



US Army Corps  
of Engineers  
Detroit District



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## OCTOBER 2022 GREAT LAKES WATER LEVEL SUMMARY

### LAKE SUPERIOR

The seasonal decline of Lake Superior commenced in October. The lake's monthly mean water level fell to 602.36 feet. This monthly mean level was 3 inches above the October long-term average (LTA) level, 4 inches above the 2021 October level, and 12 inches below the record-high October level set in 1986. Provisional water supplies\* to Lake Superior in October were below average. Precipitation that was approximately 30% below average contributed to the below average water supplies. The latest 6-month water level bulletin projects Lake Superior to continue its seasonal decline into March 2023. From November to April, the 6-month forecast shows water levels 2 to 6 inches above the past year's levels, 1 to 2 inches above LTA levels, 2 to 13 inches above Chart Datum, and 13 to 15 inches below record-high levels.

### LAKE MICHIGAN-HURON

Lake Michigan-Huron continued its seasonal decline in October and fell 5 inches from September to October. Its October monthly mean level of 579.40 feet was 6 inches above its LTA October level, 12 inches below its 2021 October level, and 35 inches below its October record high level. Similar to September, water supplies\* in October were below average due to below average precipitation and below average runoff and above average evaporation. In the latest 6-month forecast, Lake Michigan-Huron continues its seasonal decline through January 2023. Over the next 6 months, the lake is predicted to be the 3 to 8 inches below last year's levels, but 5 to 6 inches above LTA levels. Also, the forecast shows Lake Michigan-Huron water levels 30 to 32 inches below the record-high levels.

### LAKE ST. CLAIR

Lake St. Clair is in the midst of its seasonal decline and fell 6 inches from September to October to a level of 574.97 feet. The October monthly mean level was 9 inches above the monthly LTA level, 14 inches below the last year's level, and 28 inches below the October record high level. The current 6-month water level forecast calls for Lake St. Clair to continue its seasonal decline before climbing somewhat from December to January. The November to April forecast shows water levels to be 6 to 13 inches below last year's level, with the exception of February, for which the forecasted monthly mean level is 2 inches above February 2022's ice jam-impacted level. Also, the 6-month forecast projects the lake's levels to be 7 to 12 inches above monthly LTA levels and 26 to 27 inches below record-high levels.

### LAKE ERIE

Lake Erie remains in its seasonal decline and its monthly mean level fell 6 inches from September to October. October's monthly mean level of 571.92 feet was 9 inches above the monthly LTA level, 14 inches below last year's level, and 24 inches below the record high October level. October water supplies\* to Lake Erie were substantially below average. A main component of water supplies - precipitation - was only about 50% of average for October. The latest 6-month forecast shows Lake Erie continuing to decline until December when its level will be steady into January. From November to April, the lake's levels are expected to be 6 to 15 inches below last year's levels and 24 to 27 inches below record high levels. Also, water levels are to remain above LTA levels by 7 to 9 inches over the next 6 months.

### LAKE ONTARIO

Lake Ontario continued its seasonal decline from September to October and dropped 6 inches to a level of 244.13 feet. This level was 8 inches below October's LTA level, 15 inches below the October 2021 level, and 32 inches below its record-high monthly level for October. Lake Ontario experienced considerably below average water supplies\* in October, impacted by precipitation that was only around 50% of average like Lake Erie. The 6-month forecast shows Lake Ontario's seasonal decline will likely conclude in November. Over the next 6 months, Lake Ontario levels are forecasted to be 2 to 6 inches below LTA levels, 11 to 18 inches below last year's levels, and 27 to 31 inches below record high water levels.

\* "Water supplies" refers to the combined quantity of precipitation plus runoff minus evaporation. Also known as the net basin supply.