

## Hydrologic Conditions – February 2022

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

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

During February, monthly precipitation totals averaged 3.6 inches, and 1.2 inches above normal quantities across the State. The highest precipitation amount (5.5 inches) and largest positive departure from normal quantities (2.5 inches) were recorded in Lewis County. The lowest precipitation amount (2.6 inches) was recorded in Chemung County and the smallest positive departure from normal quantities (0.1 inches) was recorded in Nassau County. There were no negative departures from normal quantities recorded in February.

Of the 32 index streamflow sites, 6 recorded normal levels, 26 recorded wet levels, and none of the sites recorded dry or very dry levels during February. National weather service (NWS) flood stages were exceeded at the following 7 of the 32 index streamflow sites during February: Hoosic River near Eagle Bridge, NY (01334500); West Branch Delaware River at Walton, NY (01423000); Allegheny River at Salamanca, NY (03011020); Tonawanda Creek at Batavia, NY (04217000); Genesee River at Wellsville, NY (04221000); Oatka Creek at Garbutt, NY (04230500); and Black River near Boonville, NY (04252500). Further, at Tonawanda Creek at Rapids, NY (04218000) the NWS moderate flood stage was exceeded on two separate occasions (for about 4.5 hours between February 18 and 19, and for about 2.5 hours on February 23), and at Black River near Boonville, NY (04252500) the NWS major flood stage was exceeded for about 5 hours on February 18 due to an ice jam. An ice jam also caused major flooding at the non-index streamflow site East Branch Ausable River at Au Sable Forks, NY (04275000), with the NWS major flood stage being exceeded by over four feet the morning of February 18.

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 February.

Average lake levels of Lake Ontario during February were about 0.9 feet above long-term monthly average water levels (<https://www.glerl.noaa.gov/data/wlevels/>).

New York City reservoirs were collectively at about 93.7 percent of capacity at the end of the month; about 3.7 percent more than the normal storage capacity of about 90.0 percent (<https://www1.nyc.gov/site/dep/water/reservoir-levels.page>).

Fifty-seven 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. Seventeen percent reported above-normal water levels, 21 percent reported low water levels, and 5 percent of the index groundwater wells reported very-low water levels. There was no discernible strong geographical distribution of the different water level classifications among the index wells except that no low or very-low water levels were reported in the southeastern part of the state. Bedrock and water-table wells both had higher percentages of wells reporting water levels in their respective below-normal ranges (31 and 22 percent, respectively) than percentages of wells reporting water levels in their respective above-normal ranges (22 and 15 percent, respectively).

None of the 92 wells with sufficient data reported new record low or high monthly median levels.

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 February.

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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