

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 hhpm@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 August 2021

The Great Lakes basin overall received 97% of average of its precipitation in August. Lake Superior received 73% of its average August precipitation, while the other lakes received above average precipitation. Lakes Michigan-Huron and Erie received 108% and 107% of their respective average August precipitation amounts. Lakes Erie and Ontario each received 3.46 inches of precipitation which was near average for Lake Erie and 111% of Lake Ontario's August average amount. Like precipitation, runoff was predominantly below normal in the Superior basin, and above normal in the other lake basins. The last 12 months of precipitation for all lake basins ranges from 13% to 25% below average. Water supplies and outflows for August were above average on all lakes, except for Lake Superior.

From July to August, Lake Superior remained near its July level and fell less than an inch. Lake Michigan-Huron rose less than an inch from July to August, while Lakes St. Clair and Erie fell less than an inch. Lake Ontario rose about two inches from July to August. The 6-month forecast projects that Lake Superior will continue its seasonal decline that started in August. Lake Michigan-Huron is forecast to begin its seasonal decline in September after its brief rise. Lakes St. Clair and Erie are forecast to continue their seasonal declines that began in August. Lake Ontario is forecast to begin its seasonal decline starting in September.

PRECIPITATION (INCHES)								
BASIN	August				12-Month Comparison			
	2021	Average (1900-2017)	Diff.	% of Average	Last 12 months	Average (1900-2017)	Diff.	% of Average
Superior	2.29	3.15	-0.86	73	22.88	30.59	-7.71	75
Michigan-Huron	3.35	3.11	0.24	108	28.32	32.52	-4.20	87
Erie	3.46	3.23	0.23	107	30.54	35.55	-5.01	86
Ontario	3.46	3.11	0.35	111	30.75	35.83	-5.08	86
Great Lakes	3.07	3.15	-0.08	97	27.30	32.76	-5.46	83

Lake	August WATER SUPPLIES ¹ (cfs)		August OUTFLOW ² (cfs)	
	2021	Average ³ (1900-2008)	2021	Average ³ (1900-2008)
Superior	31,000	94,000	80,000	83,000
Michigan-Huron	113,000	54,000	221,000	195,000
Erie	10,000	-9,000	251,000	209,000
Ontario	18,000	8,000	284,000	256,000

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