

# Shared Waters, Shared Responsibility: Bringing Great Lakes freshwater data together

## What is DataStream?

DataStream Initiative is a Canadian charity dedicated to freshwater protection through open data flows. They run DataStream, an open access, free-to-use, and scientifically robust platform for sharing water quality data. DataStream works to ensure freshwater stewardship in Canada includes public voices and is informed by the best available evidence.

## Who Shares Water Quality Data?

Data contributors include community groups, Indigenous Nations, researchers, and governments. They maintain ownership of their data and control what they publish. There are over 90 monitoring groups sharing data on [Great Lakes DataStream](#).

## Monitoring Motivations

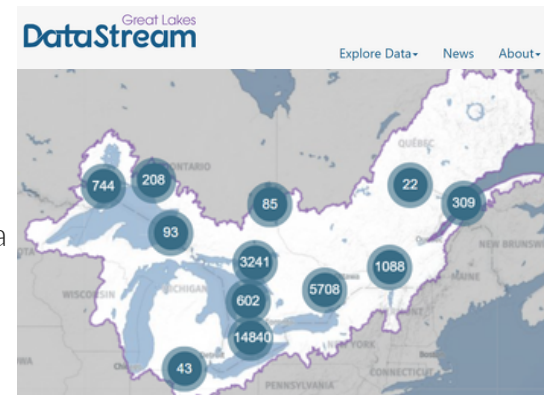
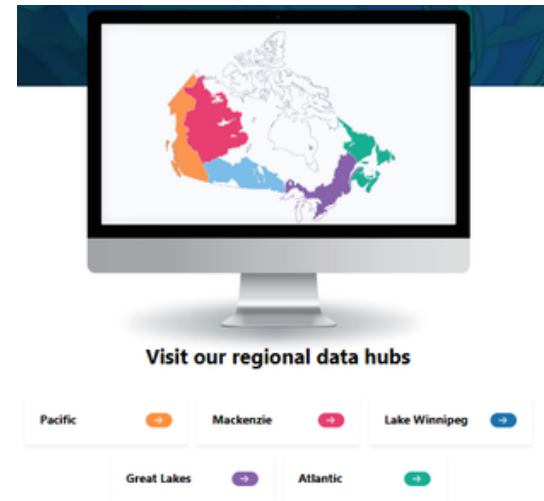
- Education and connection
- Evaluating impacts on water quality
- Establishing baselines

## Why Data Management Matters

- 75.6% of Canadian watersheds could not be assessed in the Water Rangers 2025 [Watershed Reports](#) due to insufficient data - this doesn't always mean there is no data, some of the data was not accessible, or key details were missing from datasets i.e. lack of units
- DataStream has a [schema](#) for standardizing data to ensure usability and all key details are included
- With proper metadata included in all datasets, we can reduce the number of watersheds that could not be assessed

## How is DataStream's Open Access Database Useful?

- **Watershed reporting** - provides widespread data
- **Media** - informs news outlets' investigation with real accessible data
- **Collaboration** - helps avoid duplication and connects monitoring groups
- **Data preservation** - stored for long-term use
- **Transparency and trust** - improves trust by making data openly available
- **Reach** - extends the use of data beyond its original purpose



Photos: [datastream.org](#)

## ADDITIONAL RESOURCES

- Learn more about [DataStream](#)
- Read about the [challenges with secondary use of multi-source water-quality data in the US](#)
- Learn about the [Poseidon: AI for Water Quality](#) platform
- Read about [high-resolution freshwater dissolved calcium and pH data layers for Canada and the US](#)
- Try the [Lake Winnipeg Foundation: Phosphorus Explorer](#)
- Learn about the [Fisheries and Oceans Canada \(DFO\) Pacific Science Enterprise Centre \(PSEC\) Community Stream Monitoring \(CoSMo\) project](#)

Join the free Freshwater Stewardship Community!  
[watersheds.ca/freshwater-stewardship](https://watersheds.ca/freshwater-stewardship)

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DataStream



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