

Hydrologic Conditions – October 2023

The Hydrologic Conditions Mapper for New York State has been updated for the month of October 2023 and can be accessed at:

<http://ny.water.usgs.gov/projects/eom/>

During October, monthly precipitation totals averaged 3.8 inches, and 0.5 inches below normal quantities across the State. The highest precipitation amount (6.2 inches) was recorded in Essex County, and the largest positive departure from normal quantities (1.9 inches) was recorded in Clinton County. The lowest precipitation amount (2.1 inches) was recorded in Yates County, and the largest negative departure from normal quantities (-2.1 inches) was recorded in Suffolk County.

Of the 32 index streamflow sites, 19 recorded normal levels, 10 recorded wet levels, 2 recorded dry levels, and 1 recorded very dry levels during October. The National Weather Service flood stage was not exceeded at any of the index streamflow sites during October in New York State.

The New York State Department of Environmental Conservation (NYSDEC) reported that all drought regions in New York State were in normal status at the end of October.

Average lake levels of Lake Ontario during October were about 0.1 feet above long-term monthly average water levels (<https://www.glerl.noaa.gov/data/wlevels/>).

New York City reservoirs were collectively at about 91.2 percent of capacity at the end of the month; about 12.3 percent more than the normal storage capacity of about 78.9 percent (<https://www1.nyc.gov/site/dep/water/reservoir-levels.page>).

To address the discontinuation of the nationwide USGS Groundwater Watch application, the New York Water Science Center has developed a New York Groundwater Watch application that can be accessed at <https://rconnect.usgs.gov/content/99cc8726-7baa-45af-a5bd-bced25ff82db/>. Monthly groundwater data from October 2023 indicates that water level observations in western New York were mostly normal and below normal while water level observations throughout the rest of the state (excluding Long Island) were mostly normal and above normal. Additionally, high water levels (greater than or equal to the 95th percentile) were observed at multiple wells in southeastern New York. Water level observations on Long Island ranged from low (less than the 5th percentile) to high. An effort to provide monthly groundwater conditions on the Hydrologic Conditions Mapper is still in progress.

Exceedance percentages shown on the Hydrologic Conditions Mapper are calculated for individual USGS sites. This information, along with additional information from other Federal, State, and local agencies, assists the NYSDEC and the State Drought Management Task Force with evaluating regional conditions for determination of drought classifications.

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