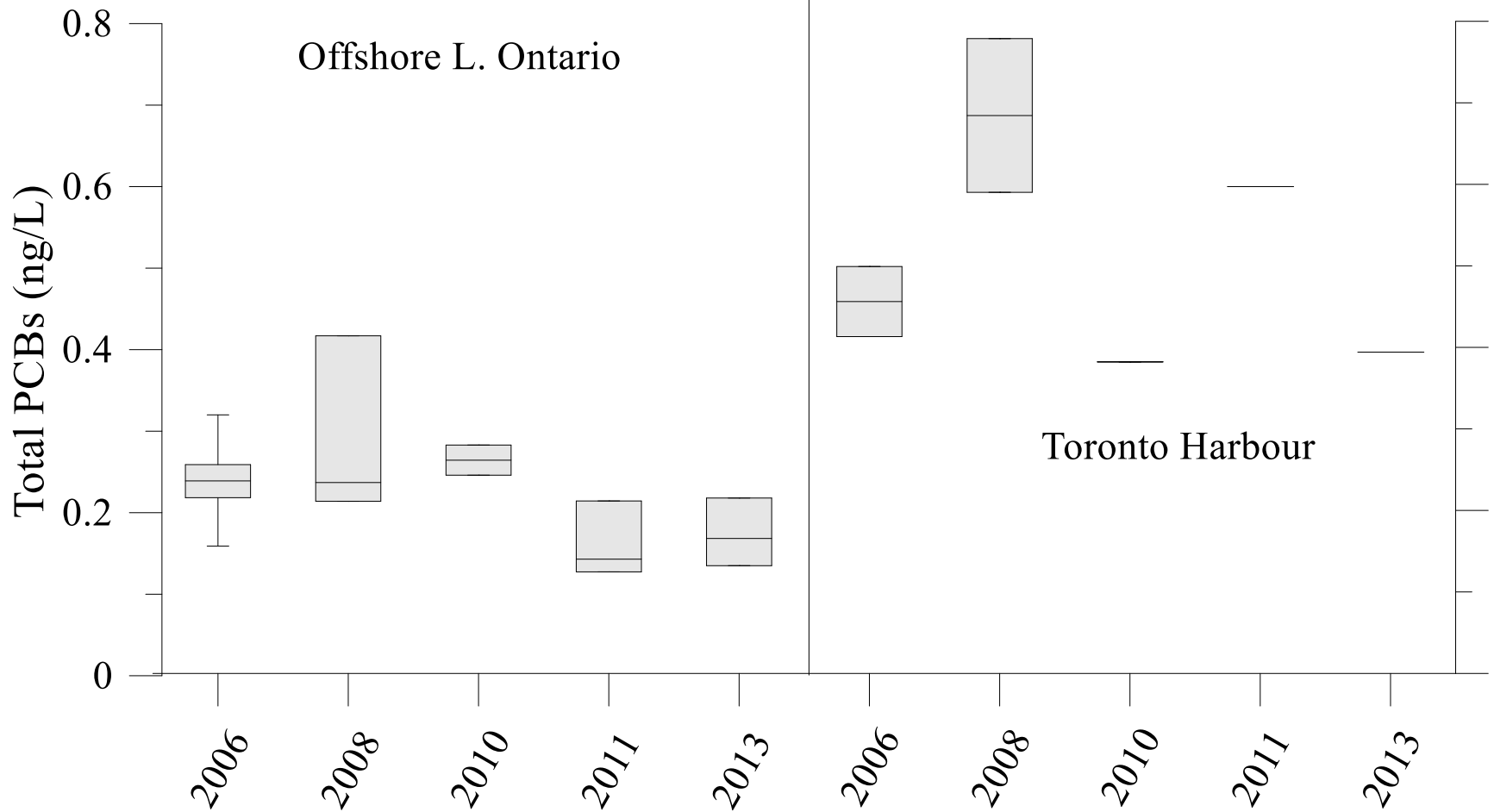
spring, surface



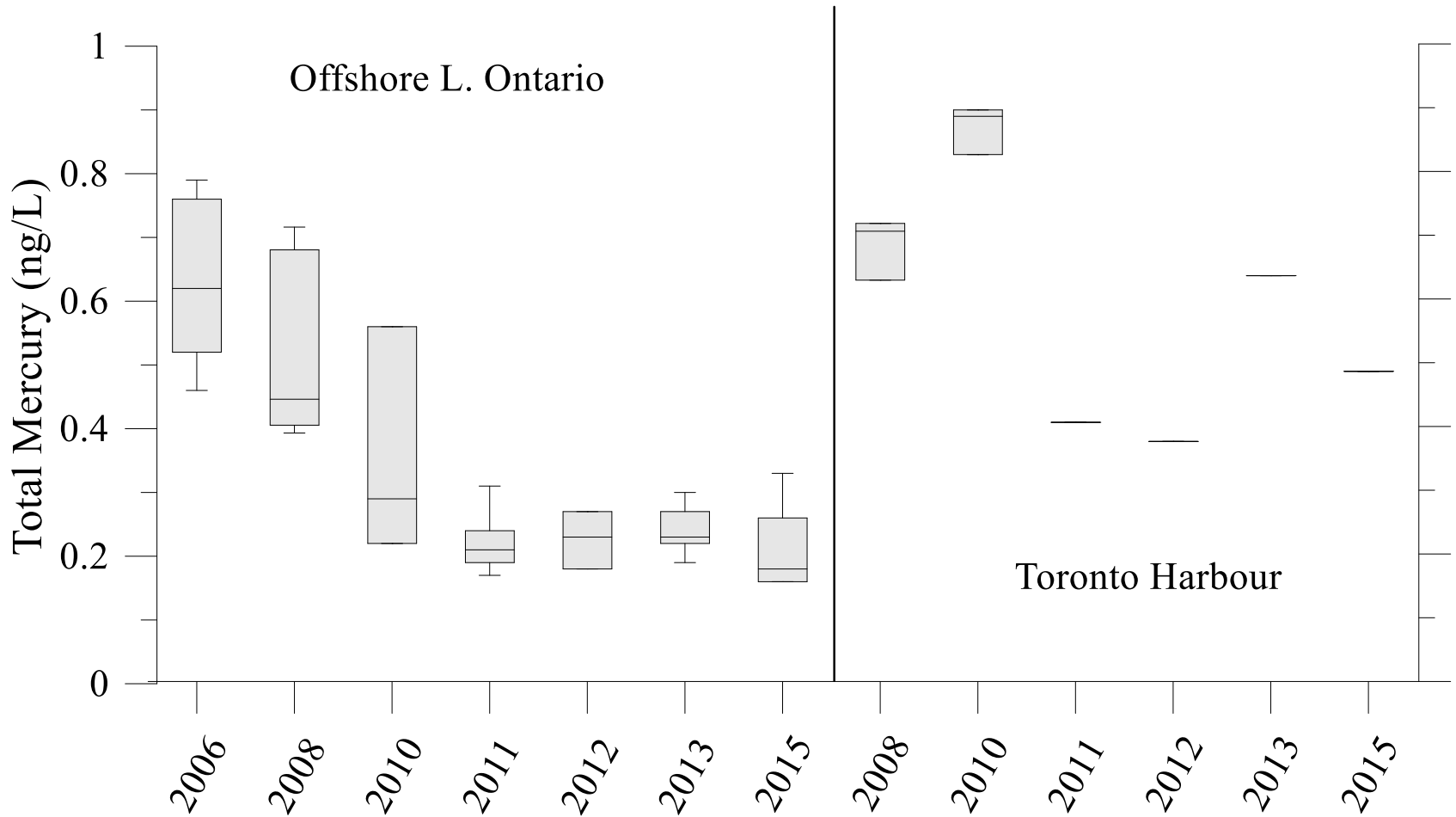
Spring Secchi Disk Depth



Total Congener PCBs - Dissolved

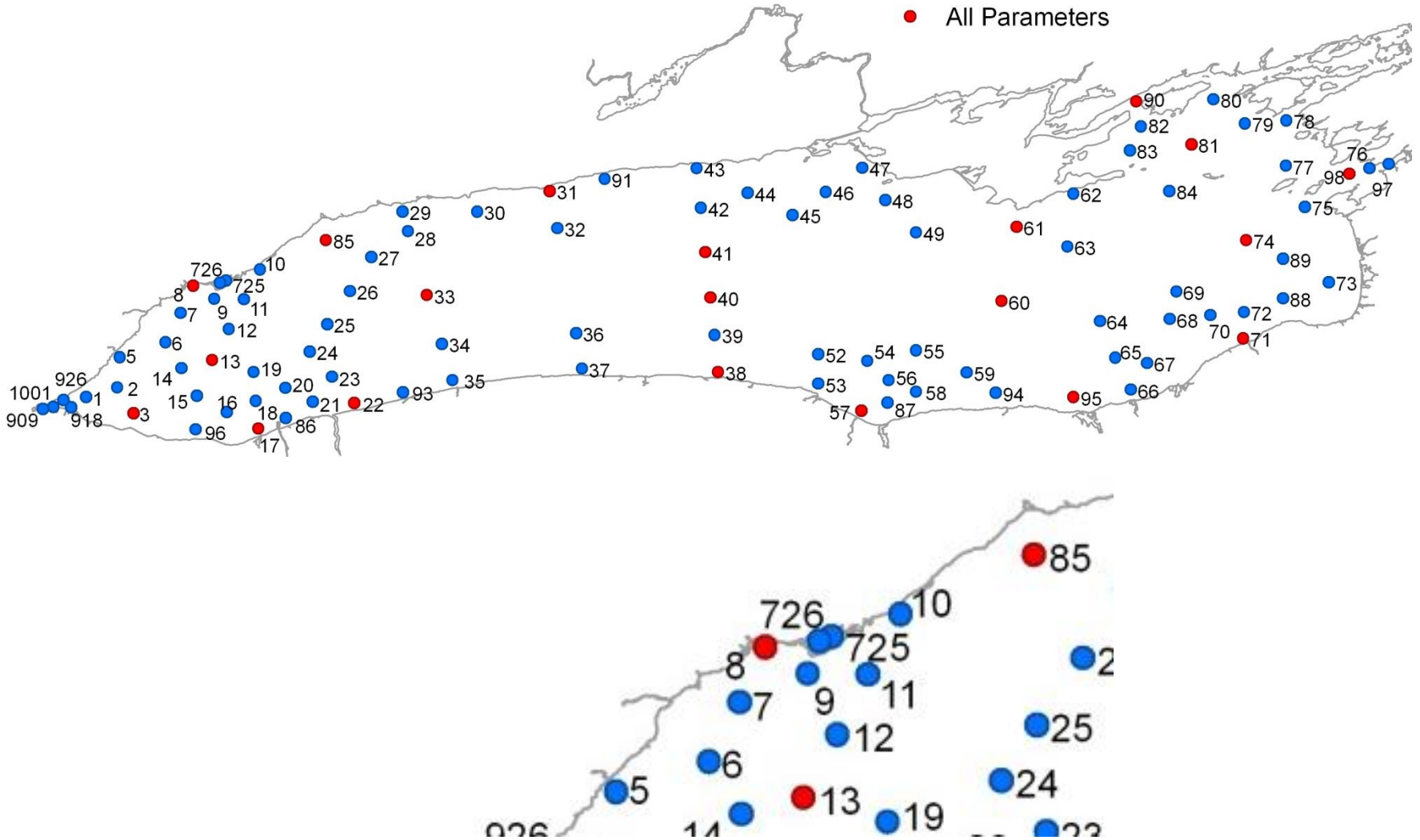


Total Mercury in Water

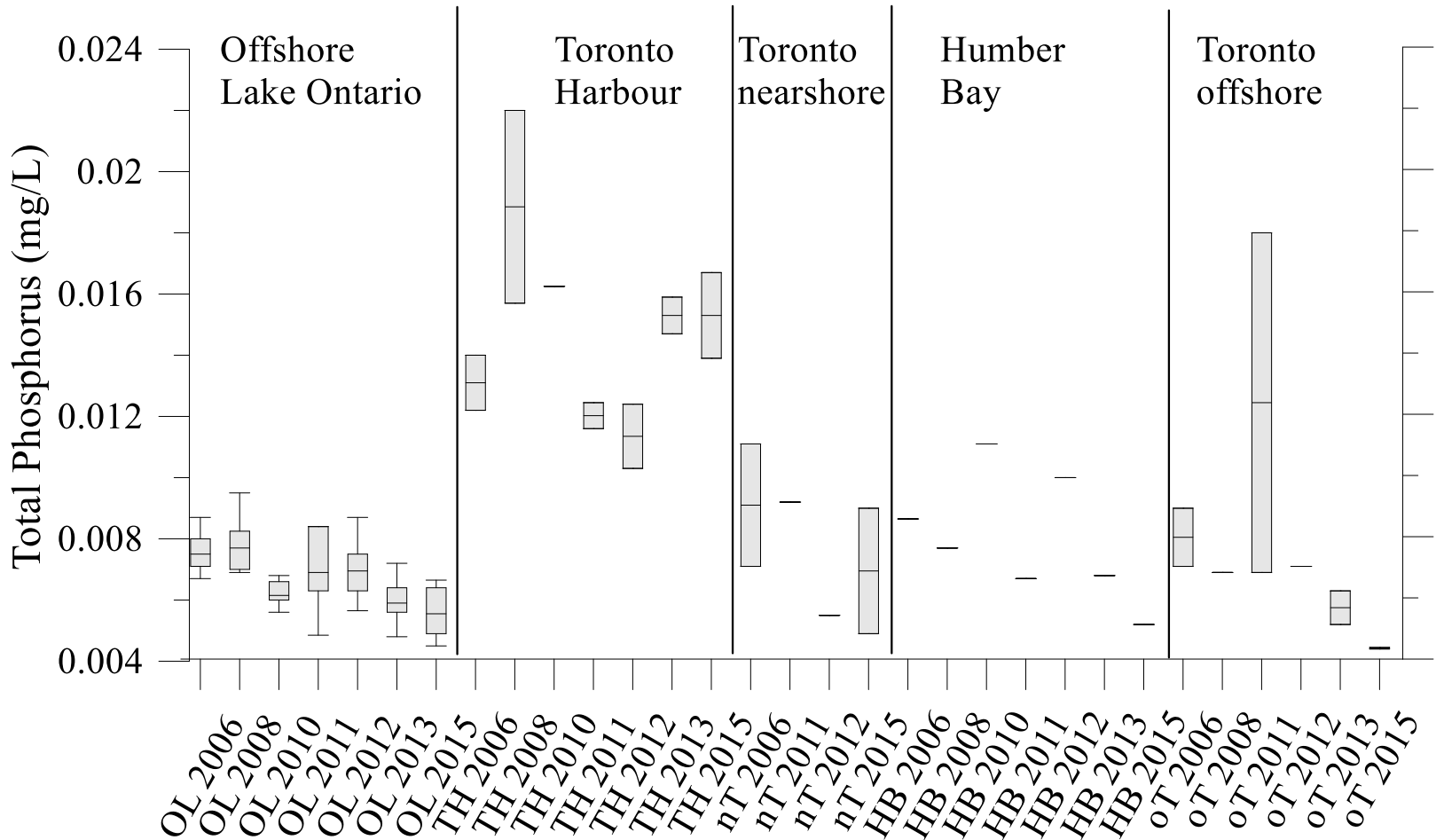


Surveillance Station Locations

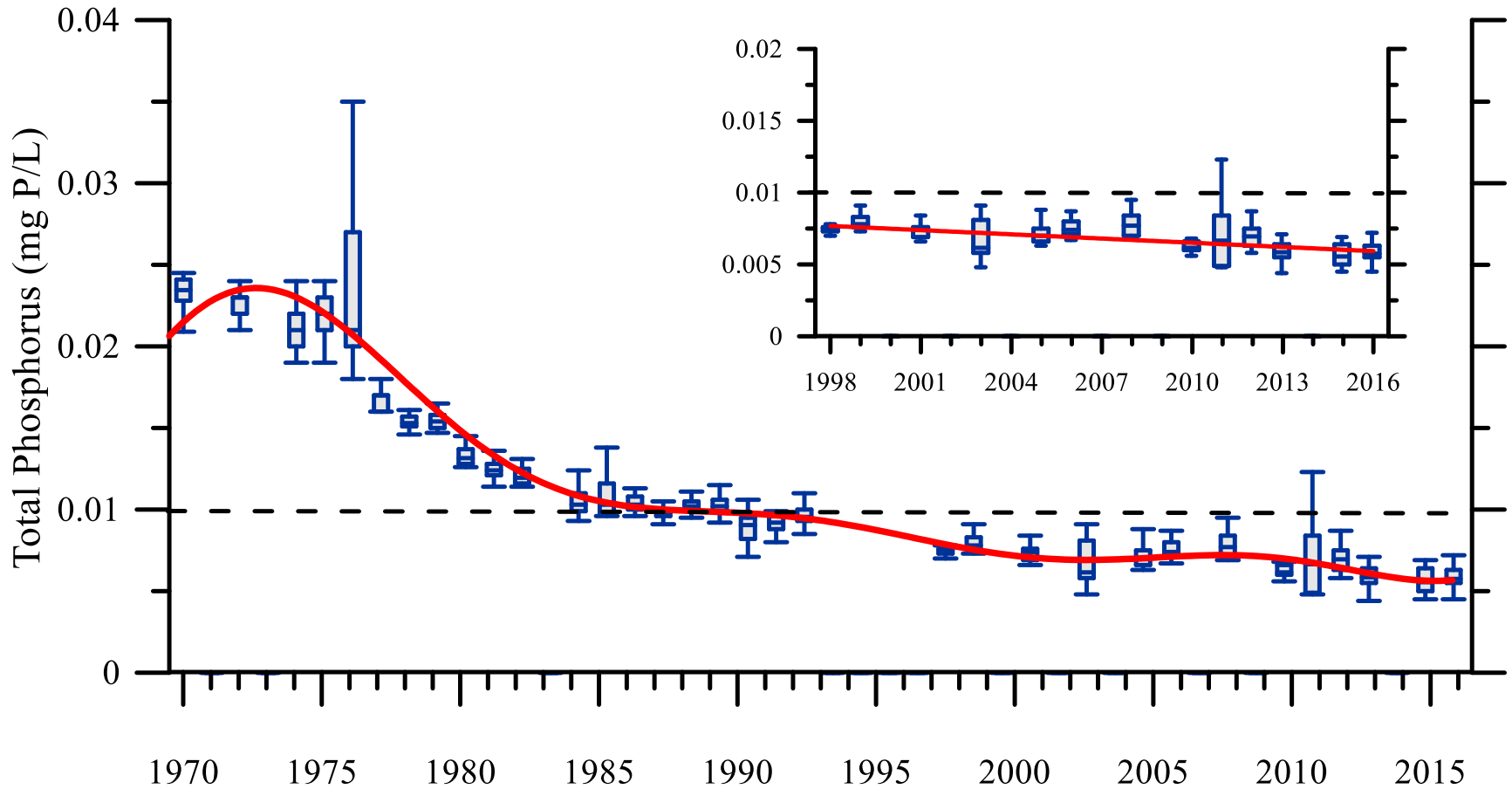
- Core Parameters
- All Parameters



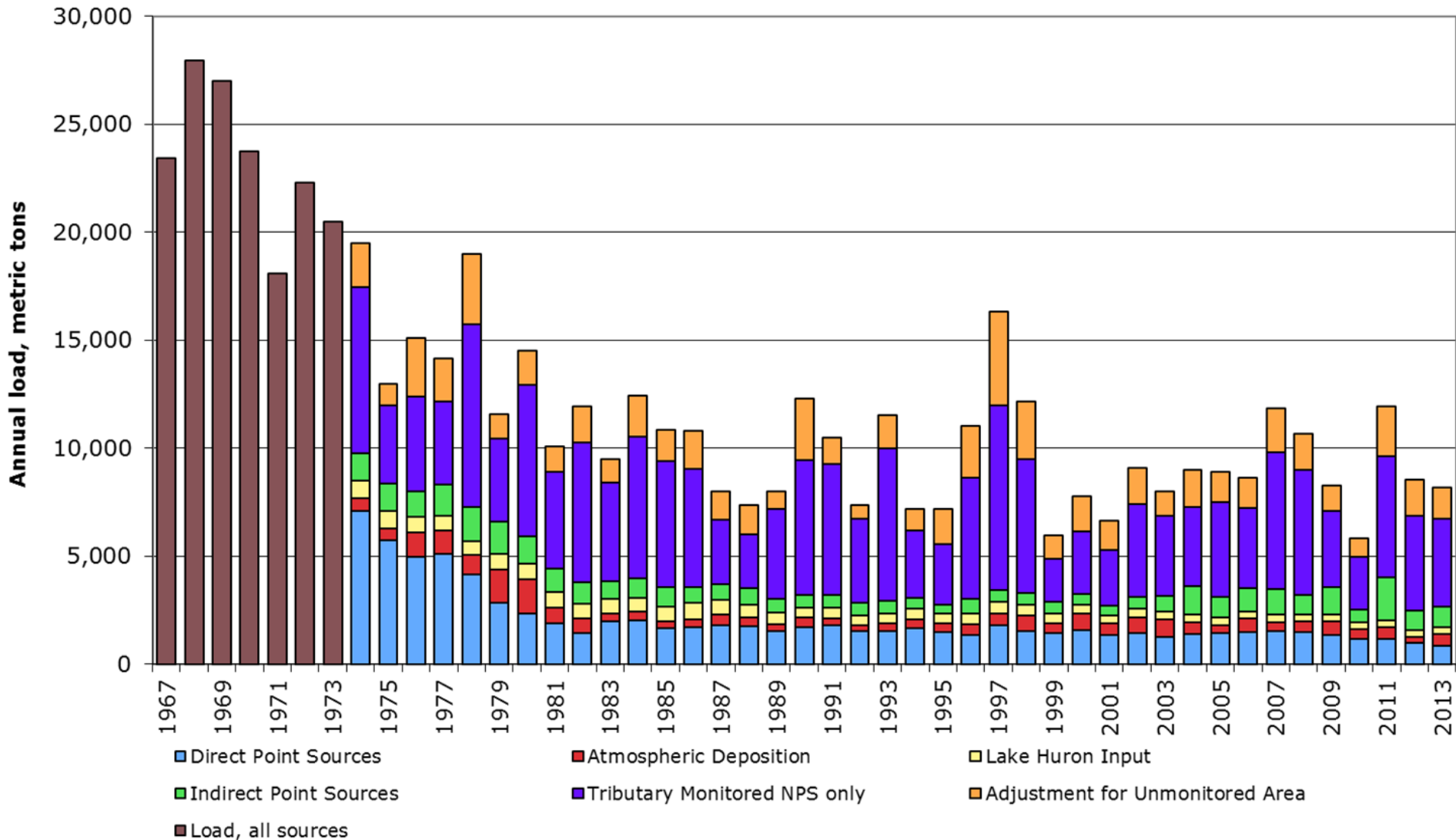
Outside the harbour...



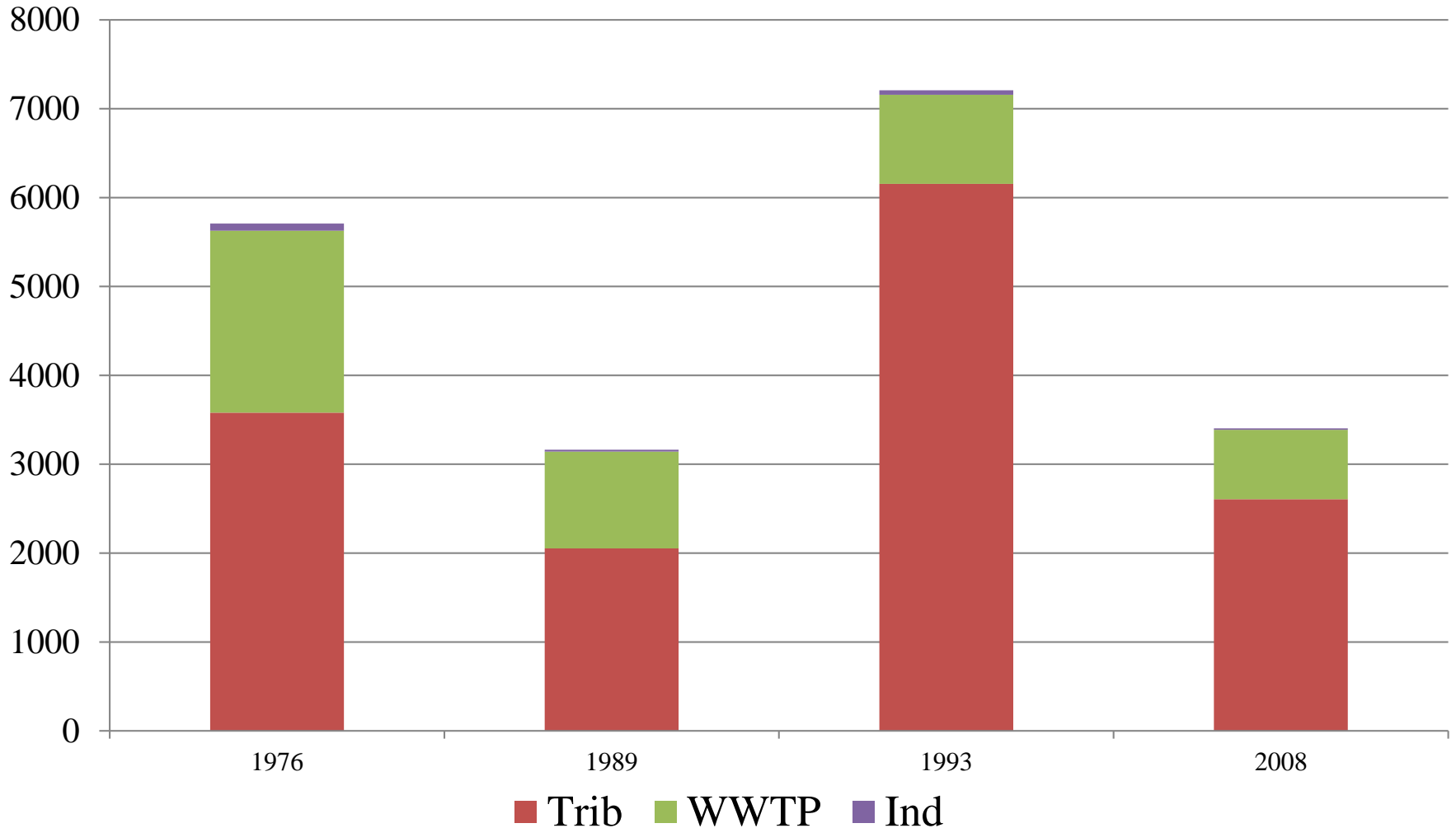
Lake Ontario Total Phosphorus Trend



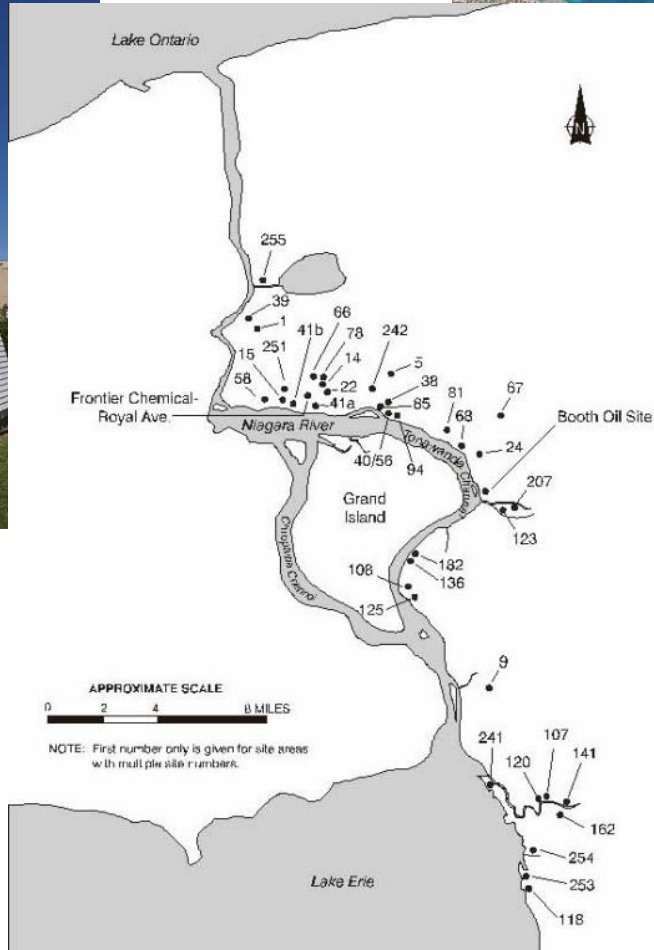
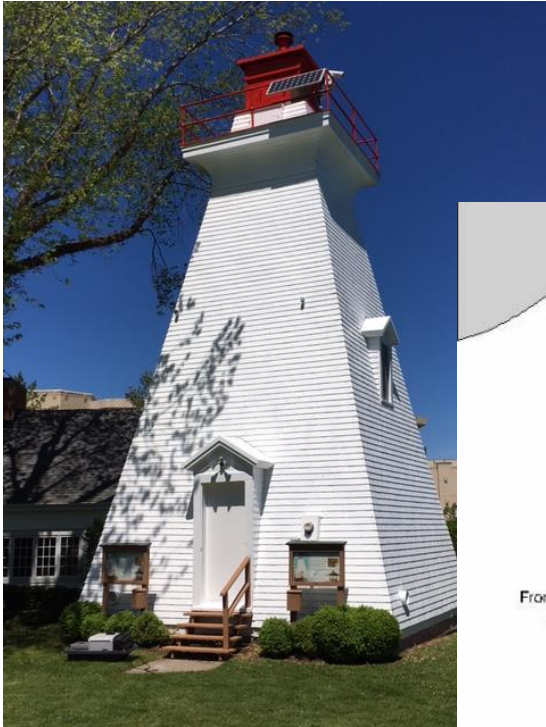
Lake Erie Total Phosphorus Loads



Lake Ontario Lakewide TP Loads

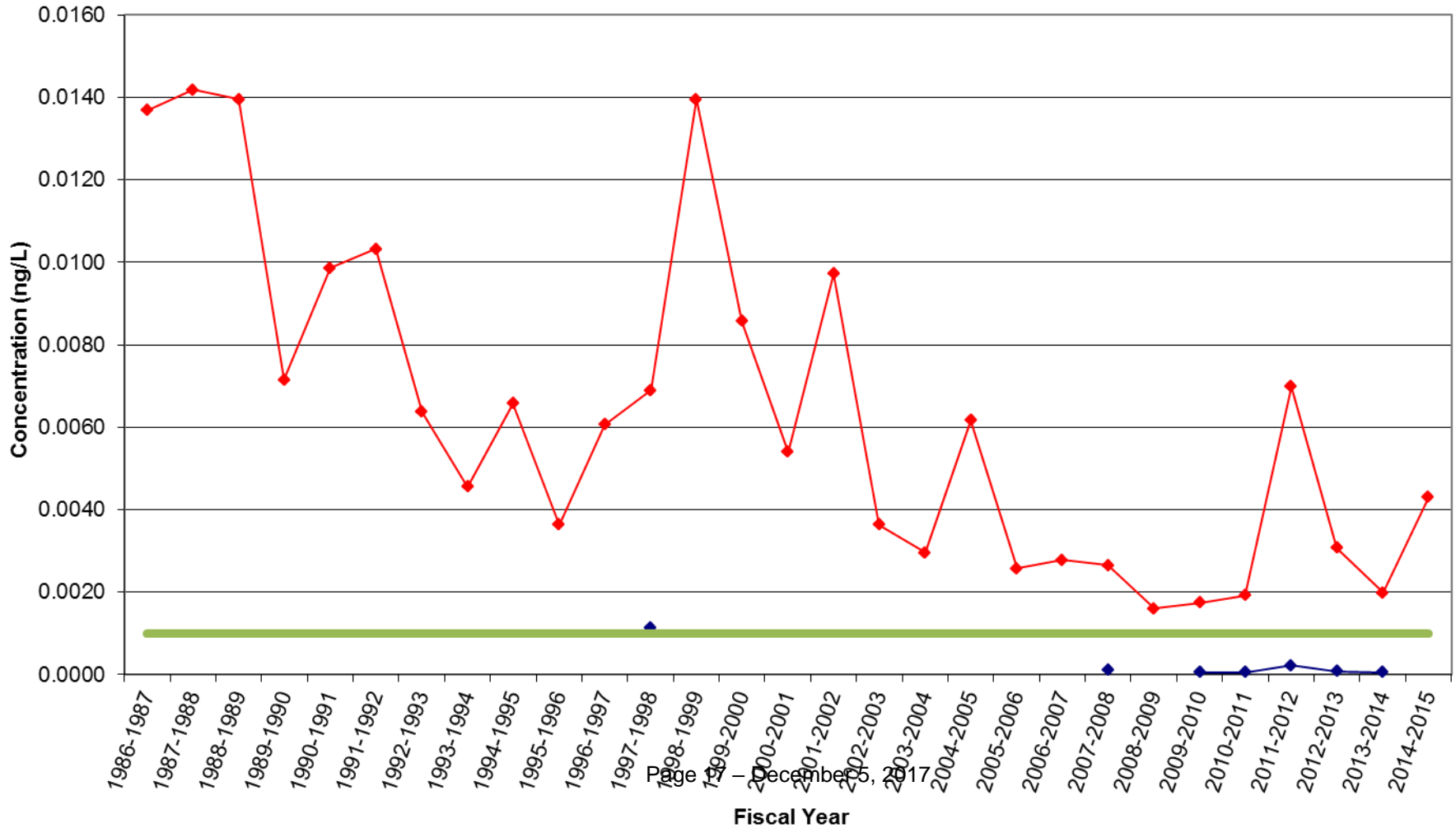


Niagara River

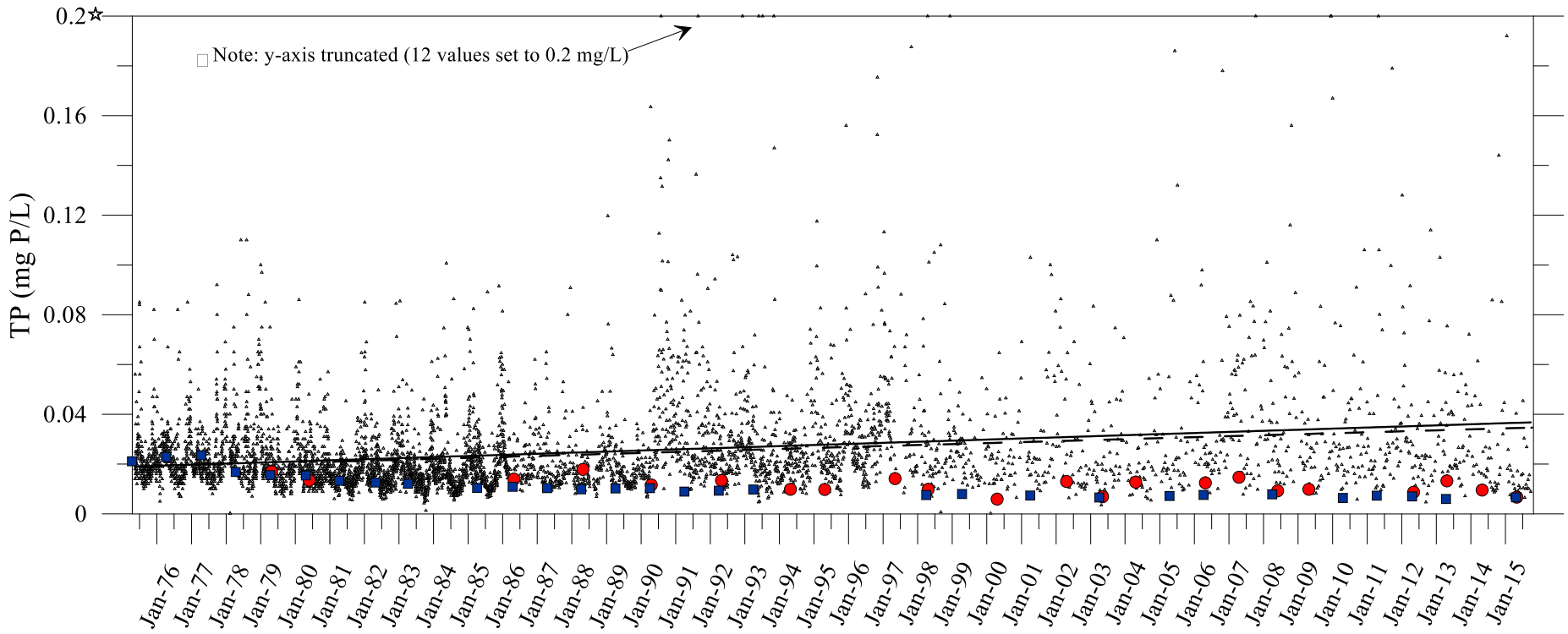


Mirex in the Niagara River

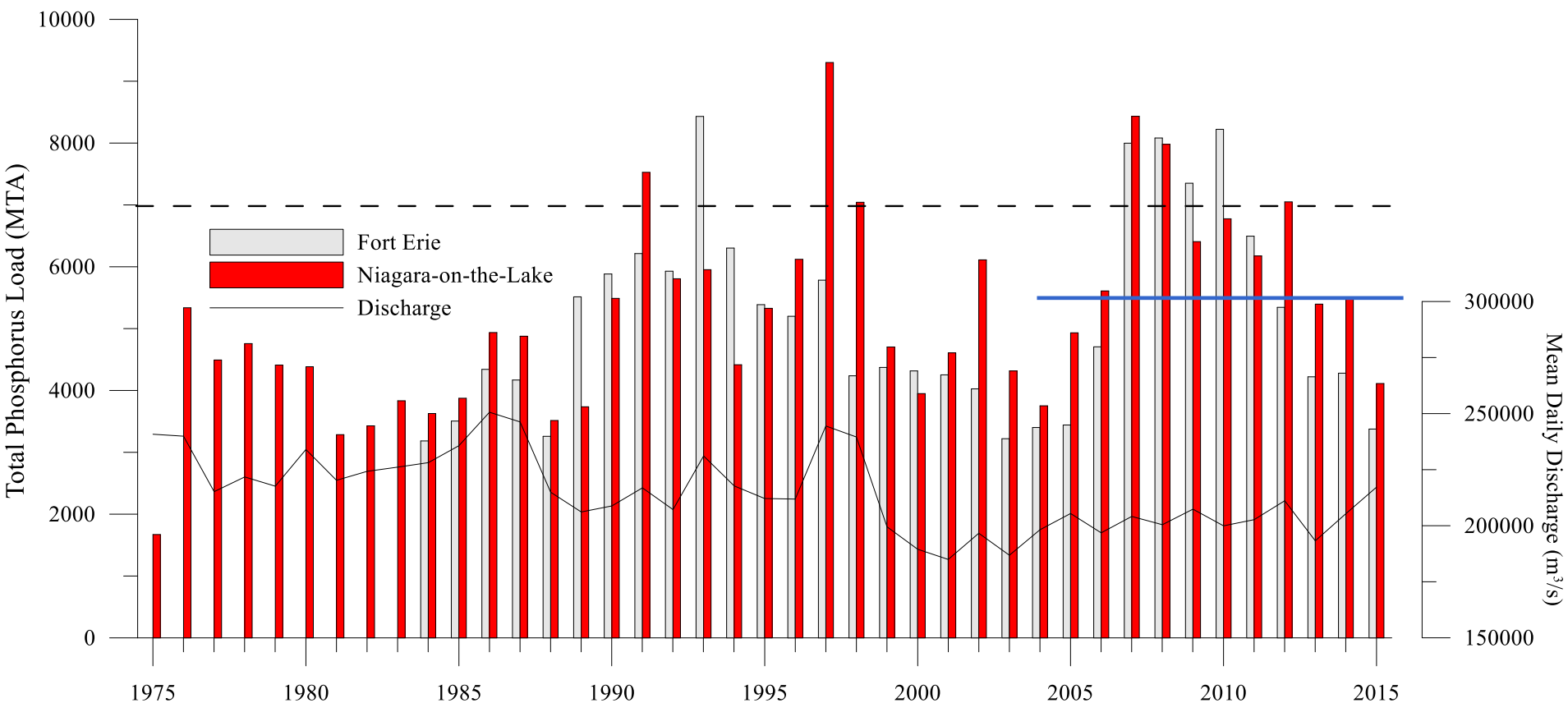
FE NOTL Guideline



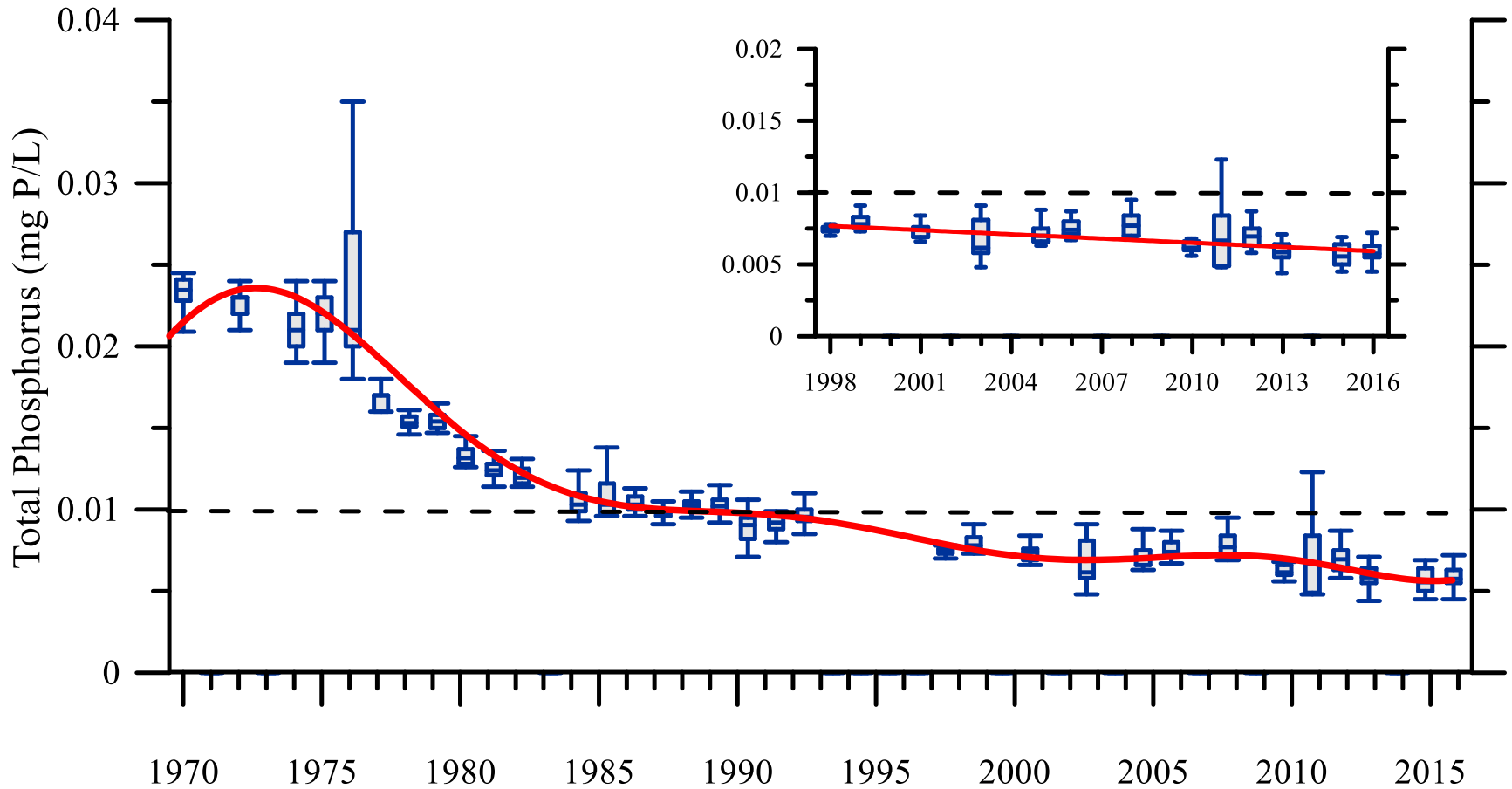
Niagara River 1975-2015 TP Concentrations



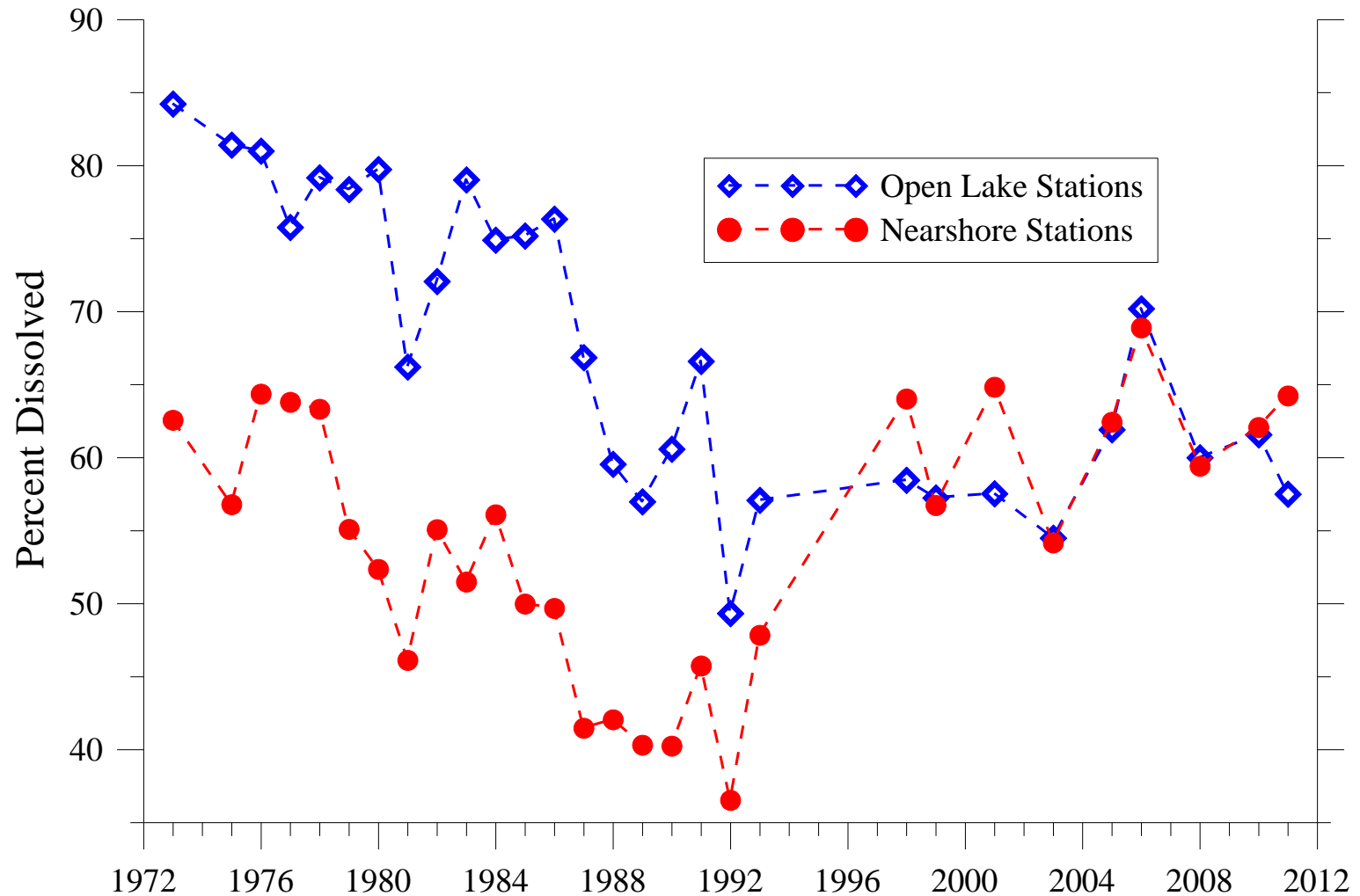
Niagara River 1975-2015 TP Loads



Lake Ontario Total Phosphorus Trend



Declining Particulate P



Great Lakes Water Quality Monitoring and Surveillance Programs

Great Lakes Water Quality Monitoring and Surveillance

Great Lakes Fish Contaminants

Great Lakes Sediment Monitoring

Great Lakes Benthic Monitoring

Great Lakes Precipitation Monitoring



Great Lakes Connecting Channels Monitoring

Enhanced Nutrient Monitoring - **Great Lakes Protection Initiative**

Enhanced Toxics Monitoring – Chemicals Management Plan

Area of Concern Monitoring – Great Lakes Action Plan



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Lake Ontario Tributary Nutrient Loads

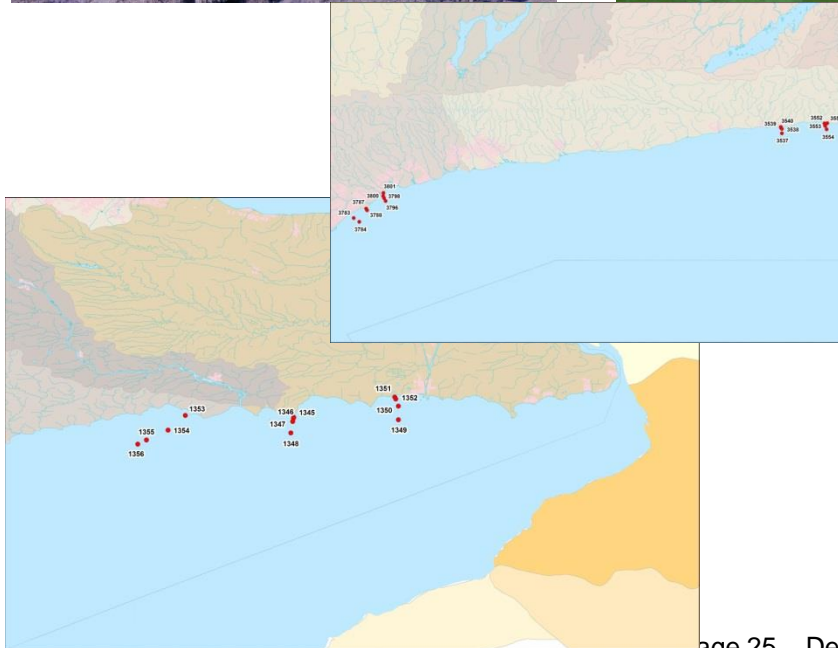
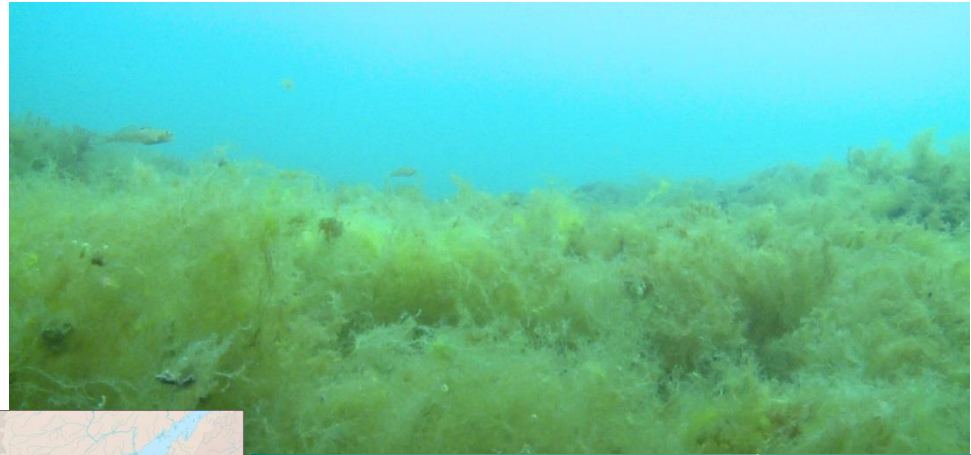


Tributary Nutrient Load Monitoring

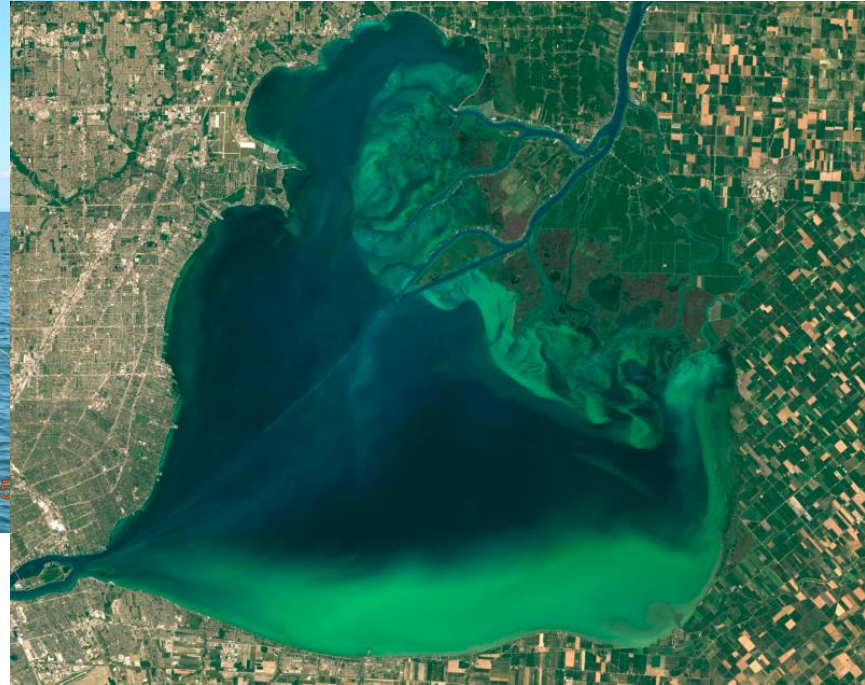


– December 5, 2017

Cladophora Monitoring - Sentinel Sites



Thank You



Alice.Dove@canada.ca