Quality of Ontario Lakes

How has the quality of Ontario's lakes changed overtime? And as of recent, how productive are Ontario's lakes?

2024-03-30

Introduction

Sources to add while citing: https://data.ontario.ca/dataset/ontario-lake-partner & https://files.ontario.ca/moe_mapping/downloads/metadata/opendata/Lake_Partner_Program_metadata_EN2.pdf

This report relies on four datasets sourced from the Ontario Lake Partner Program (LPP) via the Ontario Data Catalog. The LPP conducts annual assessments of water quality in inland lakes throughout Ontario, with data collected by volunteers following standardized provincial protocols. Specifically, the datasets cover total phosphorus, calcium, chloride concentration, and water clarity for numerous inland lakes, predominantly situated in the Precambrian Shield region. Each dataset includes geographical coordinates, site descriptions, collection dates, and metrics pertaining to the water quality. The data was last validated on January 17, 2024 and is updated yearly. The largest overlapping period across all four datasets spans from January 1, 2015, to December 31, 2022.

Purpose

This report aims to address the research question:

How has the water quality of Ontario's inland lakes, as measured by total phosphorus, calcium, chloride concentration, and water clarity, changed from 2015 to 2022? What does this suggest about the productivity of Ontario's inland lakes?