

Information

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

The Corps makes the bulletin 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 supplies a forecast of depths in connecting rivers between Great Lakes and International Section of St. Lawrence River. This *Monthly Bulletin of the Lake Levels for the Great Lakes* is available free of charge by writing to address shown on front cover, by calling (313) 226-6441 or emailing hghpm@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 July 2022

July preliminary precipitation estimates show Great Lakes basin received below average precipitation at 89 percent of average. Preliminary estimates show Lakes Superior, Michigan-Huron, Erie, and Ontario basins received 97, 82, 95, and 81 percent of average July precipitation, respectively. Precipitation is near average across Great Lakes basin over the past 12 months. July streamflow was near normal across the Great Lakes basin. Provisional estimates show July water supplies were near average for Superior and Ontario basins, and below average in Michigan-Huron and Erie basins. Outflows from all the Great Lakes were above average in July.

From June to July, water levels rose on Lake Superior by 2 inches and Lake Michigan-Huron levels did not change. Lake St. Clair fell 1 inch, Lake Erie fell 3 inches, and Lake Ontario fell 7 inches. Great Lakes 6-month water levels forecast projects Lake Superior to continue a seasonal rise into August before declining, Lake Michigan-Huron will begin a seasonal fall, and Lakes St. Clair, Erie, and Ontario will continue to decline.

PRECIPITATION (INCHES)								
BASIN	July				12-Month Comparison			
	2022	Average (1900-2018)	Diff.	% Of Average	Last 12 Months	Average (1900-2018)	Diff.	% Of Average
Superior	3.16	3.27	-0.11	97	30.07	30.59	-0.52	98
Michigan-Huron	2.48	3.03	-0.55	82	30.08	32.87	-2.79	92
Erie	3.27	3.43	-0.16	95	33.94	35.91	-1.97	95
Ontario	2.57	3.19	-0.62	81	35.37	36.34	-0.97	97
Great Lakes	2.80	3.15	-0.35	89	31.14	32.99	-1.85	94

Lake	July WATER SUPPLIES ¹ (cfs)		July OUTFLOW ² (cfs)	
	2022	Average ³ (1900-2008)	2022	Average ³ (1900-2008)
Superior	130,000	127,000	94,000	81,000
Michigan-Huron	92,000	128,000	214,000	195,000
Erie	-1,000	7,000	234,000	213,000
Ontario	19,000	23,000	305,000	261,000

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