



## Water Availability Team - Q&A

OWRD's Water Availability Team provides Oregonians with valuable resources about drought conditions, such as a [drought information page](#) and a [status map](#) showing where drought has been declared in the state. That is only a small portion of the work they do, however. Hydrologist Cameron Greenwood graciously contributed a Q&A about the Water Availability Team for us to gain a better understanding of everything the team does.

### What does the Water Availability Team do for OWRD?

The Water Availability Team (WAT) is part of the Surface Water Hydrology section at OWRD. WAT is responsible for characterizing water supplies to support the Department's mission of directly addressing Oregon's water supply needs. Much of this support is provided through the Water Availability Reporting System (WARS), which provides information on the amount of surface water available for allocation across Oregon. As curators of WARS, WAT maintains the system, provides technical support to users both internal and external to OWRD, and ensures that WARS and its information remain aligned with current climatic conditions and OWRD practices, policies, and rules.

WAT is also leading development of the Surface Water Information Modeling System (SWIMS), a modern update to WARS. SWIMS will provide more current and climate-relevant information for calculating water availability across Oregon watersheds, addressing the limitation that WARS relies on streamflow records from 1958 to 1987. By updating this system, WAT is working to ensure that information about if, when, and how much water is available for appropriation better reflects current hydrologic conditions and supports responsible allocation of surface waters.

WAT also acts as the primary coordinator and communicator regarding water supply and drought conditions, responds to requests from local governments for drought assistance, and advises the Governor on state drought declarations under ORS 536.

### How does this work support our mission to protect one of Oregon's most precious natural resources?

This work supports OWRD's mission by providing the information needed to account for legal water availability, which is critical to programmatic work such as the evaluation of water right applications. It also ensures that decisions based on WARS can withstand review in contested case hearings. The development of SWIMS further strengthens this support by ensuring that water availability information is more reflective of today's climate, addressing the limitation that the current system is based on streamflow records from 1958 to 1987. By maintaining and modernizing these tools, and by coordinating drought and water supply information, WAT provides the Department with reliable systems and guidance necessary to manage water supply needs and address shortages, directly supporting the protection of Oregon's water resources.

## What drought trends has the team observed?

Oregon has been experiencing multi-year drought cycles since 2020, with drought conditions persisting through multiple winters from 2020 to 2024. Despite periods of near-normal precipitation, streamflows and water supplies did not fully recover, and much of the state remained in drought or abnormally dry status. It was not until spring 2025 that Oregon was briefly free of both drought and abnormally dry conditions, highlighting how persistent these dry conditions have become over the previous five years. Above normal temperatures further intensified the impacts of prolonged precipitation deficits, leading to declining streamflows and an increased strain on groundwater resources.

In early 2025, above normal snowpack and precipitation provided short-term drought relief, and Oregon was briefly declared free of drought and abnormally dry conditions for the first time since 2019. However, this improvement was temporary. By late spring and summer 2025, drought returned to portions of western and northeastern Oregon, as below normal precipitation and above normal temperatures once again reduced soil moisture and streamflows. These trends highlight the cyclical but intensifying nature of drought in Oregon, with only short recovery windows between extended multi-year dry conditions.

## What is the current drought outlook for Oregon?

As of September 2, more than half of Oregon is in moderate drought, with over 31% of the state classified in severe drought. This year's drought developed primarily due to precipitation deficits that began in the spring and persisted through the summer, leading to reduced soil moisture and diminished streamflows. The potential for recovery will depend largely on the magnitude and timing of fall and winter precipitation, which historically provide the greatest recharge to Oregon's surface water and groundwater systems. Seasonal climate outlooks remain mixed, but there is some agreement for above normal precipitation in parts of northern Oregon. If this signal materializes, northern basins are likely to be among the first areas to exhibit measurable hydrologic improvement and drought relief.

## What advice do you have for people who want to help conserve water at home?

Oregon has been experiencing a multi-year drought cycle, with precipitation deficits and reduced streamflows persisting through multiple wet seasons. In this context, conserving water at home is especially important to reduce pressure on both surface water and groundwater resources. Indoors, households can conserve by promptly fixing leaks, installing water-efficient fixtures, using appliances only with full loads, and minimizing unnecessary water use. Outdoors, irrigation should be timed for early morning or evening to minimize evaporation, and planting drought-tolerant or native species can reduce water demand. Collecting rainwater for gardens and limiting lawn watering also helps stretch limited supplies. By adopting these practices, residents not only reduce their own water use during dry periods but also support broader water supply stability and resilience in Oregon's rivers, streams, and aquifers during ongoing and future drought conditions.

## Is there anything else you'd like to add?

Thus far in 2025, seven Oregon counties have received a state drought declaration under ORS 536. These are: Baker, Coos, Douglas, Lincoln, Morrow, Union, and Wheeler counties.

Thank you to the Water Availability Team for the work they do to help address Oregon's water supply needs!

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