

## 2022 DROUGHT FREQUENTLY ASKED QUESTIONS

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### **What happens when the Governor approves a request for a drought declaration?**

Water users and managers gain access to legal tools to increase water supply source flexibility. For example, water users can apply for temporary water right transfers and emergency water use permits. They also gain access to other federal and state drought assistance programs, including emergency farm loans and compensation for grazing losses.

The Governor may require that cities develop water conservation plans or water curtailment plans if the drought is considered severe enough. The City of Prineville has a Water Management and Conservation Plan that includes a water curtailment plan and will implement measures described in these plans if needed. We encourage you to conserve water and we will continue to provide information about the City's water supply conditions.

### **Why did Crook County Court request a drought declaration for Crook County?**

Crook County Court made this request in response to concerns about weather conditions causing pasture shortages, a shortened growing season, and reduced recreational opportunities. These conditions can result in significant economic damage to the agricultural and livestock industries, recreation, and related economies. Many local irrigators and ranchers rely on winter snowpack and water stored in Ochoco and Prineville Reservoirs for their water supply, and drought conditions may threaten their economic stability. A drought declaration can help make resources available to protect people and livestock, mitigate economic losses, and proactively address the threat of wildfires.

### **What is drought?**

Drought refers to a phenomenon in which dry conditions and lack of precipitation – whether it is rain, snow, or sleet – occur over certain areas for a period of time, resulting in a water shortage.

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Most of Oregon's water supply comes from precipitation in the form of rain and snowfall. When there is little precipitation for prolonged periods, drought conditions arise, and water becomes scarce.

### **What evidence is there of a drought?**

The region is still recovering from multiple years of drought. Natural springs are showing declines compared to historical norms, and reservoirs are all at record lows. Under such severe drought conditions, experts believe it may take consecutive years with significantly above-average precipitation to emerge from this drought. Specifically:

- Ochoco Reservoir and Prineville Reservoir water levels are at the lowest on record.
- We currently have much less snow than we had the past two years at this time. The amount of snow water equivalent currently measured at all our locations is over 40% lower than what was measured last year.
- The extended weather forecast for Central Oregon projects above-average temperatures, below-average precipitation, and very low soil moisture levels.

### **Will my water use be restricted?**

At this time, restricted water use for City of Prineville water customers is not anticipated.

### **Will my water bill go up this summer?**

At this time, water service bills for City of Prineville water customers will not be impacted.

### **Are we going to run out of water?**

No, despite the low surface water levels in the reservoirs and other bodies of water, the City's groundwater supplies are currently stable. The City of Prineville has been developing and implementing water management and conservation programs for decades. While our supply is stable now, the long-term impacts of prolonged drought are unknown. For this reason and

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consistent with our Water Management and Conservation Plan, we will increase water conservation efforts and encourage our customers to conserve water.

The resilience of the City's water supplies during a long-term drought, natural disaster, source contamination, or other water shortage trigger is aided by the City having two separate groundwater sources, the Prineville Valley Floor Aquifer and the Airport Area Aquifer System, with multiple wells in each aquifer.

To help you conserve water, the City offers free lawn watering gauges, leak detection tablets, water-efficient bathroom faucet aerators, and water-efficient showerheads. We also have a water conservation website with tips on conserving water outdoors and indoors and detecting leaks that waste water. [Water Conservation | City of Prineville Oregon](#)

### **Where does the City get its water supply?**

We develop water from two aquifer systems: one below the Prineville valley floor and the Airport Area Aquifer System located near the Airport. Drawing from these two separate aquifer systems enables us to provide our customers with a diverse and reliable water supply.

### **What has the City been doing to prepare?**

Investments in infrastructure, strategic and innovative planning on behalf of city leaders, and long-standing water conservation programs are just some of the reasons why the City's water supplies are secure.

We achieved a remarkable reduction in water losses since the initiation of a pipe replacement program beginning in 2008. By replacing old pipes, the City reduced water lost to leakage by approximately 140 million gallons from 2008 through 2015. The City's water loss is now under 5 percent of the City's total water use, which is comparatively low and within the State of Oregon's goal for municipal water loss of 10 percent or less. In addition, the City's efforts to reduce water loss have nearly offset all of the City's observed growth in commercial water use from 2008 through 2020.

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We have been implementing numerous water conservation measures, including:

- Replacing leaking wooden distribution pipes (the City replaced a total of 36,500 feet of pipe between 2001 and 2021).
- More accurately tracking bulk water consumption using a new bulk water station
- Improving leak detection by installing Automatic Meter Reading systems at residential connections
- Encouraging water conservation through its public education program and providing free water-efficient showerheads and lawn watering gauges along with other items aimed at reducing water consumption

Thanks to these efforts, including our Aquifer Storage and Recovery project (described in detail below), we have a reliable source of water to meet Prineville's long-term needs for growth.

### **Why are the reservoirs so low?**

There are a variety of factors impacting the reservoirs including:

- **Drought:** The current multi-year drought is unprecedented since the construction of Bowman Dam in 1961.
- **Fall through spring Crooked River flow increases to benefit downstream fish and wildlife:** The 2014 Crooked River Water Security and Jobs Act and Deschutes River Basin Habitat Conservation Plan require bypass and release of Prineville Reservoir inflows to benefit downstream fish and wildlife. This reduces the volume of carry-over storage from year to year. In many years, this would not affect reservoir storage but has significant impacts during multi-year drought events.
- **Juniper Encroachment:** The Juniper range has increased tenfold in Central Oregon since the 1880s. A Juniper in its peak of growth can consume over 30 gallons of water per day. The spread of juniper in the Upper Crooked River and Ochoco Creek watersheds has increased water demands (evapotranspiration) above Prineville Reservoir.

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- **Climate:** The trend of hotter, drier weather has increased water demand of surface water users while reducing the duration and magnitude of inflows to Prineville Reservoir.

### **Are customers using the City's water system draining the reservoirs?**

No, the City does not use any water directly from Prineville or Ochoco Reservoirs. The City's water supply comes from groundwater.

### **Where can I learn more about drought-resistant landscaping and gardening?**

[Water-wise Gardening in Central Oregon](#) by OSU Extension Service is a great resource.

### **How can I help conserve water?**

**Outdoors:** Reducing irrigation and other outdoor uses is particularly important during the hot, dry summer. Check outdoor irrigation systems for leaks. Reduce landscape watering to only before 9 am and after 7 pm. Install fixtures that increase irrigation efficiency. Consider reducing the size of your lawn and minimizing lawn watering. Avoid washing cars, driveways, and sidewalks.

**Indoors:** Take shorter showers. Check toilets and faucets for leaks. Install more water-efficient toilets, appliances, showerheads, and faucet aerators.

### **Does the drought go away when it rains?**

Rainfall in any form will provide some drought relief. A good analogy might be how medicine and illness relate to each other. A single dose of medicine can alleviate symptoms of illness, but it usually takes a sustained program of medication to cure an illness. Likewise, a single rainstorm will not break the drought, but it may provide temporary relief.

### **I have noticed the new developments being built in town. Are these new customers taking water from the supply available?**

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We are prepared for growth. We have made significant investments in our infrastructure and conservation programs and we have diversified our water supplies. As a community, we will continue to manage, conserve, and invest in our water supplies. Additionally, water for these and other customers utilizing the City’s water system comes from the City’s wells and not from the reservoirs or other surface water supplies.

### **What is the Aquifer Storage and Recovery Project?**

Aquifer Storage and Recovery (ASR) is a water management tool that allows the City to meet peak demands by taking advantage of the natural storage space found in geologic formations underground.

With the City’s ASR, groundwater is pumped from the Prineville Valley floor and stored in the Airport Area Aquifer System during periods of cooler temperatures, higher stream flow, and low water demand. The stored water can later be recovered and used during periods of hotter temperatures and higher water demand, thereby easing peak demand stress on naturally occurring water sources and reducing the need to build expensive storage facilities.

Prineville’s ASR system is expected to mitigate the long-term impacts of climate change, including reduced snowpack and stream flows, and provides for a readily available underground reservoir of stored water for use in the event of drought.

### **Drought Information & Resources**

#### [Oregon Water Resources Department - Water Conditions Report](#)

The OWRD Water Conditions Report is updated bi-weekly and includes a variety of statewide information related to the water conditions of each basin.

#### [Oregon Water Resources Department – Drought Watch](#)

The OWRD Drought Watch website contains statewide information relating to drought conditions, drought declarations, and other informational resources.