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 Lake*s is available 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
June 2022

During the month of June, preliminary precipitation estimates indicate that the Great Lakes basin received below average precipitation at 76 percent of average. Preliminary estimates show that Lakes Superior, Michigan-Huron, Erie, and Ontario basins received 70, 82, 60, and 88 percent of their average precipitation, respectively. For the month of June, streamflows were generally near normal. Provisional estimates show that June water supplies were near average for the Superior and Ontario basins, and below average for the Michigan-Huron and Erie basins. Outflows from all the Great Lakes were above average for the month of June.

From May to June, all the lakes experienced a rise in water levels, with the exception of Lake Ontario which experienced a decline. Lake Superior rose 5 inches, while Lakes Michigan-Huron, St. Clair, and Erie rose by 2, 2, and 1 inches respectively. Lake Ontario fell by 2 inches. The Great Lakes water levels 6-month forecast projects Lakes Superior and Michigan-Huron will continue their seasonal rise into the next month, while Lakes St. Clair and Erie will begin their decline, and Lake Ontario will continue its decline.

PRECIPITATION (INCHES)

BASIN	June				12-Month Comparison			
	2022	Average (1900-2018)	Diff.	% of Average	Last 12 months	Average (1900-2018)	Diff.	% of Average
Superior	2.31	3.31	-1.00	70	28.61	30.59	-1.98	94
Michigan-Huron	2.63	3.19	-0.56	82	31.86	32.87	-1.01	97
Erie	2.10	3.50	-1.40	60	35.56	35.91	-0.35	99
Ontario	2.87	3.27	-0.40	88	38.35	36.34	2.01	106
Great Lakes	2.50	3.27	-0.77	76	32.13	32.99	-0.86	97

Lake	June WATER SUPPLIES[1] (cfs)		June OUTFLOW[2] (cfs)	
	2022	Average[3] (1900-2008)	2022	Average[3] (1900-2008)
Superior	156,000	155,000	87,000	77,000
Michigan-Huron	163,000	205,000	215,000	192,000
Erie	17,000	32,000	238,000	216,000
Ontario	43,000	40,000	312,000	263,000

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