

Hydrologic Conditions – August 2017

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

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

Unlike the previous seven months, during which monthly precipitation totals across most of the State were above normal monthly quantities, those during August were close to or below normal quantities. Precipitation totals ranged from 2 inches in Yates County to 4.7 inches in Greene and Ulster Counties. The largest negative departure from normal precipitation quantities was recorded in Rockland County (-2.1 inches). The largest positive departure from normal precipitation quantities was recorded in Greene County (+0.9 inch). In general, the Catskill Mountains, northwestern Adirondack Mountains, and the far western regions of the State were wettest. Counties reporting lower than normal precipitation quantities were scattered across the State.

About 30 percent of the index streamflow sites recorded monthly streamflows that were above normal levels, but most sites had streamflows in their respective normal ranges. The sites with above-normal flows were generally located in those areas where precipitation quantities were greatest (as listed above). The only index site that recorded below-normal streamflows was on Long Island, where, except for January 2016, monthly streamflows have been below-normal levels since July 2015. 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.

High-water levels along the Lake Ontario shoreline continue to recede and were about 2 ft below the peak level that occurred during the last week of May (<https://www.glerl.noaa.gov//data/dashboard/GLWLD.html>). Average lake levels during August were about 2 ft higher than the long-term monthly average water level (<https://www.glerl.noaa.gov//data/dashboard/GLWLD.html>), but by the end of the month were within about 1.5 ft of the long-term monthly average level.

New York City reservoirs were collectively at about 86 percent of capacity at the end of the month; more than the normal storage capacity of about 78 percent (http://www.nyc.gov/html/dep/html/drinking_water/maplevels_wide.shtml).

With few exceptions, groundwater levels were at or above normal levels across the State. Forty-two percent of all index wells reported above-normal water levels for the month. An additional 49 percent reported water levels in their respective normal ranges. Only eight index wells, or 9 percent, reported low-to-very-low water levels, and these wells were scattered across the State. A slightly higher percentage of water-table wells (43 percent) recorded above-normal levels compared to bedrock wells (38 percent). Nine percent of both water-table and bedrock wells recorded below-normal levels. Of the 91 reporting wells, 13 wells reported new record high monthly median levels for August. Eleven of these wells have periods of record less than 15 years. The remaining two wells, found in Broome and Genesee Counties, have periods of record of 37 and 19 years, respectively. Although the Hydrologic Conditions Mapper showed only four reporting wells on Long Island—two of which reported normal levels and the other two 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 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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