

# **Regional Water Supply Status**

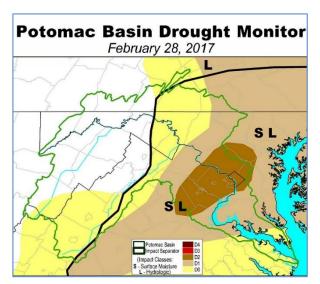
March 7, 2017

### **CURRENT CONDITIONS**

NOAA has designated parts of the Potomac Basin in differing drought conditions. The February 28, 2017 NOAA Potomac Basin Drought Monitor Report designated areas as:

- 36% is not dry
- 35% is abnormally dry
- 18% is in moderate drought status
- 11% is in severe drought status

Driest conditions are primarily located in the District, Alexandria, and Montgomery, Fairfax, Arlington and Prince William Counties. Abnormal dryness has the potential, depending on the amount of spring rains, to slow planting and growth of crops or pastures.



Normal conditions are found in the upper Potomac Basin that feeds our drinking water supplies. Stream and river flows are below average but are sufficient for normal drinking water withdrawals and flows needed to support environmental stream conditions.

The drought designations are primarily due to lower than normal soil moisture levels. Future, near-term rain amounts could affect agriculture and landscaping in localized areas.

## **DEFINING DROUGHT**

A drought is defined by NOAA as a deficiency in precipitation over an extended period, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people.

### **INDICATORS**

Regional drought status is determined primarily using the U.S. Drought Monitor Classification scheme. Drought intensity categories are measured using five key indicators addressing stream flow, soil moisture and precipitation. In the COG region, local reports and supplementary information about Potomac River flows at Point of Rocks and Little Falls, drinking water reservoir status, and groundwater levels are also used to evaluate drought status and severity.

Drought can be very localized due to localized rain patterns, changes in geography, and other factors. Conditions in the Potomac River Basin frequently differ between the upper and lower portions of the Basin. For example, the average rainfall deficit in the Basin is 4 inches during this "water year," or the time since October 1, 2016, while the deficit at Reagan National Airport is 7 inches, out of the typical total of 15 inches of rain by this date.

NOAA's drought outlook shows that the region should have no drought areas by May 31.

### **REGIONAL WATER SUPPLY STATUS**

The Potomac River flow is sufficient to meet drinking water supply needs. The region's water storage reservoirs are full, in normal operational status. Groundwater levels are sufficient to meet demand.

<u>Drinking Water Reservoirs</u>		Water Supply Storage Reservoirs	
Occoquan	Normal Operations	Jennings Randolph	100% Full
Patuxent	Normal Operations	Little Seneca	100% Full

Current water supply conditions in the Potomac Basin can be put into context when compared with conditions in California prior to the 2016-2017 winter season.

	Metropolitan <u>Washington</u>	<u>California</u>
Duration	1 winter	5-year drought 3-year State of Emergency
Drinking Water Supply	Full reservoirs	Reservoirs have been depleted, but are now full. The snow pack and rivers are recovering.
Impacts	Short duration; Abnormal dryness	Long duration; Major crop/pasture losses; Widespread water shortages; Mandatory water restrictions.

COG partners with regional water utilities, jurisdictions, <u>ICPRB</u><sup>1</sup>, the National Weather Service, USGS as well as state agencies to monitor and assess water supplies. <u>Conditions are reported</u> monthly from April to September. Report are issued more frequently if conditions warrant. Drought Watch conditions trigger additional actions by localities and drinking water utilities.

### REGIONAL RESILIENCE

Recent investments in quarry storage reservoirs such as Luck Stone and Vulcan in Virginia, and future options such as water system interconnections and new storage reservoirs, including the Travilah quarry in Maryland, provide additional regional resilience for drought and water supply emergencies.

### REGIONAL DROUGHT RESPONSE

The region's drinking water systems are designed to withstand major droughts. COG's Water Supply and Drought Awareness Plan (the Plan) was adopted by the COG Board in 2000. The Plan builds upon regional drought agreements dating to the 1970s and insures a coordinated regional response during times of drought. Jurisdictions and water utilities promote Wise Water use messages throughout the year as a part of the regional drought plan. A "Drought Watch" was last issued in September 2010. In the 17 years since the Plan was adopted, the region has never issued a "Drought Warning" or "Drought Emergency".

<sup>&</sup>lt;sup>1</sup> Interstate Commission on the Potomac River Basin