

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* is available free of charge by writing to the address shown on the front cover, by calling (313) 226-6441 or emailing hphm@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 2022

During the month of May, precipitation estimates indicate that the Great Lakes basin received near average precipitation. Lake Superior received above average precipitation for the month, receiving about 3.5 inches of precipitation, while the Lakes Michigan-Huron and Ontario basins received below average precipitation at 84% and 78% of average, respectively. Runoff was above normal in the Superior basin, and in some regions in the Michigan-Huron and Erie basins, though normal runoff was predominant across the basins. Provisional estimates show that Lake Superior observed the 3rd largest water supplies for the month of May on record, likely as a result of the above average precipitation and runoff. The Michigan-Huron basin experienced water supplies above average, while the Erie basin received near normal water supplies and the Ontario basin received slightly below average water supplies. Outflows continued to be above average, except for outflow out of Lake Superior which remained below average.

From April to May, all the lakes experienced a rise in water levels. Lake Superior rose 8 inches, while Lakes Michigan-Huron, St. Clair, Erie and Ontario rose 4, 4, 3, and 2 inches respectively. The Great Lakes water levels 6-month forecast projects Lakes Superior and Michigan-Huron will continue their seasonal rise over the next month, while Lakes St. Clair and Erie will remain near their current level, and Lake Ontario will begin its decline.

PRECIPITATION (INCHES)								
BASIN	May				12-Month Comparison			
	2022	Average (1900-2018)	Diff.	% of Average	Last 12 months	Average (1900-2018)	Diff.	% of Average
Superior	3.43	2.80	0.63	123	28.43	30.59	-2.16	93
Michigan-Huron	2.58	3.07	-0.49	84	33.34	32.87	0.47	101
Erie	3.40	3.43	-0.03	99	37.61	35.91	1.70	105
Ontario	2.46	3.15	-0.69	78	38.55	36.34	2.21	106
Great Lakes	2.90	3.03	-0.13	96	33.10	32.99	0.11	100

Lake	May WATER SUPPLIES ¹ (cfs)		May OUTFLOW ² (cfs)	
	2022	Average ³ (1900-2008)	2022	Average ³ (1900-2008)
Superior	299,000	179,000	67,000	75,000
Michigan-Huron	274,000	249,000	214,000	189,000
Erie	46,000	47,000	244,000	216,000
Ontario	48,000	58,000	309,000	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