

News Release

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U.S. Geological Survey

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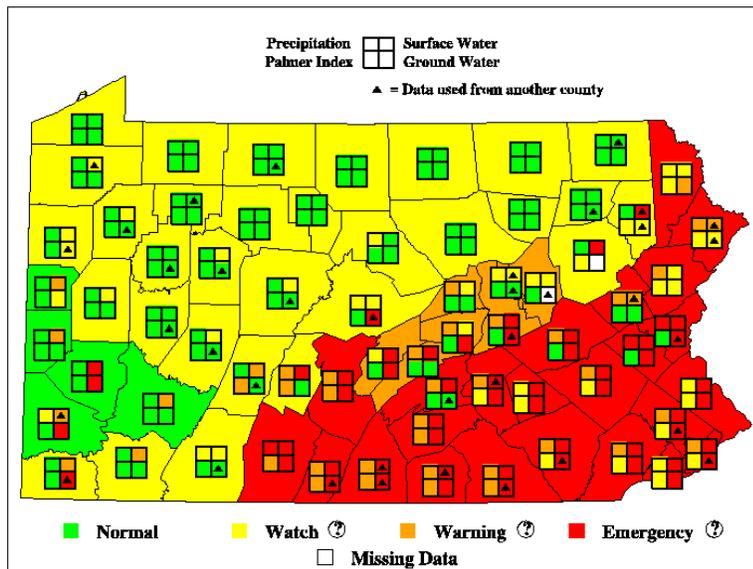
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Drought Conditions Monitoring Web Site Now Publicly Available

A new U.S. Geological Survey (USGS) Web site showing precipitation, stream flows, ground water levels, and the Palmer Drought Severity Index is now available to the public and Pennsylvania water managers. The Pennsylvania Department of Environmental Protection (DEP) relies upon these parameters, among others, to monitor water supply drought conditions. This new web site is available at <http://pa.water.usgs.gov/monitor/>

The four parameters displayed on the web site are averaged over time and are used only as indicators of the four stages of drought that Pennsylvania uses for drought management - normal, watch, warning and emergency. Actual declarations of any particular drought stage in a given county are based upon a review of these parameters in combination with other considerations. No one parameter or combination of particular parameters automatically establishes a stage of drought.

Composite Indicator Map (Precipitation Based on 90-Day Departure) as of Thursday March 14, 2002



For news release and images, go to [http:// pa.water.usgs.gov/reports/press_releases/2002/](http://pa.water.usgs.gov/reports/press_releases/2002/)

At the end of February the 90-day departure from average precipitation in three of Pennsylvania's 67 counties was greater than 45 percent below average (indicating drought emergency for that duration of precipitation) and in 22 counties fell between 35 and 45 percent below average (indicating drought warning for that duration of

precipitation). Precipitation during late fall and winter usually replenishes the groundwater supply which, in turn, contributes flow to rivers during times of low flow. Recharge to groundwater has been minimal this year, and there is little water in storage from snowpack or ice to replenish the supply.

At the end of the month of February, streamflow at 18 of the 56 USGS streamflow stations used to monitor the drought, had streamflows that are expected to occur less than 5 percent of the time. The monthly average depth to water level at 17 of the 41 wells used to monitor the drought, experienced low water levels that are expected to occur less than 5 percent of the time. Record low flows at streamflow stations and water levels at observations wells occurred in February. These sites were located primarily in the Delaware and Lower Susquehanna River Basins, according to John Nantz, Information Specialist, at the USGS in New Cumberland, Pennsylvania. Slight streamflow increases resulted from the March 2-3 and 12-13 rainfalls, but flows returned to near record low levels within days.

Tracking streamflow and groundwater levels is essential to monitoring drought severity and recovery. Short-term rainfall will improve soil moisture and aid farmers, but only adequate rainfall over a period of time can replenish groundwater and streamflow and fill reservoirs. Together, these sources supply water to all public and private users throughout Pennsylvania

The real-time streamflow stations used in this analysis are operated in cooperation with other Federal agencies, the Pennsylvania Department of Environmental Protection, and some local agencies. The observation wells used in this analysis are operated in cooperation with the Pennsylvania Department of Environmental Protection. The USGS provides real-time data for 222 streamflow stations and 67 wells across Pennsylvania.

The U.S. Geological Survey is the Nation's largest water, earth and biological science, and civilian mapping agency providing reliable, impartial scientific information to resource managers, planners, and other customers. This information is gathered in every state by USGS scientists to minimize the loss of life and property from natural disasters, contribute to the sound conservation and the economic and physical development of the Nation's natural resources, and enhance the quality of life by monitoring water, biological, energy, and mineral resources.

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In-depth information about USGS programs may be found on the USGS home page at <http://www.usgs.gov>

For more information on drought conditions, visit the PA PowerPort at www.state.pa.us, PA Keyword: "drought." Additional information can be obtained by calling Pennsylvania's toll-free drought hotline at 1-888-457-6653. Questions also can be emailed to droughtinfo@state.pa.us