

## 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 publishes the "Great Lakes, Connecting Channels and St. Lawrence River Water Levels and Depths," weekly, 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 [hphm@usace.army.mil](mailto:hphm@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/glhh>.

### Great Lakes Basin Hydrology December 2012

The overall Great Lakes basin received 91% of its average precipitation for the month of December. The Lake Superior basin received 56% of average precipitation last month and 91% of average over the past 12 months. The Lake Michigan-Huron basin received 92% of average precipitation in December and 87% of average over the past 12 months. Lake Erie received 99% of average precipitation last month and 87% of average over the past 12 months. Lake Ontario saw above average precipitation in December at 140% of average and 86% of average over the past 12 months. The water supply for Lake Superior and Lake Michigan-Huron was above average for December. Lake Erie's water supply was below average last month while Lake Ontario's water supply was above average. The tables below list December precipitation and water supply information for all Great Lakes basins.

A comparison of monthly mean lake levels for December to long-term average (1918-2011) shows Lakes Superior and Michigan-Huron were 13 and 28 inches below average, respectively, with Lake Michigan-Huron setting a record low for the month of December at 576.15 ft. Lake St. Clair was 15 inches below average last month, and Lakes Erie and Ontario were 7 and 10 inches, respectively, below average. Boaters should be aware of hazards to navigation due to continued below average water levels on all lakes.

PRECIPITATION (INCHES)								
BASIN	December				12-Month Comparison			
	2012	Average (1900-2008)	Diff.	% of Average	Last 12 months	Average (1900-2008)	Diff.	% of Average
Superior	1.14	2.02	-0.88	56	27.82	30.51	-2.69	91
Michigan-Huron	2.16	2.36	-0.20	92	28.21	32.44	-4.23	87
Erie	2.65	2.67	-0.02	99	30.87	35.40	-4.53	87
Ontario	4.12	2.95	1.17	140	30.62	35.71	-5.09	86
Great Lakes	2.16	2.38	-0.22	91	28.88	32.64	-3.76	88

LAKE	December WATER SUPPLIES <sup>1</sup> (cfs)		December OUTFLOW <sup>2</sup> (cfs)	
	2012	Average <sup>3</sup> (1900-2008)	2012	Average <sup>3</sup> (1900-2008)
Superior	-6,000	-22,000	55,000	72,000
Michigan-Huron	74,000	34,000	157,000	183,000
Erie	10,000	21,000	173,000	201,000
Ontario	49,000	27,000	205,000	234,000

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

<sup>1</sup> Water 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 water supply denotes evaporation exceeded runoff and precipitation.

<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