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 Lake*s may be obtained 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
June 2021

The Great Lakes basin received slightly above average precipitation in June. The month of June was predominantly dry until the last weekend of the month when a significant amount of rain fell in central and eastern portions of the basin. All the individual lake basins experienced near or above average precipitation in June, except Lake Superior, due to the large amount of rain that occurred toward the end of the month. The last 12 months of precipitation for all lake basins range from 13% to 19% below average. Water supplies for June were below average on all lakes, except for Lake Erie. Also, outflows continue to be above average for all lakes.

From May to June, Lakes Superior and St. Clair rose about 2 inches, while Lake Erie rose 1 inch. Lake Michigan-Huron declined 1 inch from May to June and Lake Ontario remained near its May level in June. The 6-month forecast projects that Lake Superior will continue its seasonal rise throughout the summer before beginning its seasonal decline. Lakes St. Clair, Erie, and Ontario are forecast to begin or continue their seasonal decline from June to July. Lake Michigan-Huron has not experienced a seasonal rise this spring and early summer, but the water level is forecast to rise slightly from June to July before continuing its decline later this summer.

PRECIPITATION (INCHES)

BASIN	June				12-Month Comparison			
	2021	Average (1900-2017)	Diff.	% of Average	Last 12 months	Average (1900-2017)	Diff.	% of Average
Superior	2.13	3.31	-1.18	64	24.69	30.59	-5.90	81
Michigan-Huron	4.11	3.19	0.92	129	28.17	32.52	-4.35	87
Erie	4.15	3.50	0.65	119	28.69	35.55	-6.86	81
Ontario	3.07	3.19	-0.12	96	29.12	35.83	-6.71	81
Great Lakes	3.48	3.27	0.21	106	27.25	32.76	-5.51	83

Lake	June WATER SUPPLIES[1] (cfs)		June OUTFLOW[2] (cfs)	
	2021	Average[3] (1900-2008)	2021	Average[3] (1900-2008)
Superior	127,000	155,000	81,000	77,000
Michigan-Huron	186,000	205,000	215,000	192,000
Erie	41,000	32,000	242,000	216,000
Ontario	28,000	40,000	269,000	263,000

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