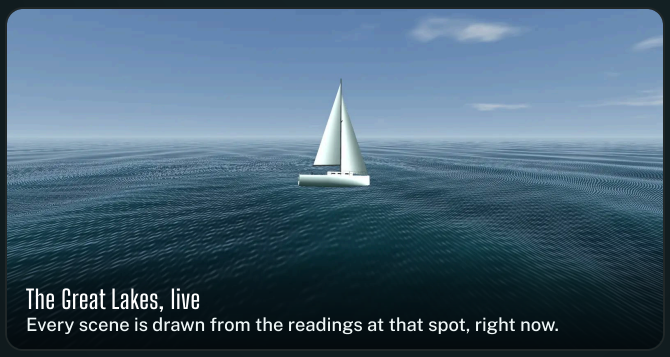
IN THE LAKES

The Great Lakes are measured every minute of every day. In The Lakes brings together what they're reporting right now, from buoys, satellites, river gauges, forecast models and marine warnings from Canadian and US agencies, on one map and in plain language. Then it lets you step in. It's free, with no accounts.



The Great Lakes, live
Every scene is drawn from the readings at that spot, right now.

BEHIND EVERY ANSWER

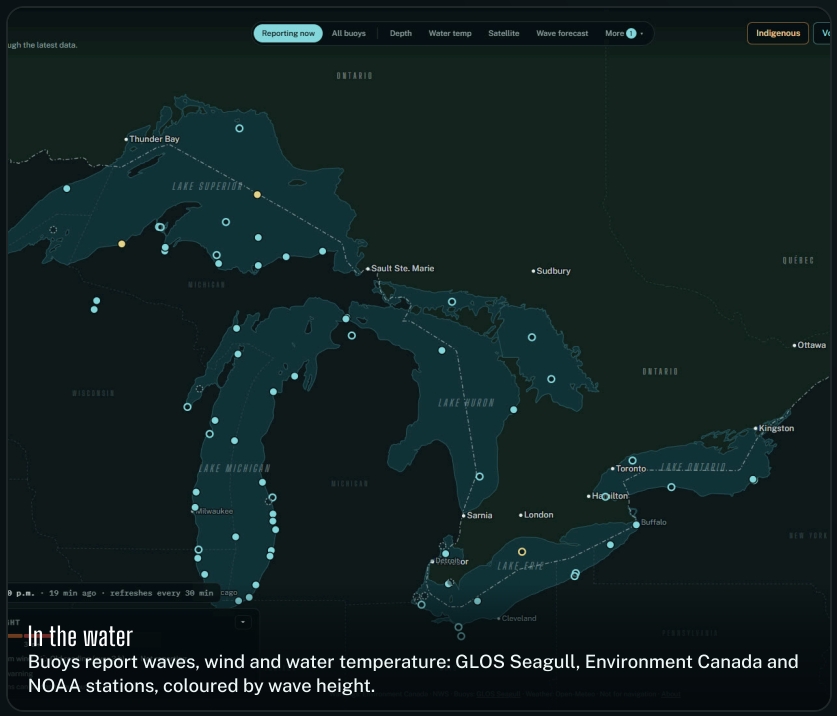
240
BUOYS AND STATIONS AROUND THE LAKES

19
LIVE DATA FEEDS

19
OPEN DATASETS BUILT IN

40+
AGENCIES, UNIVERSITIES AND COMMUNITY PROJECTS

Trusted data from dozens of sources, in one place



In the water
Buoys report waves, wind and water temperature: GLOS Seagull, Environment Canada and NOAA stations, coloured by wave height.

IN THE WATER
- GLOS Seagull buoys
- Environment Canada stations
- NOAA buoys & GLERL
- Canadian Hydrographic Service water levels

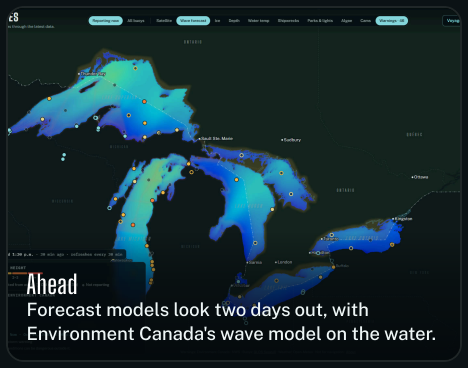
FROM ORBIT
- NOAA lake surface temperature
- NOAA CoastWatch water clarity
- Environment Canada GOES imagery
- North American Ice Service charts

FORECASTS & WARNINGS
- Environment Canada wave model
- Environment Canada marine warnings
- US NWS warnings
- NOAA lake models
- Open-Meteo

RIVERS, NATURE & CONTEXT
- Water Survey of Canada & USGS gauges
- HydroSHEDS rivers & watersheds
- Ontario wetlands & shoreline habitat
- iNaturalist species
- Ships, ports, locks & hydro
- Native Land Digital



From orbit
Satellites read the surface of the lakes: water temperature, clarity and ice.



Ahead
Forecast models look two days out, with Environment Canada's wave model on the water.

ONE PLAIN ANSWER

Should I go out today, and why?

CONDITIONS LOOK CALM
MIXED CONDITIONS
ROUGH: BEST TO STAY ASHORE

For paddling, fishing, sailing or swimming, each buoy gives one verdict with its reasons, drawn from the live reading, the warnings and the next 48 hours.

Guidance, not an official standard. Always check the official marine forecast.

STEP IN

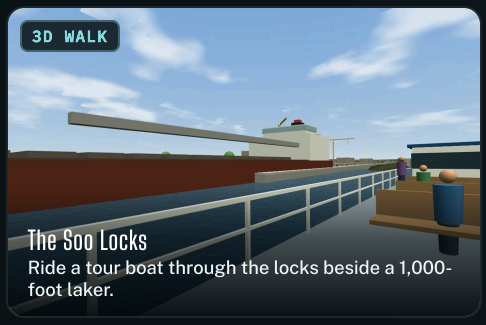
Walk the lakes in 3D.

Go through the locks, up the cliffs and into the marshes with a guide, or stand at any buoy in the waves, wind and light it's reporting right now. Each experience opens from its place on the map.

LABELLED, ALWAYS

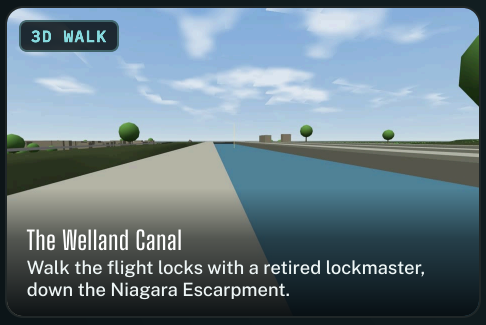
Every number says where it came from.

Measured or modelled, with its source and age: `MEASURED · 1 h 20 min ago` `MODEL ESTIMATE`. Canadian sources come first wherever they exist. When a source is down, the site says so.



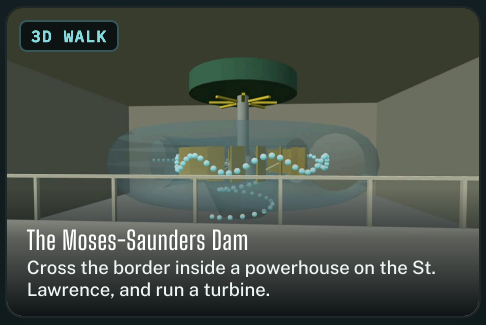
The Soo Locks

Ride a tour boat through the locks beside a 1,000-foot laker.



The Welland Canal

Walk the flight locks with a retired lockmaster, down the Niagara Escarpment.



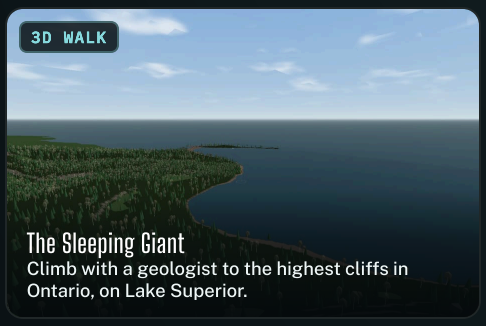
The Moses-Saunders Dam

Cross the border inside a powerhouse on the St. Lawrence, and run a turbine.



Fort William

The North West Company's inland headquarters, from the Great Hall to the camps.



The Sleeping Giant

Climb with a geologist to the highest cliffs in Ontario, on Lake Superior.



Bruce Peninsula

Along the Georgian Bay cliffs to the Grotto and Boulder Beach.



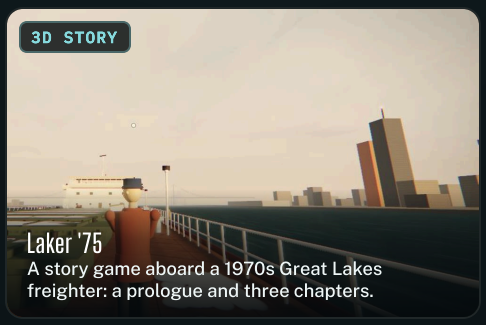
Long Point marsh

A boardwalk through the cattails with a wetland scientist, on Lake Erie.



A raindrop's journey

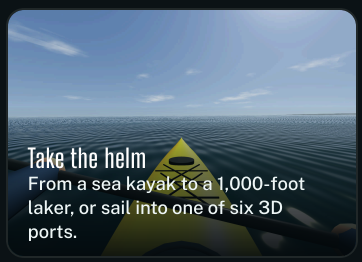
Follow one drop lake by lake to the Atlantic, over Niagara Falls or through its turbines.



Laker '75

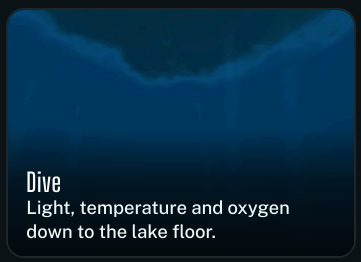
A story game aboard a 1970s Great Lakes freighter: a prologue and three chapters.

ON THE LAKES, LIVE: IN TODAY'S REAL CONDITIONS



Take the helm

From a sea kayak to a 1,000-foot laker, or sail into one of six 3D ports.



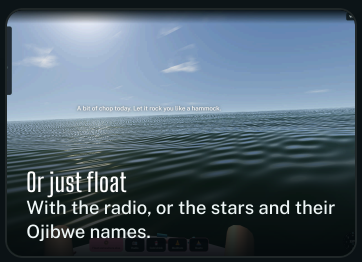
Dive

Light, temperature and oxygen down to the lake floor.



Meet the buoy

From its mast to its anchor, with live readings.



Or just float

With the radio, or the stars and their Ojibwe names.

FOR CLASSROOMS · INTHELAKES.CA/LEARN

- **40 free lessons** in 7 courses, at three levels, with teacher notes and unit plans for Grades 5, 6, 8 and 9.
- **Curriculum links for Ontario, Michigan and Wisconsin**, with a switch to show only yours.
- **Adopt a buoy:** download its real readings for charts and data challenges.

Know the water before you're in it.
Come curious. The lakes have more to tell than anyone has heard yet.

Live data from Environment and Climate Change Canada, Fisheries and Oceans Canada, GLOS Seagull, NOAA, USGS and Open-Meteo, with rivers from HydroSHEDS and the Water Survey of Canada, wetlands and shoreline habitat from the Ontario Ministry of Natural Resources, species from iNaturalist, and territories from Native Land Digital. Full credits on the site.