

Hydrologic Conditions – December 2023

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

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

During December, monthly precipitation totals averaged 5.4 inches, and 1.9 inches above normal quantities across the State. The highest precipitation amount (9.1 inches) and largest positive departure from normal quantities (5.2 inches) were recorded in Rockland County. The lowest precipitation amount (2.9 inches) was recorded in Livingston County, and the largest negative departure from normal quantities (-0.6 inches) was recorded in Cattaraugus County.

Of the 32 index streamflow sites, 5 recorded normal levels, 25 recorded wet levels, 1 recorded dry levels, and 1 recorded very dry levels during December.

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 December.

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

New York City reservoirs were collectively at about 98.1 percent of capacity at the end of the month; about 8.5 percent more than the normal storage capacity of about 89.6 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 December 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. Water level observations on Long Island were mostly normal and below normal but ranged from low (less than the 5th percentile) to high (greater than or equal to the 95th percentile). 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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