

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 <http://www.lre.usace.army.mil/Missions/GreatLakesInformation.aspx>.

Great Lakes Basin Hydrology May 2019

Preliminary estimates indicate that the Great Lakes basin received above average precipitation in the month of May. Lake Superior had near average precipitation in May, while the rest of individual lake basins experienced above average precipitation. Lake Ontario received the most precipitation, which was 44% above average. Water supplies in May were well above average. Lake Michigan-Huron experienced its fourth highest May net basin supply since 1900, while Lake Ontario experienced its fifth highest. Outflows for all lakes continued to be above average during the month of May. Preliminary estimates indicate that outflows through the St. Clair River, Detroit River, and Niagara River were all above their record high outflow for May.

May monthly mean water levels on Lakes Superior, St. Clair, and Erie surpassed their May record high water level by 1, 2, and 3 inches, respectively. Lakes Michigan-Huron and Ontario May mean water levels were both 4 inches below their record high for May. From April to May, all of the lakes rose with the continuation of wet conditions in the basin. Lakes Superior, Michigan-Huron, St. Clair, and Erie rose between 6 to 9 inches, while Lake Ontario experienced a rise of 22 inches. The current 6-month forecast indicates that monthly mean water levels for June will meet or surpass record high June levels on all of the lakes.

PRECIPITATION (INCHES)								
BASIN	May				12-Month Comparison			
	2019	Average (1900-2016)	Diff.	% of Average	Average Last 12 Months	Average (1900-2016)	Diff.	% of Average
Superior	2.70	2.79	-0.09	97	30.15	30.58	-0.43	99
Michigan-Huron	4.00	3.05	0.95	131	33.56	32.55	1.01	103
Erie	3.80	3.37	0.43	113	37.12	35.62	1.50	104
Ontario	4.46	3.10	1.36	144	37.80	35.87	1.93	105
Great Lakes	3.65	3.02	0.63	121	33.46	32.77	0.69	102

LAKE	May WATER SUPPLIES ¹ (cfs)		May OUTFLOW ² (cfs)	
	2019	Average (1900-2008)	2019	Average ³ (1900-2008)
Superior	215,000	182,000	77,000	75,000
Michigan-Huron	449,000	251,000	239,000	189,000
Erie	73,000	48,000	277,000	216,000
Ontario	111,000	60,000	268,000	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