

Information

Recorded monthly mean water levels in this bulletin are derived from a representative network of water level gages on each lake (see cover map). Providers of these data are the U.S. Department of Commerce, NOAA, National Ocean Service, and Integrated Science Data Management, Department of Fisheries and Oceans, Canada. The Detroit District, Corps of Engineers and Environment and Climate Change Canada derive historic and projected lake levels under the auspices of the Coordinating Committee on Great Lakes Basic Hydraulic and Hydrologic Data.

This bulletin is produced monthly as a public service. The Corps also, on a weekly basis publishes online the *Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths*, which provides a forecast of depths in the connecting rivers between the Great Lakes and the International Section of the St. Lawrence River. This *Monthly Bulletin of the Lake Levels for the Great Lakes* may be obtained free of charge by writing to the address shown on the front cover, by calling (313) 226-6441 or emailing hhpm@usace.army.mil. Notices of change of address should include the name of the publication. This information is available on the internet at <https://www.lre.usace.army.mil/Missions/GreatLakesInformation.aspx>.

Great Lakes Basin Hydrology May 2021

The Great Lakes basin received 61% of its average monthly precipitation. Likewise, each of the basins themselves received less than their monthly average precipitation. Lake Superior and Lake Erie received 73% and 72% of their monthly averages, while Lake Michigan-Huron received 56% of its monthly average. Lake Ontario received only 44% of its monthly average. Precipitation across all lakes have been 15% to 24% below average over the past 12 months. Each of the Great Lakes basins received below average water supply for May. Outflows continue to be above average for all lakes.

Lakes Superior and Lake St. Clair each rose 1 inch from April to May. Michigan-Huron remained near its level from April and March. Lake Erie rose 2 inches from April to May while Lake Ontario rose 4 inches from April to May. The 6-month forecast projects that Lake Superior, Michigan-Huron, and Ontario will continue their seasonal rise and then begin their season declines later this summer. Lake St. Clair is forecasted to begin its seasonal decline, and Lake Erie is forecasted to remain at its current level and then begin its season decline in July.

PRECIPITATION (INCHES)								
BASIN	May				12-Month Comparison			
	2021	Average (1900-2017)	Diff.	% of Average	Last 12 months	Average (1900-2017)	Diff.	% of Average
Superior	2.04	2.80	-0.76	73	26.04	30.59	-4.55	85
Michigan-Huron	1.71	3.03	-1.32	56	27.30	32.52	-5.22	84
Erie	2.44	3.39	-0.95	72	26.90	35.55	-8.65	76
Ontario	1.38	3.11	-1.73	44	27.81	35.83	-8.02	78
Great Lakes	1.85	3.03	-1.18	61	26.79	32.76	-5.97	82

Lake	May WATER SUPPLIES ¹ (cfs)		May OUTFLOW ² (cfs)	
	2021	Average ³ (1900-2008)	2021	Average ³ (1900-2008)
Superior	76,000	179,000	83,000	75,000
Michigan-Huron	148,000	249,000	228,000	189,000
Erie	36,000	47,000	244,000	216,000
Ontario	36,000	58,000	282,000	260,000

Notes: Values (excluding averages) are based on preliminary computations; cfs denotes cubic feet per second.

¹ Net basin supply is the net result of precipitation falling on the lake, runoff from precipitation falling on the land which flows to the lake, and evaporation from the lake. Negative net basin supply denotes evaporation exceeded runoff and precipitation. The net total supply can be found by adding the net basin supply and the outflow from the upstream lake.

² Does not include diversions.

³ Lake Ontario average water supplies and average outflows are based on period of record 1900-2005