

## **Drought Report December 2, 2016**

### **Preface**

This report summarizes the indicators used in drought monitoring: groundwater, surface water, precipitation, and palmer index. Indicator readings are recorded in each county. When a reading reaches a pre-determined trigger level, the indicator is coded as “Normal,” “Watch,” “Warning,” or “Emergency” for that county.

These indicators are used to evaluate the drought status of each county; they are not themselves drought declarations. Drought declarations are determined by the Commonwealth Drought Coordinator, with support of the Drought Task Force, and given final approval by the Governor.

### **Summary: Week of November 28 - December 2, 2016**

**Precipitation:** The week brought welcome precipitation primarily to the east of the Appalachians, but not to levels that make up for longer term precipitation departures or enable groundwater and stream levels to fully recover to normal for this time of year.

As of 8 am on December 2, 72-hour cumulative precipitation ranged from averages of 0.25 inches in the western part of the state up to 2.0 inches along the Delaware Basin in the east. The precipitation produced peaking in stream levels in many areas above median daily values, particularly in the east, with groundwater levels rising noted in network observation wells.

Rainfall for the next 7 days is forecast to range from 0.5 inches generally within the Delaware Basin to the east up to 1.6 inches in the in the Erie/northwest area.

The 90-day precipitation departures ranged from 50% below normal in the south central and eastern part of the state to 75% above normal in Armstrong, Jefferson and Allegheny Counties. Departures ranged from -5.6 inches in Monroe County to +6.0 inches in Jefferson County.

**Groundwater:** Although the precipitation brought some rise in groundwater levels, some groundwater indicators in network monitoring wells, particularly in the mid-state, have recently moved from “Watch” indicator status to “Warning” status due to the historically-based higher average well levels at this time of the year that factors into the computation of the indicator status.

**Stream flows:** Stream flows generally increased and peaked in response to the precipitation and began declining as precipitation ended with current instantaneous stream flows now ranging from above to normal throughout the state with a number of gage stations showing below normal primarily at locations below dams.

**Public water supplies:** Since the last report, five additional Public Water Supply Agencies have been identified as implementing either voluntary or mandatory restrictions: East Stroudsburg Borough, Hanover Borough Water Dept, Mary D Community Association, Schuylkill County Municipal Authority, and Schuylkill Haven Borough.

Complete list of systems implementing restrictions:

- Albion Borough Water System, Erie County
- Bedford Borough Water Authority, Bedford County
- Galeton Borough Water Authority, Potter County
- Franklin County General Authority, Franklin County
- Hanover Borough Water Dept., York County
- Huntingdon Borough Water Department, Huntingdon County
- Jay Township, Elk County
- Mahanoy Township Authority, Schuylkill County
- Mary D Community Assoc., Schuylkill County
- North Heidelberg Water, Berks County
- Petersburg Commons Water System, Huntingdon County
- Richfield Area Joint Authority, Juniata County
- Schuylkill County Municipal Authority, Schuylkill County
- Schuylkill Haven Borough, Schuylkill County
- Shinglehouse Borough Water Department, Potter County
- Timeless Towns of America, Adams County
- Wellsboro Municipal Authority, Tioga County

**Delaware River Basin:** On November 23, the Delaware River Basin Commission (DRBC) issued a special permit for coordinated operations of regional reservoirs, out-of-basin diversions, and Delaware River flow objectives, with a current “Watch” drought status basin-wide in response to persistent dry conditions. As of November 22, the salt front was at River Mile 89, which is 19 miles upstream of the normal location for November.

**Drought Task Force:** The Commonwealth Drought Task Force met on Wednesday, November 30, 2016, with the Commonwealth Drought Coordinator recommending that no changes in drought declarations be made. Conditions will continue to be monitored on a daily basis and reassessed when the task force meets again on Friday, December 16.

