

## Information

Recorded monthly mean 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* is available 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 <https://www.lre.usace.army.mil/Missions/GreatLakesInformation.aspx>.

### Great Lakes Basin Hydrology January 2022

Preliminary estimates of precipitation indicate the Great Lakes basin and each individual lake basin received below average precipitation during the month of January. Lakes Michigan-Huron and Erie both received under an inch of precipitation, which was only 35% of average for Lake Michigan-Huron and 37% of average for Lake Erie. Water supplies were well below average on all lakes likely due to the below average precipitation and above average evaporation. Lake Superior's water supplies for January is preliminarily estimated to be the lowest on record for the month. Outflows from Lakes Michigan-Huron, Erie, and Ontario continue to be above average, while Lake Superior's outflow remained below average.

From December to January, all the lakes experienced a decline in lake level. Lakes Superior declined 3 inches, Lakes Michigan-Huron and St. Clair each declined about 4 inches, Lake Erie declined 2 inches, and Lake Ontario declined less than an inch. The Great Lakes 6-month water level forecast projects Lakes Superior, Michigan-Huron, St. Clair, and Erie will continue to decline from January to February, while Lake Ontario is forecast to rise slightly.

PRECIPITATION (INCHES)								
BASIN	January				12-Month Comparison			
	2022	Average (1900-2018)	Diff.	% of Average	Last 12 months	Average (1900-2018)	Diff.	% of Average
Superior	1.05	1.89	-0.84	56	24.94	30.59	-5.65	82
Michigan-Huron	0.76	2.17	-1.41	35	28.39	32.87	-4.48	86
Erie	0.92	2.52	-1.60	37	34.45	35.91	-1.46	96
Ontario	1.74	2.76	-1.02	63	34.72	36.34	-1.62	96
Great Lakes	0.97	2.20	-1.23	44	28.93	32.99	-4.06	88

Lake	January WATER SUPPLIES <sup>1</sup> (cfs)		January OUTFLOW <sup>2</sup> (cfs)	
	2022	Average <sup>3</sup> (1900-2008)	2022	Average <sup>3</sup> (1900-2008)
Superior	-73,000	-12,000	61,000	69,000
Michigan-Huron	-17,000	61,000	196,000	161,000
Erie	-8,000	29,000	242,000	196,000
Ontario	13,000	32,000	262,000	222,000

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