

# DETROIT DISTRICT U.S. ARMY CORPS OF ENGINEERS CELRE-EHW 477 MICHIGAN AVENUE DETROIT, MICHIGAN 48226

## JANUARY 2020 GREAT LAKES WATER LEVEL SUMMARY

# **LAKE SUPERIOR**

Lake Superior continued its seasonal decline in January. Its monthly mean level fell approximately an inch from December to January to 602.72 feet. This January level surpassed its record-high January level previously set in 1986, was 4 inches above last January's level and 15 inches above the long term average (LTA) January level. Net basin supplies to Lake Superior were above average in January. Above normal temperatures likely resulted in enhanced runoff and reduced the amount of evaporation. Over the next month, Lake Superior's water level is expected to decline, then begin its seasonal climb in March. The lake is projected to exceed its record-high water level in February and tie its March record high, but fall short of its record-highs from April through July by 1 to 2 inches. Also, Lake Superior's level is projected to remain above its long-term average (LTA) levels by 13 to 15 inches through July. Lastly, Lake Superior is projected to be 1 to 3 inches above its levels of a year ago from February to April, but 1 to 2 inches below last year's levels from May to July.

## **LAKE MICHIGAN-HURON**

Lake Michigan-Huron's monthly mean level rose slightly from December to January to 581.56 feet. This level was 3 inches higher than its previous record high from 1987, 18 inches above last January's level and 38 inches above its LTA level. Net basin supplies received by Lake Michigan-Huron were the 3<sup>rd</sup> highest quantity the lake has received in January since 1900. Above average temperatures led to increased snowmelt and a higher fraction of precipitation falling as rain. Moreover, evaporation was below average as a result of the warmer than average temperatures. Due to continued wet conditions, Lake Michigan-Huron is forecasted to break its monthly mean record-high levels every month from February to July by 4 to 7 inches. In addition, water levels on Michigan-Huron are expected to remain 4 to 18 inches above last year's levels and 35 to 39 inches above its LTA through July.

#### **LAKE ST. CLAIR**

The monthly mean level of Lake St. Clair rose by 5 inches from December to January. Its January mean level of 576.77 feet tied its January record-high level previously set in 1986. This level was 37 inches above its monthly LTA and 15 inches above its level of one year ago. Lake St. Clair's level is forecasted to exceed its monthly record-high levels from February to June, and be an inch shy of its record-high in July. In addition, the lake is projected to be 4 to 18 inches above last year's levels through May, and be within an inch of its 2019 monthly levels in June and July.

#### **LAKE ERIE**

Lake Erie commenced its annual water level rise in January, rising 5 inches to a monthly mean level of 573.49 feet. This level was 7 inches above its January 2019 level and 31 inches above its LTA level. The lake experienced significantly above average net basin supply in January as a result of increased snowmelt and a higher fraction of precipitation falling as rain - both attributable to above average temperatures in the basin. The current 6-month forecast indicates that Lake Erie will continue its seasonal rise through May. Lake Erie is predicted to set new monthly record high levels from February to May, but fall 2 to 4 inches below record-highs in June and July. It is also forecasted to be 2 to 11 inches above last year's levels through May and 2 to 4 inches below last year's levels in June and July.

# **LAKE ONTARIO**

Lake Ontario began its seasonal rise in January, as its monthly mean level climbed 2 inches from December to January. The lake's monthly mean level of 246.23 feet was 9 inches above last January's level, 19 inches above LTA, and 4 inches below its record-high level. This January, the net basin supply to Lake Ontario was its 4<sup>th</sup> highest amount for January since 1900. The lake is projected to continue climbing over the next several months before peaking in May. Over the 6-month forecast horizon, Lake Ontario is expected to be 7 to 12 inches higher than they were last year from February to April, but 8 to 18 inches lower than they were last year from May to July.