Metadata for: GREAT LAKES INTAKE PROGRAM (GLIP): GREAT LAKES AND LAKE SIMCOE WATER CHEMISTRY AND CHLOROPHYLL DATA SINCE 1976

This table provides essential information about the program data.

Title	GREAT LAKES INTAKE PROGRAM (GLIP): GREAT LAKES AND LAKE SIMCOE WATER CHEMISTRY AND CHLOROPHYLL DATA SINCE 1976
Abstract	1. Program Description The Great Lakes Intake Program (GLIP) monitors nearshore water quality in the Great Lakes, St. Lawrence River and Lake Simcoe. GLIP is a 50-year partnership between the Ministry of the Environment, Conservation and Parks and municipal water treatment plants to provide high frequency monitoring of source water in the Great Lakes Basin. Untreated water samples are collected weekly or bi-weekly, all year round at water treatment plant intakes. Monitoring of planktonic algae was initiated in the 1960s; chlorophyll and nutrients were added to the program in the 1970s. GLIP monitoring addresses key environmental priorities and supports informed decision-making to restore, protect and conserve the Great Lakes and Lake Simcoe. Uses of program data include assessing the effectiveness of broadscale pollution control measures, tracking long-term trends in source water quality, and monitoring the cumulative effects of climate change, land use, invasive species and other factors that impact nearshore water quality. 2. Data Description The dataset includes water chemistry and chlorophyll data for 18 locations in the Great Lakes-St. Lawrence River and 4 locations in Lake Simcoe. Information on the sampling locations from which samples are collected is provided in the Open Data files. The dataset starts between 1976 and 1985, depending on when chlorophyll and nutrient monitoring began at individual intakes. Water samples are collected by water treatment plant staff and analyzed by the Ministry of the Environment, Conservation and Parks using standard analytical procedures. The data provided are raw data that have not been edited (e.g., to exclude outliers or adjust values that are below minimum detection limits). Data are updated on a yearly basis. Parameter Notes a) Chlorophyll-a: Pre-1985 values in the dataset have been increased by 35% to account for a lab methodology change from cellulose nitrate filters and glass fiber filtration to nylon filters, which increased CHLRAT yields by 35% (Nicholls and Hopkins. 1993. Journal of Great Lakes Research, 19:637-647). b)Ammonia+Ammonium, Nitrite, Nitrate, andNitrate+Nitrite: Early lab analysis included filtering of the sample as indicated by the F in the TEST_NAME; recent samples are not filtered as indicated by the U in the TEST_NAME. c)Nitrate+Nitrite: Prior to January 1993, NNOTFR values in the dataset for the Great Lakes sites were calculated by adding NNO2FR and NNO3FR. NNOTFR (or NNOTUR) values for the Lake Simcoe sites were always measured in the lab and were not calculated. d) Nitrate: Beginning in May 1984 for the Lake Simcoe sites and in January 1993 for the Great Lakes sites, NNO3FR (or NNO3UR) was no longer measured in the lab; post-1983/1992 values can be calculated by subtracting NNO2FR (or NNO2UR) from NNOTFR or (NNOTUR). Nitrogen: Beginning in spring of 2015, NNTKUR was no longer measured in the lab; estimated values for total Kjeldahl nitrogen can be calculated based on other nitrogen parameters (e.g. NTOT, available for dates after August 2013). f) VALUE_QUALIFIERS (e.g., codes indicating when measured values were at trace amounts) are not available for pre-1995 values. g) Analytical methods: Analytical methods are not included for data prior to 1994. 3. Data Use Requirements

	Data users agree to acknowledge the Ministry of the Environment, Conservation and Parks in all oral and written presentations, disclosures, and publications resulting from any analyses of the Great Lakes Intake Program dataset. There are no restrictions on the publication of work based on analysis of the dataset. A copy of any published work resulting from any analyses of the dataset should be sent to the responsible party listed above so that the utility of the program data can be tracked over time. Data users are asked to apply the normal standards of scientific etiquette when deciding to publish results based substantially on the dataset. Data users agree that there is no representation, warranty, condition or other promise of any kind, express, implied, statutory or otherwise, including as to the accuracy, completeness, reliability, currency or veracity of the dataset. The Ministry of the Environment, Conservation and Parks is not responsible for any indemnification regarding any loss, claim, damage or liability that may result from the Requester's use of the Great Lakes Intake Program dataset. 4. Contact for Additional Information Please contact Patrick Cheung at the contact information below if you have any questions regarding the Great Lakes Intake Program. Algae (phytoplankton) data are also available upon request.
Status	
Contact	Name: Patrick Cheung Voice: (416) 235-6236 Email: DWSP@ontario.ca Organisation: Ontario Ministry of the Environment, Conservation and Parks Position: Team Leader, Drinking Water Monitoring Unit Role: Principal Investigator
Cited Responsible Parties	Name: Patrick Cheung Voice: (416) 235-6236 Email: DWSP@ontario.ca Organisation: Ontario Ministry of the Environment, Conservation and Parks Position: Team Leader, Drinking Water Monitoring Unit Role: Principal Investigator Name: Claire Holeton Voice: (416) 327-3715 Email: Claire.holeton@ontario.ca Organisation: Ontario Ministry of the Environment, Conservation and Parks Position: Nutrient and Algal Monitoring Scientist Role: Principal Investigator, algae Monitoring
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