

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 December 2016

During December, precipitation within the overall Great Lakes basin was near average according to preliminary estimates. The precipitation experienced by Lake Superior exceeded its December average precipitation by 13%. In addition, precipitation to Lake Michigan-Huron was near average. Lakes Erie and Ontario received precipitation in December that was 18% and 9% below average. The only Great Lake to experience above average net basin supplies in December was Superior. Lakes Michigan-Huron and Ontario received below average net basin supplies, while the net basin supply to Lake Erie was near average. The tables below list December precipitation and water supply information for the Great Lakes basin.

All of the lakes continued their seasonal decline in the month of December. All of the lakes were above their long-term average (LTA) monthly December levels except Lake Ontario. Lakes Superior, Michigan-Huron, St. Clair, and Erie were 6 to 8 inches above their LTA December levels. Lake Ontario, however, was 2 inches below its LTA level. Also, Lakes Superior and Michigan-Huron were 2 inches below their levels from December 2015, while the lower lakes were at about the same level as they were last December.

PRELIMINARY PRECIPITATION (INCHES)								
BASIN	December				12-Month Comparison			
	2016	Average (1900-2014)	Diff.	% of Average	Average Last 12 months	Average (1900-2014)	Diff.	% of Average
Superior	2.28	2.02	0.26	113	32.81	30.52	2.29	108
Michigan-Huron	2.29	2.35	-0.06	97	32.87	32.57	0.30	101
Erie	2.20	2.68	-0.48	82	33.53	35.65	-2.12	94
Ontario	2.69	2.97	1.80	91	32.31	35.87	-3.56	90
Great Lakes	2.30	2.37	-0.07	97	32.98	32.76	0.22	101

LAKE	December Net Basin Supplies ¹ (cfs)		December Outflows ² (cfs)	
	2016	Average (1900-2008)	2016	Average ³ (1900-2008)
Superior	-9,000	-22,000	85,000	72,000
Michigan-Huron	-10,000	34,000	198,000	183,000
Erie	18,000	21,000	221,000	201,000
Ontario	21,000	27,000	244,000	234,000

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