Hydrologic Conditions – January 2016

The Hydrologic Conditions Mapper for New York State has been updated for the month of January 2016 and can be accessed at:

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

The average precipitation across most of New York was between 1.4 and 2.5 inches, but ranged from 0.89 inches in Steuben and Yates Counties to over 4 inches in counties near New York City and on Long Island. The large quantities recorded in the southeastern corner of the State were primarily a result of a nor'easter blizzard that dropped from 25 to 30 inches of snow on January 23rd. Precipitation totals exceeded normal monthly quantities in this area. Elsewhere, precipitation totals were generally 0.5 to 1.0 inch below normal quantities, but this deficit was greater in the Adirondack Mountain region, where a maximum deficit of -1.96 inches was recorded for Hamilton County.

Streamflows were generally in the normal range across the State. Only two index basins—on the upper Hudson River—reported above-normal flow conditions. The likely explanation for this apparent discrepancy is that precipitation that normally falls as snow during a typical January, fell as rain this January. Therefore, although total precipitation was low, that which fell was more likely to runoff and contribute to streamflows. Only one site, at the northern end of the State, reported below-normal flows. Water levels in streams were intermittently affected by ice when below-freezing temperatures persisted for more than a couple days. New York City reservoirs were collectively at normal capacity (about 88 percent) at the end of the month.

Groundwater levels were both above- and below-normal levels across the State, with no discernible pattern. Almost 50 percent of the reporting sites reported water levels within their respective normal ranges. Forty-one percent of all sites reported low-to-very-low water levels with a slightly higher percentage of water-table wells (versus bedrock wells) in this category. Except for one bedrock well, the wells with January period-of-record low water levels were sites with less than 13 years of record. The lone site—a bedrock well in Cayuga County—with a January period-of-record high water level has only 10 years of record.

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.