

## Hydrologic Conditions – March 2018

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

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

During March, monthly precipitation totals averaged 3.2 inches, and 0.5 inches below normal quantities across the State. The highest precipitation amount and the largest positive departure from normal quantities (4.8 inches and 1.8 inches above normal quantities) were recorded in Onondaga County. The lowest precipitation amount was recorded in Clinton County (1.76 inches and 0.53 inch below normal quantities). The largest monthly deficits were in Rockland County (-1.9 inches below normal quantities).

Of the 32 index streamflow sites, 29 recorded normal levels. Three of the index streamflow sites, all in the Catskill Mountain region, recorded dry levels. On March 2, over 1.4 inches of rain fell in part of Rockland County, resulting in one station slightly exceeding minor flood stage for a brief period. A combination of snow melt from warm weather and nearly an inch of precipitation from March 30 – 31, resulted in two stations exceeding minor flood stage for 1 - 2 days in Cortland and Broome Counties. Normal flows existed at the index streamflow site on Long Island where, except for January 2016, monthly streamflows have been below-normal levels since July 2015. Precipitation in Nassau and Suffolk counties remained below normal quantities by -0.7 and -1.1 inches, respectively. 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 March were about 0.8 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 97 percent of capacity at the end of the month; about 1 percent more than the normal storage capacity of about 96 percent ([http://www.nyc.gov/html/dep/html/drinking\\_water/maplevels\\_wide.shtml](http://www.nyc.gov/html/dep/html/drinking_water/maplevels_wide.shtml)).

Forty-nine percent of the index groundwater wells reported normal water levels for the month. Thirty-four percent reported above-normal water levels and 13 percent reported low-to-very-low water levels. There was no discernible geographical distribution of wells that fell into a particular classification; rather, wells in all conditions were scattered across the State. Bedrock wells recorded a similar percentage (34 percent) of wells with water levels in their respective above-normal ranges compared to water-table wells (33 percent). However, 6 percent of bedrock wells had water levels in their respective below-normal ranges, whereas no water-table wells were in below-normal ranges.

Of the 86 reporting wells, 6 wells reported new record high monthly median levels and 2 reported new record low monthly median levels for March; all 8 of these wells have periods of record less than 16 years. Although the Hydrologic Conditions Mapper showed only 3 reporting wells on Long Island—two of which reported below-normal water levels—the USGS Groundwater Watch (at <https://groundwaterwatch.usgs.gov/>) showed that the majority of wells in central and western Suffolk County reported below-normal water levels at the end of March.

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.

Chris L. Gazoorian, Acting Surface-Water Specialist, New York Water Science Center  
Phone: 518-285-5615 Email: [cgazoori@usgs.gov](mailto:cgazoori@usgs.gov)