

Frequently Asked Questions on Drought Preparations



Water Resources Program

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Ecology keeps watchful eye on snowpack all year-round

Prepare for – not react to -- drought

It is never too soon to be thinking about future water needs. Washington has historically been considered a water-rich state, but the availability of water can no longer be taken for granted. The impacts of global warming, rapid population growth and increased development will all continue to affect water supply.

Drought has always been a part of Washington's climate. What is unusual is that droughts appear to be occurring more frequently. Just in the last decade, we had droughts in 2001 and 2005; and were on alert in 2010. The term "drought" is used in Washington to describe conditions where a region receives below average precipitation for an extended period of time.

Warmer climate = less snowpack = less water in the summer and fall

The [Washington Climate Impacts Group](#), based at the University of Washington, is an internationally-recognized interdisciplinary climate research group. They project that temperature and precipitation in the Pacific Northwest will change significantly over the next 20-40 years. Temperatures will be warmer, likely with wetter winters and drier summers.

Snowpack is one of nature's primary ways of storing water for future use. In the warm months, snowpack is our main source of water for streams and groundwater. A warmer climate means less snow and more rain, making our water supplies more vulnerable, especially in the late summer and fall when stream levels are naturally lower and water use increases.

Water supplies for farmers, well owners, municipal water purveyors, and fish and wildlife may be impacted in those regions heavily reliant on accumulated snowpack for spring and summer run-off.

MORE INFORMATION

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Special accommodations

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Q: What is the process for declaring a drought emergency?

A: The Department of Ecology (Ecology) is constantly monitoring snow and rain conditions, in conjunction with other state and federal agencies. Possible drought conditions are identified as early as possible, which sets a legally-defined process in motion.

Snow Water Equivalent (snow moisture) measurements are taken at the many SNOTEL (SNOW TELEmetry) sites across Washington State. Current snowpack and SNOTEL figures are available from the U.S. Department of Agriculture's Natural Resources Conservation Service, <http://www.wcc.nrcs.usda.gov/snow/>

To consider a declaration of a drought emergency, a region must meet two criteria:

- Is an area that is receiving, or is projected to receive, less than 75 percent of normal water supply.
- Water users within those areas will likely incur undue hardships as a result of the shortage.

If Ecology determines that a geographical area (or portion thereof) is suffering from drought conditions (as defined above), it is empowered to declare a drought condition. Before making such a declaration, there must be agreement from the state's two top drought committees (the Water Supply Availability and the Executive Water Emergency committees), as well as written approval from the governor.

The Water Supply Availability Committee is made up of mostly federal agencies involved in monitoring, forecasting, or managing state water supplies; Ecology chairs the group. The Executive Water Management Committee is chaired by the Governor's Office, and is comprised mostly of representatives from state agencies (such as the Departments of Agriculture, Fish & Wildlife, and Health).

Ecology's declaration of a drought emergency frees up the state funds designated for drought relief.

Q: How can drought emergency funds be used?

A: A drought emergency declaration allows Ecology to issue emergency water permits, authorize temporary transfers of water rights and provide drought relief in the form of loans and grants for uses such as:

- Drilling emergency wells or deepening existing wells for cities, farms and fish hatcheries.
- Leasing water rights for stream flows.
- Construction of pumps, pipelines and measuring devices that provide immediate drought relief.
- Development of emergency or alternative water sources.

A list of more than 30 types of projects and activities that can be funded with drought relief money is available at: <http://www.ecy.wa.gov/biblio/1011003.html>

Q: How will water users know if their water supply is in jeopardy?

A: If Ecology declares a drought emergency or emergencies, regular updates on drought conditions and drought relief funding will be available on Ecology's Web site: <http://www.ecy.wa.gov/ecyhome.html>. The declaration will also appear in a newspaper of general circulation in the area affected by the order. Additional drought monitoring resources are listed below.

Even in those regions of the state where a drought emergency is declared, not all water supplies will be affected. In the recent past, wet and cool springs have compensated for warm and dry conditions.

Remember every day is a good day to save water. Ecology encourages you to follow the advice of your public utility or other water provider on wise water use. Tips on water conservation can be found at Ecology's web site:

<http://www.ecy.wa.gov/programs/wr/ws/wtrcnsv.html>.

Drought monitoring Web sites

- U.S. Drought Monitor reports are available at <http://droughtmonitor.unl.edu/>
- Water supply forecasts from the National Weather Service's Northwest River Forecast Center are available at <http://www.nwrfc.noaa.gov/ws/>
- Long-range weather forecasts are available at the National Weather Service's Climate Prediction Center site: <http://www.cpc.noaa.gov/>.
- Yakima daily water reports can be accessed at <http://www.usbr.gov/pn/hydromet/yakima/index.html>.
- Washington water supply information: <http://www.ecy.wa.gov/programs/wr/ws/wtrsupply.html>
- USGS Drought Watch: <http://wa.water.usgs.gov/news/drought/>