

Hydrologic Conditions – April 2022

The Hydrologic Conditions Mapper for New York State has been updated for the month of April 2022 and can be accessed at:

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

During April, monthly precipitation totals averaged 4.1 inches, and 0.6 inches above normal quantities across the State. The highest precipitation amount (6.6 inches) and largest positive departure from normal quantities (2.4 inches) were recorded in Ulster County. The lowest precipitation amount (1.9 inches) was recorded in Yates County and the largest negative departure from normal quantities (1.5 inches) was recorded in Suffolk County.

Of the 32 index streamflow sites, 20 recorded normal levels, 7 recorded wet levels, and 5 recorded dry levels during April. None of the sites recorded very dry levels. As a result of heavy rainfall on and around April 8, National Weather Service (NWS) flood stages were exceeded at 6 of the 32 index streamflow sites: Hudson River at Hadley, NY (01318500); Sacandaga River near Hope, NY (01321000); Wappinger Creek near Wappingers Falls, NY (01372500); Beaver Kill at Cooks Falls, NY (01420500); West Branch Delaware River at Walton, NY (01423000); and Susquehanna River at Conklin, NY (01503000). No NWS moderate or major flood stages were exceeded at any of the 32 index streamflow sites during April. However, due to the April 8 rainfall, major flood stages were exceeded at two non-index streamflow sites: Tremper Kill near Andes, NY (01415000) and West Branch Delaware River upstream from Delhi, NY (01421900).

The New York State Department of Environmental Conservation (NYSDEC) reported that all drought regions in New York State were in normal status at the end of April.

Average lake levels of Lake Ontario during April were about 0.8 feet above long-term monthly average water levels (<https://www.glerl.noaa.gov/data/wlevels/>).

New York City reservoirs were collectively at about 98.1 percent of capacity at the end of the month; even with the normal storage capacity of about 98.1 percent (<https://www1.nyc.gov/site/dep/water/reservoir-levels.page>).

Forty-one percent of the index groundwater wells with sufficient data for the month and period of record (94 in total) reported normal water levels for the month. Forty-eight percent reported above-normal water levels, 10 percent reported low water levels, and one percent reported very-low water levels. Low water levels were mostly confined to the western part of the state; otherwise, there was no discernible strong geographical distribution of the wells that fell into the normal and above normal classifications. Bedrock and water-table wells both had higher percentages of wells reporting water levels in their respective above-normal ranges (51 and 46 percent, respectively) than percentages of wells reporting water levels in their respective below-normal ranges (13 and 9 percent, respectively).

Ten of the 93 wells with sufficient data reported new record high monthly median levels for April. All of those wells have periods of record of 21 years or less. One of the 94 wells with sufficient data, a water-table well located in Schuyler County with records dating back to 2003, reported a new record low monthly median level for April.

Although the Hydrologic Conditions Mapper showed only three reporting wells with sufficient data on Long Island—all of which reported normal water levels—the USGS Groundwater Watch (at <https://groundwaterwatch.usgs.gov/>) showed that many other wells in Nassau and Suffolk Counties continued to indicate 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, assists the NYSDEC and the State Drought Management Task Force with evaluating regional conditions for determination of drought classifications.

Alex Graziano, Hydrologist, New York Water Science Center

Phone: 518-527-5843

Email: agraziano@usgs.gov