

Hydrologic Conditions – August 2018

The Hydrologic Conditions Mapper for New York State has been updated for the month of August 2018 and can be accessed at:

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

During August, monthly precipitation totals averaged 5.8 inches, and 1.9 inches above normal quantities across the State. The highest precipitation amount (9.4 inches) and the largest positive departure from normal quantities (5.6 inches) were recorded in Greene County. The lowest precipitation amount (2.6 inches) was recorded in Orleans County, while the largest negative departure from normal quantities (-1.3 inches) was recorded in Franklin County.

Of the 32 index streamflow sites, 11 recorded normal levels. Eighteen of the index streamflow sites recorded wet levels, 2 recorded dry levels, and 1 recorded very dry levels. During August, 2 (01503000 - Susquehanna River at Conklin, NY and 01513500 - Susquehanna River at Vestal, NY), stations exceeded National Weather Service moderate flood stage and 5 (01350101 - Schoharie Creek at Gilboa, NY, 01362500 - Esopus Creek at Coldbrook, NY, 01387450 - Mahwah River near Suffern, NY, 01423000 - West Branch Delaware River at Walton, NY and 01515000 - Susquehanna River at Waverly, NY) exceeded National Weather Service minor flood stage. In response to the significant and widespread flooding, the Governor declared a State of Emergency for Broome, Chemung, Chenango, Cortland, Delaware, Monroe, Onondaga, Ontario, Schulyer, Seneca, Steuben, Tioga, Wayne, Yates, and contiguous counties from August 14th through August 21st (<https://www.governor.ny.gov/news/video-b-roll-audio-photos-rush-transcript-governor-cuomo-issues-state-emergency-ports-finger>). A Drought Watch designation, as issued by NYS Department of Environmental Conservation (DEC), has continued in effect for Nassau and Suffolk Counties since July 2016.

Average lake levels of Lake Ontario during August were about 0.1 foot above long-term monthly average water levels (<https://www.glerl.noaa.gov/data/dashboard/GLWLD.html>).

New York City reservoirs were collectively at about 95.3 percent of capacity at the end of the month; about 17 percent more than the normal storage capacity of about 78.6 percent (http://www.nyc.gov/html/dep/html/drinking_water/maplevels_wide.shtml).

Forty percent of the index groundwater wells reported normal water levels for the month. Thirty-six percent reported above-normal water levels and 24 percent reported low to very-low water levels. Many of the wet wells were mostly confined to the southern part of the State, while many of the dry wells were confined to the northern and eastern parts of the State. Bedrock wells recorded a slightly greater percentage (29 percent) of wells with water levels in their respective below-normal ranges compared to water-table wells (22 percent). However, both bedrock and water-table wells had similar percentages of wells reporting water levels in their respective above-normal ranges (38 percent and 35 percent, respectively).

Of the 90 reporting wells, 2 reported new record low monthly median levels for August; both wells have periods of record less than 16 years. Sixteen of the 90 reporting wells reported new record high monthly median levels; one of which has records dating back to 1967. Although the Hydrologic Conditions Mapper showed only 3 reporting wells with sufficient data on Long Island—two of which reported below-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 August.

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 assist the NYSDEC and the State Drought Management Task Force to evaluate regional conditions for determination of drought classifications.

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