

# STATE OF THE DISTRICT & WATER OUTLOOK

First off, I would like to thank our field staff for their hard work rotating over 3,000 acres on and off every Monday, as well as the irrigators who were patient with the process and were engaged in the benefical use of the water.

During the worst drought in recorded history, Tumalo Irrigation delivered irrigation water on a rotation of seven days on and seven days off schedule and stayed in compliance with the Habitat Conservation Plan.

The National Oceanic and Atmospheric Administration Climate Prediction Center (CPC) has issued a La Niña Advisory and expects La Niña to continue through this coming winter. If these projections come to fruition, it would go a long way toward alleviating or putting a big dent in the drought. The current long-term federal climate forecast doesn't anticipate a reversal of the historic drought.

Tumalo will need to store at least 18,000-acre-feet of water in Crescent Lake in able to perform the same rotation. Anything less, and we will need to make some significant changes. Unfortunately, no one can predict the longevity of a drought, however planning ahead is always a good idea. Please keep this in mind as you plan for the 2022 irrigation season.

On the bright side, we were able to secure full funding for the next round of piping. The funding will be used to pipe the main canal that delivers all the water for the north side of the district. That project is slated to begin after the 2022 irrigation season.

The purpose of a stock run is to fill patrons' ponds with stock water for livestock. Based on water laws, it is illegal to use stock water for any other purpose, including filling ponds for aesthetic purposes or using the water to irrigate or for domestic use.

Stock runs are dependent on water levels in Tumalo Creek, which fluctuate based on the weather. It is our goal to have three stock runs during the 2021-22 maintenance season.

# PLANNED STOCK RUNS November 15-19 January 17-21 March 28-April 1

Please note, you must call the office to schedule the delivery of stock water.

Stock run information will be posted to www.Tumalo.org and sent via the District text message program. To sign up for text messages, text "TUMALO" to 541-253-4321.

# WHAT'S HAPPENING UNDERGROUND?

Aquifers play an important role as a source of freshwater for urban areas and agricultural irrigation.

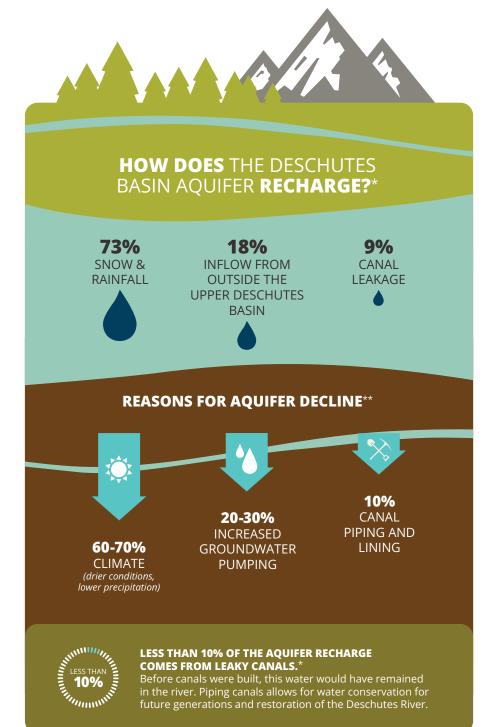
An aquifer is a geologic formation that can store and transmit water to wells, springs, and some streams. An aquifer is more like a sponge than an underground river: geologic materials have connected pores that allow water to move from one space to another, but unless the rock is fractured, water does not move through large, hollow tunnels at rapid rates.

Cascade Range aquifers in the upper Deschutes Basin have experienced a general drying trend since the 1950s. Climate oscillations remain the primary driver of these declines.

(Gannett et al. 2001; Gannett et al. 2003).

## **DID YOU KNOW?**

Snowpack and precipitation runoff from the Cascade Range contribute 73% of the water in our aquifer. Climate variations resulting in consistently drier winters with less precipitation are the largest threat to the water supply in the Upper Deschutes Basin.



- \* Gannett et al. 2001, Gannett and Lite 2013, Oregon Water Resource Water Department
- \*\* United States Geological Survey between 1997-2008 investigated the influence of canal lining, groundwater pumping, and climate on water level trends in the region.

# PLAN UPDATE:

# **DESCHUTES BASIN HABITAT CONSERVATION**

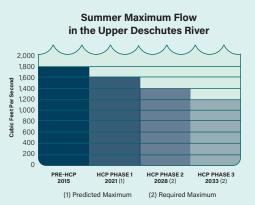
The Deschutes Basin Habitat Conservation Plan (HCP) was completed in December 2020. Tumalo Irrigation District, along with seven other irrigation districts and the City of Prineville, began implementing the HCP this year.



The HCP aids water managers by providing certainty on water storage, release, diversion, and return paradigm for the next 30 years in the Deschutes Basin. The plan is valid for 30 years and will be up for renegotiation in 2051.

The Habitat Conservation Plan requires a release of 300 cfs by 2028. By 2033, the districts will need to increase the minimum winter flow to 400 cfs, with provisions for up to 500 cfs in winter.

# Winter Minimum Flow in the Upper Deschutes River 600 Adaptive Management > PRE-HCP HCP PHASE 1 HCP PHASE 2 2028 2033 \*Adaptive management is a systematic approach for improving resource management by learning from management outcomes.



# HOW THE HCP WILL BE ACCOMPLISHED



A combination of adjusted water management practices.



Increased funding for conservation projects and in-stream leasing programs.



More gradual ramping up and down of the irrigation season releases.

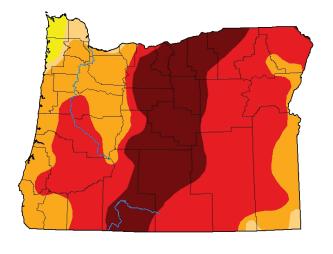


Support for on-farm water conservation, maintenance of fish screens, and related items, all to better align the water management operations with the life-history needs of steelhead trout, bulltrout, sockeye salmon, and Oregon spotted frogs.

# **EXPERTS: OREGON MAY BE IN PERPETUAL DROUGHT**

The Capital Press reports that Larry O'Neill, state climatologist at Oregon State University, says the current drought is "historically significant," with about three-quarters of the state experiencing conditions considered "extreme."

However, the state is actually in the fourth year of below-average precipitation, which has exacerbated the drought during "unprecedentedly" high temperatures this summer, O'Neill told the Oregon Water Resources Commission.



# Intensity None D0 (Abnormally Dry) D1 (Moderate Drought) D2 (Severe Drought)

D3 (Extreme Drought)

**D4** (Exceptional Drought)

No Data

CURRENT U.S.
DROUGHT MONITOR
CONDITIONS
FOR OREGON

#### 3.8 MILLION

people in Oregon are affected by drought

35

counties with USDA disaster designations

#### 14th

driest year to date was in 2021, over the past 127 years



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Sign up today by texting "TUMALO" to 541-253-4321



Oregon is one of the most agriculturally diverse states in the nation, producing over 225 commodities across several different growing regions.

Farm-level agricultural receipts contribute more than \$5 billion to Oregon's economy with an estimated total added value of \$28 billion when accounting for total supply chain benefits.

