

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 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. 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 January 2018

According to preliminary estimates, basin-wide precipitation was below average for all of the Great Lakes, at 73% of average precipitation. Both Lake Superior and Lake Michigan-Huron were representative of this and received 71% of their average January precipitation. Lake Erie was comparable and received 69% of its average January precipitation. Lake Ontario received the most precipitation at 90% of its average January precipitation. Over the last 12 months, the total precipitation has been just above average for the Great Lakes basin on the whole. January net basin supplies were above average for all but Lake Superior. Outflows in January were above average for all lakes.

All of the lakes were above their January long-term average water levels. From December to January, most of the lakes' levels declined, where Lake St. Clair fell by 5 inches, Lake Superior fell by 3 inches, and Lakes Michigan-Huron and Erie fell by 2 inches. On the contrary, Lake Ontario rose by 2 inches. This January's levels were 2 to 10 inches above last year's level. All of the lakes were below their record high levels in January. Lake Superior's January level was 2 inches below its record January high level, while other lakes were 13 to 22 inches below.

PRELIMINARY PRECIPITATION (INCHES)								
BASIN	January				12-Month Comparison			
	2018	Average (1900-2014)	Diff.	% of Average	Last 12 months	Average (1900-2014)	Diff.	% of Average
Superior	1.37	1.94	-0.57	71	33.58	30.52	3.06	110
Michigan-Huron	1.52	2.15	-0.63	71	34.26	32.57	1.69	105
Erie	1.73	2.50	-0.77	69	34.93	35.65	-0.72	98
Ontario	2.47	2.74	-0.27	90	40.94	35.87	5.07	114
Great Lakes	1.61	2.21	-0.60	73	34.98	32.76	2.22	107

LAKE	January Net Basin Supplies ¹ (cfs)		January Outflows ² (cfs)	
	2018	Average (1900-2008)	2018	Average ³ (1900-2008)
Superior	-31,000	-13,000	73,000	69,000
Michigan-Huron	101,000	60,000	172,000	161,000
Erie	43,000	29,000	223,000	196,000
Ontario	64,000	32,000	252,000	222,000

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