

## Information

Recorded 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) 226-6442 or emailing [hhpm@usace.army.mil](mailto: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 October 2018

According to preliminary estimates, precipitation throughout the Great Lakes basin was above average in October. Lake Superior and Lake Michigan-Huron received over 4 inches of precipitation and were above average by 48% and 54%, respectively, which led to above average water supplies. Lake Erie received 116% of average precipitation for the month and Lake Ontario received 108% of average precipitation. Despite slightly above average precipitation for Lakes Erie and Ontario, water supplies were below average for Lake Erie and near average for Lake Ontario. Outflows from all the lakes continued to be above average during the month of October.

October monthly mean water levels were above their long-term average for all lakes. From September to October, all the lakes declined, except for Lake Superior. Typically, Lake Superior begins its seasonal decline in October, but the wet conditions led to a rise of 3 inches in the last month. Lake Michigan-Huron declined by 2 inches from September to October, while Lakes St. Clair, Erie, and Ontario fell by 4 inches. Lake Superior's monthly mean level for October was 2 inches below last year's level and Lake Ontario was 9 inches below its level from a year ago. Lakes Michigan-Huron, St. Clair, and Erie October levels were above last year's levels by 1, 2, and 3 inches, respectively.

PRELIMINARY PRECIPITATION (INCHES)								
BASIN	October				12-Month Comparison			
	2018	Average (1900-2016)	Diff.	% of Average	Average Last 12 Months	Average (1900-2016)	Diff.	% of Average
Superior	4.26	2.88	1.38	148	28.48	30.58	-2.10	93
Michigan-Huron	4.53	2.94	1.59	154	30.56	32.55	-1.99	94
Erie	3.29	2.83	0.46	116	35.67	35.62	0.05	100
Ontario	3.42	3.17	0.25	108	33.11	35.87	-2.76	92
Great Lakes	4.13	2.93	1.20	141	30.84	32.77	-1.93	94

LAKE	October WATER SUPPLIES <sup>1</sup> (cfs)		October OUTFLOW <sup>2</sup> (cfs)	
	2018	Average (1900-2008)	2018	Average <sup>3</sup> (1900-2008)
Superior	178,000	40,000	95,000	80,000
Michigan-Huron	98,000	1,000	221,000	191,000
Erie	-41,000	-21,000	237,000	201,000
Ontario	8,000	7,000	272,000	243,000

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

<sup>1</sup> 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.

<sup>2</sup> Does not include diversions.

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