

## 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) 226-6441 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 April 2019

Preliminary estimates indicate that all of the Great Lakes received above average precipitation in the month of April. Each lake exceeded their average April precipitation by at least 24%. Lake Erie experienced the highest above average at 37%. April water supplies to each of the Great Lakes were significantly above average as well. In fact, Lake Michigan-Huron experienced its fifth highest April net basin supply since 1900, while Lake Erie experienced its ninth highest. Preliminary estimates of outflows point to the St. Clair River achieving its highest recorded monthly mean April flow in 2019. Outflows for all lakes continued to be above average during the month of April.

April monthly mean water levels for all the lakes were above their long-term average levels and above their April 2018 levels. In addition, the levels of all the lakes rose in April. Lake Superior's monthly mean level rose about one and a half inches in April. Lakes Michigan-Huron and Erie climbed by about 4 and 6 inches, respectively, in April, while the monthly mean levels of Lakes Erie and Ontario both rose 7 inches. The lakes ranged from above 2 to 7 inches above their levels of a year ago. Lake Superior was 3 inches below its April record high.

PRECIPITATION (INCHES)								
BASIN	April				12-Month Comparison			
	2019	Average (1900-2016)	Diff.	% of Average	Average Last 12 Months	Average (1900-2016)	Diff.	% of Average
Superior	2.55	2.03	0.52	126	30.43	30.58	-0.15	100
Michigan-Huron	3.45	2.66	0.79	130	32.97	32.55	0.42	101
Erie	4.38	3.19	1.19	137	36.77	35.62	1.15	103
Ontario	3.62	2.93	0.69	124	35.33	35.87	-0.54	98
Great Lakes	3.34	2.58	0.76	129	32.93	32.77	0.16	100

LAKE	April WATER SUPPLIES <sup>1</sup> (cfs)		April OUTFLOW <sup>2</sup> (cfs)	
	2019	Average (1900-2008)	2019	Average <sup>3</sup> (1900-2008)
Superior	226,000	150,000	85,000	68,000
Michigan-Huron	455,000	284,000	221,000	182,000
Erie	112,000	67,000	251,000	207,000
Ontario	107,000	93,000	263,000	251,000

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