

Weekly Drought Report October 04, 2010

Precipitation

Over the past week, the remnants of tropical storm Nicole dropped 7 to 8 inches of rain on the eastern portion of the state and 4-5 inches of rain on the central portion of the state, which has eliminated the 90-day precipitation deficits for those areas. However, the western side of the state received only 1 to 2.5 inches, which only reduced the precipitation deficits somewhat. Negative 90-day departures over -2.9 inches still exist in Greene, Washington, Beaver, Armstrong and Venango Counties with less negative departures throughout the western part of the state.

Surface Water

Instantaneous streamflows have improved significantly across the Central and Eastern portions of the state. In the West, instantaneous streamflows range from above normal to much below normal. Based upon the Oct. 2, 2010 indicator map, the 30-day running average streamflow conditions have improved to normal status for all counties except Beaver, Elk, Mercer and Somerset which remain in “watch” status.

Groundwater

With the changes in groundwater usually lagging behind precipitation events, improvements in the moving 30-day average well levels will likely take time in reaction to recent and forecast precipitation events. Proportionately more precipitation makes its way as groundwater recharge at this time of year with diminishing evapotranspiration that comes with cooler weather, and less plant uptake.

Palmer Drought Severity Index

At this time, the drought indicators continue to be in “watch” status. However, this indicator is updated on a weekly basis on Tuesdays and may change tomorrow due to the recent precipitation.

Precipitation forecast

The 7-day forecast indicates additional precipitation ranging from 0.5 inches up to about 3 inches in the northcentral part of the state. This precipitation will continue to reduce precipitation departures from normal and result in further improvements in surface water levels and to groundwater through recharge.

A more thorough review of the past weeks precipitation impacts on the drought monitoring indicators will be conducted later this week. It is likely that parts of the Commonwealth will be approaching normal conditions. A recommendation for lifting the drought watch and warning declarations for certain areas may be warranted in the upcoming weeks.

Note- There was a disk failure at USGS over the weekend and the drought indicator maps displayed today do not reflect data beyond Oct. 2, 2010. USGS is resolving the issue and the drought indicator maps will be current beginning on Oct. 6.