

REGIONAL WATER SUPPLY AND DROUGHT AWARENESS RESPONSE PLAN OVERVIEW

UPDATED: MAY 2024

WATER SUPPLY AND DROUGHT AWARENESS RESPONSE PLAN

Adopted in 2000, [COG's water supply and drought response awareness plan \(The Plan\)](#) is implemented during drought conditions for the purpose of coordinated regional response. The Plan consists of two interrelated components: (1) A year-round public outreach campaign emphasizing wise water use and conservation; and (2) A water supply and drought awareness and response plan.

The first part of the Plan, a (year-round) wise water use campaign, consists of indoor and outdoor water conservation messages from the region's drinking water utilities. The second part of the Plan establishes a series of triggers and associated actions tailored to the severity of drought conditions. Actions include coordinated regional decision-making through the Drought Coordination Committee (DCC) concerning drought stage declarations (NORMAL, WATCH, WARNING, EMERGENCY), public messaging, and if necessary, coordination concerning implementation of water use restrictions (WARNING and EMERGENCY stages).

Since adopting the Plan in 2000, the COG region has never declared a drought warning or emergency.

LAST DROUGHT WATCH DECLARED IN 2010

Due to unusually dry conditions, COG's DCC declared a drought "WATCH" in September 2010. A press release was issued that urged residents and businesses to conserve water. It also emphasized that water supply reservoirs constructed in the early 1980s to provide water during droughts were full, but would be utilized if needed. The WATCH ended when Tropical Storm Nicole hit the region.

This was the third time since the regional plan was adopted that the region has declared a WATCH. The DCC has never declared a WARNING or EMERGENCY for the Potomac River system, although in 2002, the combined reservoir storage in Jennings Randolph and Little Seneca briefly dropped to levels approaching the WARNING trigger. Due to sufficient rainfall it was not necessary to implement this stage of the plan.

Since 2000, several smaller community water systems have briefly declared WARNING or EMERGENCY stages due to limited rainfall and less resilient water supply systems.

COG's ROLE DURING TIMES OF DROUGHT

The COG Chief Administrative Officer's Committee, in conjunction with area water utility general managers, supported by a technical committee of the Interstate Commission on the Potomac River Basin (ICPRB) staff, local government staff, state water supply coordinators, and the NOAA Climate Prediction Center, comprise the Drought Coordination Committee (DCC) under the Plan.

The DCC is the delegated authority under the Plan for issuing drought stage declarations (e.g., WATCH, WARNING, and EMERGENCY) and public notification associated with each stage. Should the region declare a drought WARNING or EMERGENCY, the DCC would be responsible for coordinating issuance of public messages and water use restrictions to insure regional consistency.

The DCC would meet frequently via conference call to help manage drought response for the region. When conditions are in the NORMAL range, the CAOs receive monthly reports between April and October. When abnormally dry conditions persist in the Potomac River basin, as measured by the National Weather Service, the DCC may be convened to consider issuance of a drought WATCH.

COG's WATER SUPPLY AND DROUGHT AWARENESS REPORT

COG issues monthly Water Supply and Drought Awareness Reports during the drought monitoring season (typically May – October) unless conditions deteriorate and additional reporting is needed. The report is a snapshot of current water supply and drought monitoring conditions in the Potomac River Basin and includes streamflow, groundwater and precipitation data. The report is emailed to the DCC each month and it is also posted on COG's Drought Website:

<https://www.mwcog.org/drought>

WATER SUPPLY IN THE COG REGION

The Washington metropolitan region gets most of its drinking water from the free flowing (non-tidal) Potomac River. Additional sources of water include the Patuxent and Occoquan reservoirs, as well as a number of small surface and ground water sources. During periods of low flow in the Potomac River, the Jennings Randolph Reservoir in West Virginia and the Little Seneca Reservoir in Montgomery County may be utilized to augment Potomac River flow and ensure sufficient drinking water supply.

Three major, or wholesale, water supply agencies furnish about 95% of the metropolitan Washington region's water. These are the Washington Aqueduct of the U.S. Army Corps of Engineers, Fairfax Water, and the Washington Suburban Sanitary Commission. Other agencies in our region supply the remaining 5% of the water. Some parts of the region are supplied by utilities that purchase water wholesale from one or more of the three large water utilities mentioned above.

During times of drought, natural flows on the Potomac may not always be sufficient to meet water supply needs while still maintaining a minimum flow in the river for sustaining aquatic resources. When low flows occur, the 1982 Water Supply Coordination Agreement designates ICPRB's Section for Cooperative Water Supply Operations on the Potomac (CO-OP) to be responsible for coordination of water resources among the three large water utilities.

The three major supply agencies have paid for water storage held in reservoirs in the Potomac Basin. These reservoirs can augment water supply during low flow conditions to ensure the region's water supply demands are met while also meeting Potomac River environmental requirements for water flow.

The Jennings Randolph Reservoir in the upper reaches of the Potomac River Basin stores 13 billion gallons of water for water supply purposes. Water released from Jennings Randolph takes at least a week before reaching the metropolitan Washington region.

Located in Montgomery County, Little Seneca Reservoir has 4 billion gallons of water supply storage that can quickly reach water intakes for the major supply agencies in the metropolitan Washington region.

Recent investments in quarry storage reservoirs such as Luck Stone and Vulcan in Virginia to provide additional regional resilience for drought and water supply emergencies. Additionally, a recent Bill approved by Congress and President Biden contains funding for a secondary water source study for the region. COG along with the U.S. Army Corp of Engineers, ICPRB, area water utilities, and additional partners, will work together to evaluate the best way to design, build, and operate additional infrastructure to improve the resiliency of the region's water supply.