Weekly Drought Report November 2, 2010

Precipitation

Over the last 7 days, Pennsylvania received between 0.01 to about 2.0 inches of precipitation with the greatest amounts concentrated in northwest part of the state and in a band running from Harrisburg up through Allentown area.

The rainfall Pennsylvania received over the past week has improved the precipitation indicators. For example, of the 9 county indicators last week that were in warning, only 3 remain today in warning with the others improving to watch or normal condition.

Negative 90-day departures from normal continue to persist in the western third of the state with 12 counties having negative values the highest of which include -4.5 inches in Warren County and -3.8 inches in Armstrong County.

Surface Water

A review of instantaneous streamflows indicate that current flows remain at or above average over all areas of the state except the southern portion west of the Susquehanna River to the Pennsylvania state line. Overall, the instantaneous streamflows are dropping. The 30-day moving average streamflow values are decreasing across the state except for the northwest portion where they continue to rise. Beaver County has now exited "Watch" status and is in "Normal" status. This improvement results in the entire state being in "Normal" status for this date.

Groundwater

The 30-day moving averages of county groundwater well levels are showing mixed results. Of the 17 counties reviewed, 8 monitoring wells (Adams, Beaver, Berks, Elk, Luzerne, Lycoming, Monroe and Tioga) show improvement with increases in groundwater well levels, while 9 monitoring wells show either not much change (Somerset) or declining levels (Allegheny, Armstrong, Bedford, Butler, Fayette, Northumberland, Potter, Venango). All indicators remain in normal status except for Fayette County.

Palmer Drought Severity Index

As was last week, the drought indicators remain at "normal or above" status.

Public Water Supply Agencies (PWSAs)

25 PWSAs remain on restrictions and 7 PWSAs have returned to normal operations with the removal of all restrictions.

Precipitation forecast

Trace levels of precipitation accumulations are forecast over the next 7 days with greater accumulated amounts between 0.25 in the east and 1.5 inches in the west from November 10th through November 18th.

Conditions have improved statewide over the past month. The greatest recovery occurred in the eastern portion of the state due to Tropical Storm Nicole arriving at the tail end of September, which eliminated the 90-day precipitation deficits. Conditions in the western portion of the state improved only slightly. Precipitation deficits remain, ranging from 2 to 4.5 inches and streamflows and groundwater well levels are showing declining trends that will persist unless meaningful precipitation is received in the coming months.

The Statewide Drought Task Force is scheduled to meet next week on Nov. 9. Conditions will be discussed at that time. It is likely that the eastern portion of PA will warrant lifting of the drought watch and warning declarations, with the western portion of PA moving to drought watch from drought warning or remaining in drought watch.