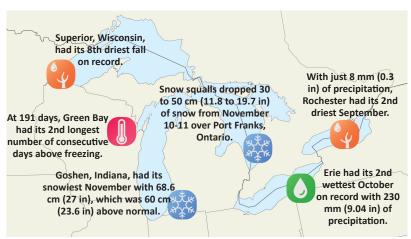
December 2025

# Great Lakes Significant Events - September - November 2025



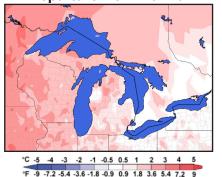
A cool start to September transitioned to a warm pattern that lingered for weeks. Record to nearrecord daytime high temperatures and elevated overnight temperatures blanketed the region at times from late September into early October. Warm air translated to near-record warm water in the Great Lakes by mid-October, priming the region for lake effect snow in November.

Extremely dry weather, paired with the warmth, resulted in significant drought expansion throughout the fall. The southern shores of Lakes Superior and Michigan were two areas spared from drought. Conditions began to improve for southeastern Lake Erie and the US Lake Ontario basin later in the fall.

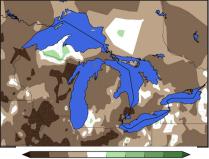
November brought an active weather pattern with notable early-season snow across the Great Lakes. The fall ended with a large storm system that brought bitterly cold temperatures, 80-112 kph (50-70 mph) wind gusts, and high snow totals across the Great Lakes from November 26-30. High winds caused a seiche on Lake Erie resulting in a 2.5-to-3-meter (8.2to 9.8-foot) difference in water levels between Toledo and Buffalo on November 26. Chicago had its snowiest November day on record with 21.3 cm (8.4 in) on November 29.

## Regional Climate Overview - September - November 2025

#### **Fall Temperature Departure from Normal**



## **Fall Precipitation Percent of Normal**



Precipitation and temperature normals based on 1991-2020.

## **Air Temperature and Precipitation**

Fall air temperatures averaged out to be near or above normal. September averaged up to 3°C (5°F) warmer than normal, while October was up to 4°C (7°F) above normal, with the Superior basin showing the largest departures throughout the season. November temperatures ranged from 2°C (4°F) cooler than normal in the Erie and Ontario basins to 3°C (5°F) warmer than normal in the western Superior basin.

Fall was drier than normal for most areas. September precipitation ranged from 25% of normal to near normal for most basins, with the southern Superior basin notably wetter. October precipitation ranged from less than 25% of normal in the western Superior basin to over 200% of normal in the southern Erie basin. November precipitation ranged from 25% of normal in the western Superior, western Michigan, western Huron, and Erie basins to over 200% of normal in the southern Superior basin.

### **Current Water Levels**

Lake	End of Nov 2025 Level Compared to:		Change in Level from beg. of Sept to end of Nov	
	Average for Nov	Nov 2024	2025 Change in Level	Average Change in Level
Sup.	-13 cm	+3 cm	-15 cm	-10 cm
Mich Huron	-30 cm	-20 cm	-33 cm	-17 cm
Erie	-10 cm	-20 cm	-36 cm	-23 cm
Ont.	-7 cm	+8 cm	-34 cm	-30 cm

Water levels at the end of November highlighted the dry fall conditions across the basin. All the lakes were below their end of November average levels. Lakes Superior and Ontario were above last November's levels, while Lakes Michigan-Huron and Erie were 20 cm below last year. Dry conditions led to greater than average declines on all lakes from the start of September to the end of November. In the period of record (1900-present), Lake Michigan-Huron experienced its 8th largest decline and Lake Erie had its 13th largest decline in water levels for fall.

# Regional Impacts - September - November 2025

Drought: Intense drought resulted in notable impacts, especially in the eastern half of the basin. In western New York, record low groundwater levels caused wells to run dry, and the Town of Ripley distributed bottled water to relieve strain on their reservoir. Fly fishing season was delayed on the Salmon River. A two-week burn ban was issued across New York. Corn and soybean yields were reduced in Ontario. In western New York, apple yields were down and pumpkin size was reduced. Some vegetable crops had complete losses.

**November Snowfall:** An active weather pattern resulted in unusually high November snow totals across the Great Lakes. The season kicked off November 9-11 with lake effect snow that brought 30 cm (1 ft) to southeast Wisconsin and record snow that snarled traffic across southeast Ontario. In the west, areas around and north of Duluth had up to 30 cm (1 ft) of snow just before the US Thanksgiving holiday. The central and eastern basin saw up to 30 to 60 cm (1 to 2 ft) of snow November 26-30, canceling thousands of flights, creating dangerous road travel, and knocking out power.

HABs: The 2025 Harmful Algal Bloom (HAB) in western Lake Erie was classified as mild (severity index of 2.4). The bloom was slow to develop during summer, reached its peak in August, and quickly declined in September.

Fall Foliage: Drought-stressed trees in Ontario and New York had dull fall colors that were short-lived. Leaf colors were more vibrant in the west, with peak colors on display into late October.



Low reservoir level in Redfield, New York (Credit: CMOR/NDMC)



Accident on US 41 in Marquette, Michigan (Credit: Hailey Krummich)



Warmth blanketed Minnesota on November 14 (Credit: MN DNR)

# Regional Outlook - January - March 2026

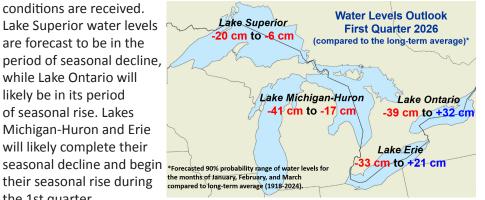
#### Temperature and Precipitation

Canadian and American outlooks show increased chances of above-normal precipitation across the Great Lakes basin. The Canadian outlook indicates a chance of above-normal temperatures basin wide whereas the American forecasters are predicting equal chances of above-, near-, or below-normal temperature.

#### **Great Lakes Water Level Outlook**

The December forecast indicates that during the 1st quarter of 2026 (Jan, Feb, Mar) water levels on Lakes Superior and Michigan-Huron are likely to remain below long-term average levels. Lakes Erie and Ontario could have water levels above or below long-term average levels depending on if wetter or drier

conditions are received. Lake Superior water levels are forecast to be in the period of seasonal decline, while Lake Ontario will likely be in its period of seasonal rise. Lakes Michigan-Huron and Erie will likely complete their their seasonal rise during the 1st quarter.



#### Ice Cover Outlook

The North American Ice Service predicts ice conditions above normal for Lake Superior, slightly below normal for Lake Ontario, and near normal for Lakes Erie, Huron, Michigan, and St. Clair and Georgian Bay.

#### **Partners**

Midwestern Regional Climate Center **Environment and Climate Change Canada** Agriculture and Agri-Food Canada Northeast Regional Climate Center Great Lakes Region State Climatologists <u>NOAA</u> <u>NCE</u>

CoastWatch Great Lakes Node **Great Lakes and IL-IN Sea Grant Networks** North Central River Forecast Center

Ohio River Forecast Center Climate Prediction Center

Office for Coastal Management <u>GLISA</u>

US Army Corps of Engineers, Detroit District **NIDIS** 

USDA Midwest Climate Hub

