Hydrologic Conditions – June 2017

The Hydrologic Conditions Mapper for New York State has been updated for the month of June 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 June. The drought watch that had been in place since July 2016 for the rest of the State, 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 third month in a row, frequent rain produced precipitation totals that exceeded normal monthly quantities across most of the State. Over 75 percent of the counties in New York reported precipitation totals of at least 4 inches; however, precipitation totals ranged from 2.5 inches in Rockland County to 8.2 inches in Lewis County. The greatest departures from normal precipitation quantities were recorded in Rockland County–2.0 inches below normal monthly precipitation totals–and Lewis County–4.2 inches above normal monthly precipitation totals. In general, the northern and central-eastern parts of the State were wettest and the southeastern corner was driest.

Monthly streamflows were above normal levels in a band from the upper Susquehanna River basin and the Catskill Mountains Region northward to the Adirondack Mountains Region. Elsewhere streamflows were at normal levels, except for 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/). Portions of the New York State Canal System were closed during June 6-9 due to high flows.

Although riverine flooding was essentially nonexistent, widespread flooding along the Lake Ontario shoreline due to unusually high lake levels continued for the second month in a row. Lake Ontario water levels were at record high levels and over 2.5 ft above monthly average water levels for May and June (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 about 97 percent of capacity at the end of the month; more than the normal storage capacity of about 94 percent.

With few exceptions, groundwater levels were at or above normal levels across the State. Forty-eight percent of all index wells reported above-normal water levels for the month. An additional 45 percent reported water levels in their respective normal ranges. Only six index wells, or 7 percent, reported low-to-very-low water levels, and four of these wells were located on Long Island. A slightly higher percentage of water-table wells (52 percent) recorded above-normal levels compared to bedrock wells (44 percent). Water-table wells (9 percent) were more likely to record below-normal levels than bedrock wells (3 percent). Of the 91 reporting wells, 5 wells reported new record high monthly median levels for June. Four of these wells have periods of record less than 13 years. The fifth well, found in Chenango County, has a period of record of over 40 years. Although the Hydrologic Conditions Mapper showed only four reporting wells on Long Island, the USGS Groundwater Watch (at https://groundwaterwatch.usgs.gov/) showed that the majority of wells on the Island, especially in central and western Suffolk County, reported below-normal water levels at the end of June.

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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