

## Hydrologic Conditions – September 2023

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

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

During September, monthly precipitation totals averaged 3.5 inches, and 0.5 inches below normal quantities across the State. The highest precipitation amount (14.1 inches) and largest positive departure from normal quantities (10.1 inches) were recorded in New York City. The lowest precipitation amount (1.1 inches) was recorded in Orleans County, and the largest negative departure from normal quantities (-3.0 inches) was recorded in Chautauqua County.

Of the 32 index streamflow sites, 16 recorded normal levels, 12 recorded wet levels, 3 recorded dry levels, and 1 recorded very dry levels during September. As a result of heavy rainfall from September 25 – 26, the National Weather Service (NWS) minor flood stage was exceeded at one index streamflow site, Wappinger Creek near Wappingers Falls, NY (01372500). Also, as a result of the heavy and intense rainfall over the New York City area from September 29 – 30, the NWS major flood stage at the non-index streamflow site, Bronx River at NY Botanical Garden at Bronx, NY (01302020), was exceeded for about 18 hours.

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 September.

Average lake levels of Lake Ontario during September were about 0.5 feet above long-term monthly average water levels (<https://www.glerl.noaa.gov/data/wlevels/>).

New York City reservoirs were collectively at about 90.9 percent of capacity at the end of the month; about 13.9 percent more than the normal storage capacity of about 77.0 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 September 2023 indicates that normal and above normal water levels were observed throughout the state, and that below normal water levels were generally only observed in western New York and on Long Island. 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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