

## Hydrologic Conditions – November 2021

The Hydrologic Conditions Mapper for New York State has been updated for the month of November 2021 and can be accessed at:

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

During November, monthly precipitation totals averaged 2.4 inches, and 1.2 inches below normal quantities across the State. The highest precipitation amount (5.7 inches) and largest positive departure from normal quantities (1.1 inches) were recorded in Oswego County. The lowest precipitation amount (0.8 inches) and the largest negative departure from normal quantities (3.0 inches) were recorded in Nassau County.

Of the 32 index streamflow sites, 14 recorded normal levels, 18 recorded wet levels, and none of the sites recorded dry or very dry levels during November. During November, the National Weather Service (NWS) flood stage was not exceeded at any streamflow sites 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 November.

Average lake levels of Lake Ontario during November were about 1.0 feet above long-term monthly average water levels (<https://www.glerl.noaa.gov/data/wlevels/>).

New York City reservoirs were collectively at about 92.8 percent of capacity at the end of the month; about 11.2 percent more than the normal storage capacity of about 81.6 percent (<https://www1.nyc.gov/site/dep/water/reservoir-levels.page>).

Thirty-three percent of the index groundwater wells with sufficient data for the month and period of record (92 in total) reported normal water levels for the month. Sixty-three percent reported above-normal water levels, three percent reported low water levels, and one percent of the index groundwater wells reported very-low water levels. Only above normal water levels were observed in the southeastern part of the state (excluding Long Island, where only normal water levels were observed). For the rest of the wells, there was no discernible strong geographical distribution of the different classifications. Bedrock and water-table wells both had low percentages of wells reporting water levels in their respective below-normal ranges (9 and 2 percent, respectively) and high percentages of wells reporting water levels in their respective above-normal ranges (58 and 67 percent, respectively).

None of the 92 wells with sufficient data reported new record low monthly median levels for November. Fourteen of the 92 wells reported new record high monthly median levels, and 13 of those wells have periods of record of 20 years or less. The other well that reported a new high monthly median level is a water-table well located in Niagara County that has records dating back to 1973; though, records do not exist for this well for a total of 7 years between 1997 and 2004.

Although the Hydrologic Conditions Mapper showed only three reporting wells with sufficient data on Long Island—all of which reported normal water levels—the USGS Groundwater Watch (at <https://groundwaterwatch.usgs.gov/>) showed that many wells in Nassau and Suffolk Counties continue to indicate below-normal water levels at the end of November.

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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