

Hydrologic Conditions – May 2017

The Hydrologic Conditions Mapper for New York State has been updated for the month of May 2017 and can be accessed at:

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

As issued by NYS Department of Environmental Conservation (DEC), a Drought Watch has continued in effect for Long Island through the month of May. The drought watch for the rest State, which had been in place since July 2016, was discontinued as of May 2017 due to a return to normal precipitation levels and improved groundwater, stream flow, and lake levels. Long Island remains in a drought watch because precipitation quantities continue to be below normal levels.

For the second month in a row, frequent rain produced precipitation totals that exceeded normal monthly quantities across the State. Over 75 percent of the counties in New York reported precipitation totals of at least 5 inches; however, precipitation totals ranged from 3.7 inches in Suffolk County (Long Island) to 7.5 inches or more in Saratoga and Fulton Counties. The greatest departures from normal precipitation quantities were recorded in Rockland and Suffolk Counties—0.17 and 0.19 inches, respectively, below normal monthly precipitation totals—and Fulton County—3.55 inches above normal monthly precipitation totals.

Monthly streamflows across the State were at or above normal levels with the only exception being the index site on Long Island, where, except for January 2016, monthly streamflows have been below-normal levels since June 2015 (see USGS WaterWatch at <https://waterwatch.usgs.gov/>). Although riverine flooding was essentially nonexistent, widespread flooding along the Lake Ontario shoreline due to unusually high lake levels occurred throughout the month. Lake Ontario water levels were at record high levels and over 2 ft above average water levels for most of May (based on data provided by the NOAA Great Lakes Environmental Research Laboratory at <https://www.glerl.noaa.gov/data/>).

New York City reservoirs were collectively at full capacity (100 percent) at the end of the month; more than the normal storage level of 97.5 percent.

With few exceptions, groundwater levels were at or above normal levels across the State. Sixty-three percent of all index wells reported above-normal water levels for the month. An additional 30 percent reported water levels in their respective normal ranges. Only six index wells, or 7 percent, reported low-to-very-low water levels, and three of these wells were located on Long Island. A slightly higher percentage of bedrock wells (68 percent) recorded above-normal levels compared to water-table wells (62 percent). Water-table wells (9 percent) were more likely to record below-normal levels than bedrock wells (6 percent). Of the 90 reporting wells, only one reported a new record low monthly median value for May (a well in Suffolk County) and 11 reported new record high monthly median levels. Of these 12 wells, which recorded either monthly low or high record levels, only one (the one in Suffolk County) had a period of record that exceeded 15 years. Although the Hydrologic Conditions Mapper showed only three reporting wells on Long Island, the USGS Groundwater Watch (at <https://groundwaterwatch.usgs.gov/>) showed that the majority of wells on the Island reported below-normal water levels at the end of May.

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.

Let me know if you have any questions.

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