

# DEPARTMENT OF ECOLOGY DROUGHT ADVISORY July 5, 2023

A Drought Advisory is in effect for all areas of Washington State.

A Drought Advisory is intended to increase awareness of developing drought conditions and provide recommendations for voluntary actions to alleviate impacts, pursuant to RCW 43.83B.405(1).

The Department of Ecology continues to monitor water supply conditions and will regularly reassess the need for a formal drought declaration. Recommendations to declare a drought emergency are made by the state Executive Water Emergency Committee. The Executive Water Emergency Committee will next convene on July 18th, 2023, and can meet earlier if conditions significantly change.

To inform our understanding, the department welcomes information from water users regarding current and expected impacts and hardships resulting from low water conditions. See information for reporting information below.

## Water Supply Conditions

- As defined by RCW 43.83B.011, drought conditions mean that a geographic area is expected to receive less than 75 percent of normal water supply and there is a potential for undue hardship to water users or uses.
- While Washington experienced an average snowpack in most watersheds this year, reaching 111 percent of normal at the end of April, the month of May featured record warm temperatures. May 2023 tied May 1958 as the warmest such month since 1895.
- The most recent 60 days have featured temperatures in the 90<sup>th</sup> percentile or above for the entire state (Gridmet: records dating to 1979).
- Over the same period, precipitation percentiles were below the 10<sup>th</sup> percentile for most of Western and Southeastern Washington (Gridmet: records dating to 1979).
- The state received about 50 percent of its normal precipitation during the 60 days between April 29 and June 27 (Gridmet:1991-2020 normal period).
- Seasonal water supply forecasts indicate the state will experience below normal runoff (median forecast of 85 percent of normal) from April to September, with individual station forecasts ranging from 62 to 136 percent of normal (Northwest River Forecast Center: June 30 forecast date).
- Record high temperatures during May caused early and rapid snowmelt. This will cause runoff this summer to be much below normal, especially in basins dependent on snowpack. In addition, the lack of precipitation since early May reduces the volume of runoff in both rain and snow-dominated basins.

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- WAC 173-166-030 requires that, "The determination of drought conditions will consider seasonal water supply forecasts, other relevant hydro-meteorological factors (e.g., precipitation, snowpack, soil moisture, streamflow, and aquifer levels) and also may consider extreme departures from normal conditions over subseasonal time frames." (Emphasis added).
- According to the Northwest River Forecast Center, the subseasonal, month-by-month runoff volume for June through September will fall below the statutory drought threshold (75 percent of normal) in nearly every watershed where forecast information is available.
- The NOAA Climate Prediction Center outlook for temperature and precipitation for the months of July through September indicates a higher probability of warmer than normal temperatures statewide. The Climate Prediction Center also forecasts a higher likelihood of below-normal precipitation for Western Washington.

## Most Affected Users

- Irrigation users with junior water rights may be required to restrict their diversions to
  protect senior water rights. This process is underway in the Hangman Creek, Spokane River,
  Walla Walla River, Okanogan River, Methow River, Yakima River, Nooksack River, and Skagit
  River watersheds. Restrictions may expand to other watersheds.
- Small water systems and private homeowners dependent on shallow wells or lacking storage are most vulnerable to impacts in dry years.
- Drought conditions can cause severe stress to fish coping with low streamflows and high water temperatures. Wildlife can struggle to find water sources and forage.
- The Northwest Interagency Coordination Center forecasts above normal potential for significant wildfire risk in Washington during the months of July, August, and September.

#### Less Affected Areas

- Farms and communities receiving water from the Columbia River and Lake Roosevelt are not expected to experience shortages this year if current weather trends continue.
- Mid- to large-size water systems plan to meet customer water requirements during critical years and are not expected to encounter shortage issues.
- Runoff forecasts for major rivers in Klickitat and Skamania Counties which benefitted from much above normal snowpack -- are not expected to fall below drought levels, but low precipitation will still affect lower elevation streams, pasture lands, and increase wildfire risk. A major wildfire is currently active in Skamania County.

#### **Recommendations to Alleviate Drought Impacts**

- All water users should take care to conserve their water use. Find leaks and repair them.
- Producers are encouraged to contact their local conservation district for technical assistance.
- Impacted producers should contact their local USDA office to determine their eligibility for disaster assistance. Producers and growers should keep detailed records of crop losses for federal assistance programs.

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- Junior water right holders concerned about waters rights curtailment should contact their local Department of Ecology Regional Office.
- Customers of public water systems in the affected area should look for communications from their local water utility to determine whether shortages are expected.
- Water system managers should review their own water shortage response plans and educate their customers about water conservation.
- Residents with private wells should monitor their well levels and reduce pumping if necessary to avoid drying their well or burning out their pump.
- Recreationists should not build rock dams in streams for the purpose of creating wading areas and should avoid the harassment of fish and wildlife.
- Rural residents should take care to reduce fire risks on their property by adopting "Firewise" practices, e.g., creating a defensible space around residential structures by thinning trees and brush; choosing fire-resistant plants; selecting ignition-resistant building materials; positioning structures away from slopes; and working with firefighters to develop emergency plans.
- If your water supply is at risk of failing, contact the Department of Ecology Regional Office nearest you.

## **Report observations of drought conditions**

Observations and photographs of drought conditions can help us assess whether to elevate state response. Submit observations using the Conditions Monitoring Observation System at: go.unl.edu/CMOR.

## Petitioning for a drought declaration

Pursuant to RCW 43.83B.405(2)(e), a person may petition the department to have a drought emergency declared in a specific geographic area. A petition should contain the information elements described in WAC 173-166-060(5).

For further information, contact:

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Signed this 5<sup>th</sup> day July of 2023

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Laura Watson, Director