

Hydrologic Conditions – January 2022

The Hydrologic Conditions Mapper for New York State has been updated for the month of January 2022 and can be accessed at:

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

During January, monthly precipitation totals averaged 2.1 inches, and 0.8 inches below normal quantities across the State. The highest precipitation amount (4.3 inches) and largest positive departure from normal quantities (0.8 inches) were recorded in New York City. The lowest precipitation amount (1.0 inches) was recorded in Washington County and the largest negative departure from normal quantities (2.2 inches) was recorded in Warren County.

Of the 32 index streamflow sites, 21 recorded normal levels, 10 recorded dry levels, 1 recorded very dry levels, and none of the sites recorded wet levels during January. The National Weather Service (NWS) flood stage was not exceeded at any streamflow sites during January 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 January.

Average lake levels of Lake Ontario during January 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 85.0 percent of capacity at the end of the month; about 4.6 percent less than the normal storage capacity of about 89.6 percent (<https://www1.nyc.gov/site/dep/water/reservoir-levels.page>).

Fifty-three percent of the index groundwater wells with sufficient data for the month and period of record (93 in total) reported normal water levels for the month. Twelve percent reported above-normal water levels, 20 percent reported low water levels, and 15 percent of the index groundwater wells reported very-low water levels. There was no discernible strong geographical distribution of the different water level classifications. Bedrock and water-table wells both had higher percentages of wells reporting water levels in their respective below-normal ranges (47 and 27 percent, respectively) than percentages of wells reporting water levels in their respective above-normal ranges (19 and 7 percent, respectively).

Eight of the 92 wells with sufficient data reported new record low monthly median levels for January. Two of the 92 wells reported new record high monthly median levels. All of the wells with new record low or high monthly medians have periods of record of 19 years or less.

Although the Hydrologic Conditions Mapper showed only four reporting wells with sufficient data on Long Island—three of which reported normal water levels and one of which reported dry 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 January.

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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