

Hydrologic Conditions – July 2022

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

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

During July, monthly precipitation totals averaged 3.2 inches, and 0.9 inches below normal quantities across the State. The highest precipitation amount (5.2 inches) and largest positive departure from normal quantities (1.0 inches) were recorded in Lewis County. The lowest precipitation amount (1.5 inches) and largest negative departure from normal quantities (-2.7 inches) were recorded in Chemung County.

Of the 32 index streamflow sites, 17 recorded normal levels, none recorded wet levels, 13 recorded dry levels, and 2 recorded very dry levels during July. The National Weather Service (NWS) flood stage was not exceeded at any of the index streamflow sites during July in New York State.

At the end of July, a Drought Watch designation, as issued by New York State Department of Environmental Conservation (NYSDEC), went into effect for 21 counties in four of the nine drought regions (Long Island, Great Lakes, Finger Lakes, and Southern Tier).

Average lake levels of Lake Ontario during July were about 0.2 feet below long-term monthly average water levels (<https://www.glerl.noaa.gov/data/wlevels/>).

New York City reservoirs were collectively at about 82.5 percent of capacity at the end of the month; about 6.9 percent less than the normal storage capacity of about 89.4 percent (<https://www1.nyc.gov/site/dep/water/reservoir-levels.page>).

Fifty-three percent of the index groundwater wells with sufficient data for the month and period of record (97 in total) reported normal water levels for the month. Six percent reported above-normal water levels, 27 percent reported low water levels, and 14 percent reported very-low water levels. In the Adirondack region and northernmost parts of the state, mostly normal water levels were recorded. Distributed throughout much of the rest of the state, was a mix of normal, low, and very low water levels. Bedrock and water-table wells both had lower percentages of wells reporting water levels in their respective above-normal ranges (12 and 2 percent, respectively) than percentages of wells reporting water levels in their respective below-normal ranges (41 and 42 percent, respectively).

Six of the wells with sufficient data reported new record low monthly median levels for July. All of those wells have periods of records of 17 years or less. None of the 97 wells with sufficient data reported new record high monthly median levels for July.

Although the Hydrologic Conditions Mapper showed only four reporting wells with sufficient data on Long Island—two of which reported normal water levels, one of which reported low water levels, and one of which reported very low water levels—the USGS Groundwater Watch (<https://groundwaterwatch.usgs.gov/>) showed that many wells in Nassau and Suffolk Counties continued to indicate below-normal water levels at the end of July.

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.

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