

## Hydrologic Conditions – April 2017

The Hydrologic Conditions Mapper for New York State has been updated for the month of April 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 New York through the month of April.

Snowfall in parts of the State near the beginning of April and frequent rain through the remainder of the month produced monthly precipitation quantities that generally exceeded normal April quantities across most of the State. Fifty percent of the counties in New York reported precipitation totals between 3.7 and 4.7 inches during the month; however, precipitation totals ranged from 2.7 inches in Rockland County to over 6 inches in Niagara and Erie Counties. In fact, the National Weather Service reported a period-of-record (since 1871) monthly maximum precipitation total of 6.38 inches at Buffalo. The greatest departures from normal precipitation quantities were recorded in Niagara County—3.26 inches above normal monthly precipitation totals—and Rockland County—0.87 inches below normal monthly precipitation totals. Below-normal precipitation totals generally were clustered in the southeastern corner of the State.

Monthly streamflows across the State were at or above normal levels with the only exception being the index site on Long Island, which had below-normal flows. Flows in many streams that have their headwaters in high-elevation areas of the State were sustained by snowmelt and rain during the first and second weeks of the month. Elsewhere and throughout the month, frequent rainfall contributed to sustained flows. High-flow events occurred across most of the State on April 7-8 and 21-22, and almost weekly high-flow events were recorded at sites in the northeastern area of the Adirondacks. Below-normal flows still persist on Long Island (see USGS WaterWatch at <https://waterwatch.usgs.gov/>) where, except for January 2016, monthly streamflows have been below-normal levels since June 2015.

Rainfall and snowmelt in the Catskill Mountains region continued to replenish the reservoirs in the New York City water-supply system. Reservoirs were collectively at near-full capacity (99.6 percent) at the end of the month; slightly more than normal storage (98.5 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 43 percent reported water levels in their respective normal ranges. Only 8 index wells, or 9 percent (down from 28 percent during March), reported low-to-very-low water levels. These percentages held true for both water-table and bedrock wells. Of the 88 reporting wells, only 2 reported new record low monthly median values for April and 7 reported new record high monthly median levels. Of these 9 wells, which recorded either monthly low or high record levels, none had periods of record that exceeded 15 years. Although the Hydrologic Conditions Mapper showed only one reporting well 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 April.

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.

William F. Coon, Surface-Water Specialist, New York Water Science Center  
Phone: 607-266-0217, ext. 3019

Email: [wcoon@usgs.gov](mailto:wcoon@usgs.gov)