

FALL
2023

WATER FRONT

TUMALO IRRIGATION DISTRICT



WINTER FORECAST

DESCHUTES BASIN WATER RESILIENCE

Addressing Drought & Ecosystem Health

Amidst the nation's persistent drought crisis, eight irrigation districts, including Tumalo Irrigation District have conservation projects offering tangible solutions to water scarcity and ecosystem stress. These projects bolster water resilience, support local agriculture, and safeguard the environment for generations to come.

Central Oregon's historic multi-year drought crisis continues, with Crook, Deschutes, and Jefferson Counties in severe drought. Despite a slight improvement in 2023, major storage reservoirs like Wickiup Reservoir in the Deschutes Basin remain critically low. Natural river flows, the lowest on record since 1930, have been drastically reduced, affecting both agriculture and ecosystems.

Tumalo Irrigation District is dedicated to ensuring a reliable water supply for agriculture.

In addition, TID is committed to improving water flows in the Deschutes River, Tumalo Creek, and Crescent Creek; restoring and protecting native habitat; ensuring reliable water supply for agriculture and recreation; and supplying glacial water to cool the warming Deschutes River.



Will Oregon's winter be snowy, wet or dry? Strength of El Niño will likely play a role.

The National Oceanic and Atmospheric Administration has predicted an El Niño will likely make the Pacific Northwest warmer than normal this winter and cause drought to persist east of the Cascade Range.

A very strong El Niño is one in which the temperatures in the Pacific Ocean are much, much warmer than normal, almost historically warm. We've had three such events since 1950.

OUR MISSION

Manage water resources to meet the present and future needs of its members in ways that are economically and environmentally responsible.

The District's priorities are improving water delivery efficiencies, conserving water, and preserving and restoring native fish and wildlife habitat in the Deschutes River Basin.

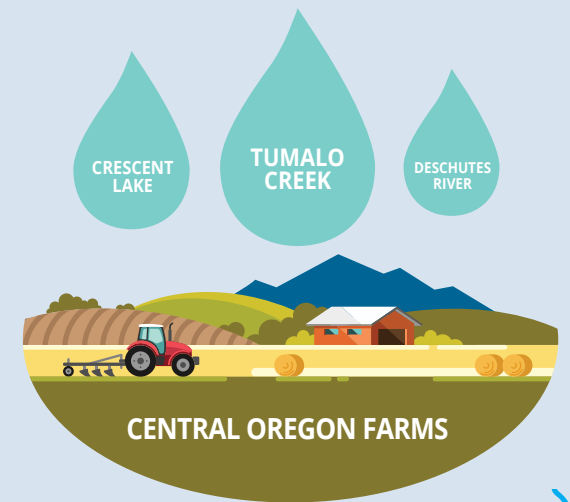
STATE OF THE DISTRICT & WATER OUTLOOK

As we welcome new property owners within the TID boundaries, we want to familiarize everyone with how the District operates and the challenges we anticipate this year, particularly in light of the ongoing drought conditions.

The District relies on two primary water sources: Tumalo Creek, supplied by the Broken Top Watershed, and Crescent Lake Reservoir.

Tumalo Creek serves as the District's source for spring water, typically flowing until early to mid-July. As there is no storage on Tumalo Creek, freezing weather in the high country can lead to significant fluctuations in water supply lasting several days. Due to the prevailing drought conditions, we anticipate more fluctuations than usual, with no surplus to compensate for the lows until we tap into Crescent Lake Reservoir.

TID relies on Crescent Lake Reservoir for stored water. We begin drawing water from the Reservoir when Tumalo Creek reaches its lowest flows, continuing until the end of the irrigation season, typically on September 30. However, in 2024, we expect the Reservoir may deplete earlier.



THIS YEAR, WE FACE TWO SIGNIFICANT CHALLENGES:



Snowpack at Broken Top is only approximately 15% of normal for this time of year.



Crescent Lake Reservoir is at 9% of its capacity (6,200 acre-feet, with a total capacity of 86,900 acre-feet).

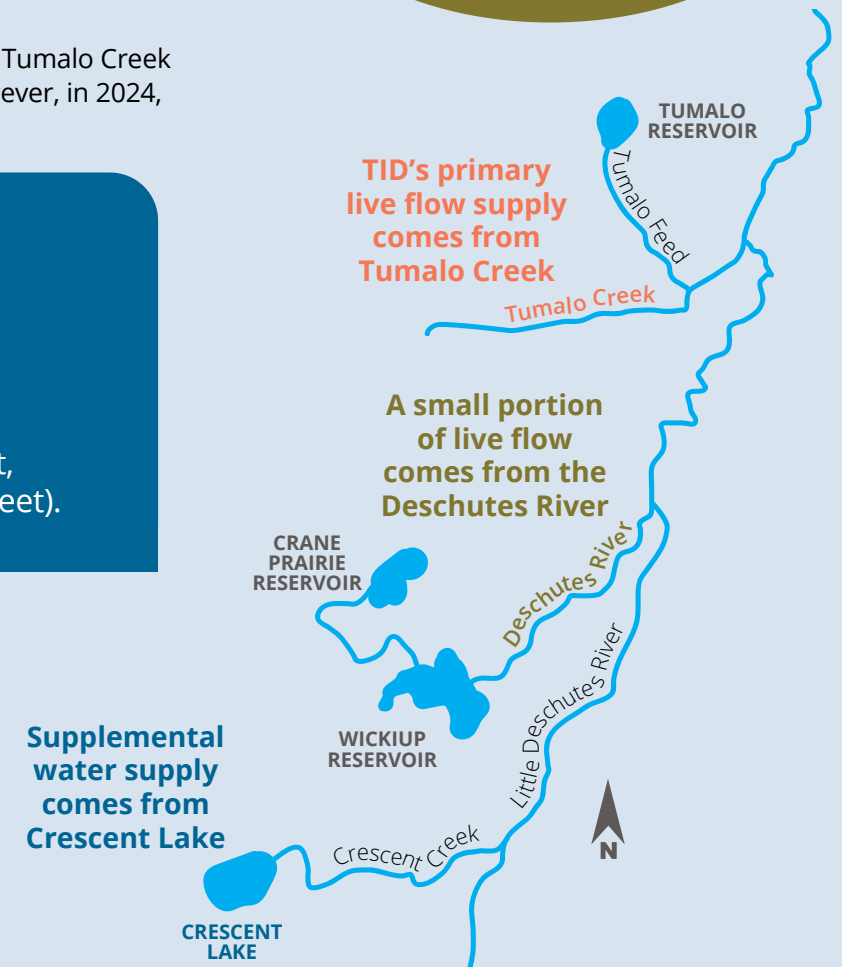
To address this situation proactively, TID must avoid drawing water from Crescent Lake during the spring to preserve it for later in the season. This involves not depending on the reservoir to regulate the variations in Tumalo Creek during the cool early spring months. Instead, we aim to conserve water during this period and utilize it in the later hot summer months of August and September, with the goal of sustaining our supply into September. The outcome will be influenced significantly by the spring weather patterns; a cool, wet spring would be advantageous, while a hot, dry spring might necessitate tapping into Crescent Lake earlier than planned.

We are committed to managing water efficiently and will make every effort to optimize its use for the season. We request your collaboration in implementing best management practices on your farms to navigate this challenging water year. It is crucial that we work together, maintain a positive attitude, and acknowledge that the District will distribute all available water, striving for fairness in apportionment. Consider the following suggestions:

- ✓ **Opt for shorter irrigation sets, six or eight hours instead of twelve.**
- ✓ **Regularly check and adjust your nozzle size; smaller nozzles can contribute to water conservation.**
- ✓ **Replace leaking or outdated gaskets.**
- ✓ **Leave some land idle.**

RESOURCES:

OSU Extension Service in Deschutes County: www.extension.oregonstate.edu/deschutes 541-447-6628
Deschutes Soil and Water Conservation District: www.deschuteswcd.org 541-923-4358 ext. 3190



Temperatures in the Mountains: A significant difference in temperatures in the mountains can slow down or completely stop water runoff. Runoff is an intricate part of the natural water cycle, and low runoff negatively impacts TID's ability to deliver water to patrons.



Drought: When the snow begins melting off, the melt will go directly into the ground to the local aquifer if the ground is dry and not frozen. When this occurs, it leaves less runoff for irrigation.



HABITAT CONSERVATION PLAN: HOW DOES IT BENEFIT TID?

Despite extreme and persistent drought conditions, all eight irrigation districts belonging to the Deschutes Basin Board of Control (DBBC) and the City of Prineville, remain firmly committed to implementing the conservation measures outlined in the Deschutes Basin Habitat Conservation Plan (HCP). Adherence to the plan means that the irrigation districts are authorized to continue to access what limited water supplies are available during times of drought, and district patrons can rely on these supplies with confidence based on the U.S. Fish and Wildlife Service's approval of the HCP in 2020.

The plan sets the course for conservation efforts for the next 30 years, and provides the districts with both a pathway and time for modernizing their delivery systems through canal piping and other projects.

Central Oregon irrigation districts have successfully implemented over **\$53 million** in projects, **conserving over 49 cfs/12,000 acre feet** annually and ensuring **more water for farmers, food, and fish.**

The HCP provides:

- +** **PROTECTION** to irrigation districts and endangered species in the Deschutes River.
- +** **CERTAINTY** and predictability for water users and endangered species.
- +** **FLEXIBILITY** in drought or flood situations.
- +** **A ROADMAP** for all basin partners to contribute to restoration needs in the Deschutes Basin.
- +** **A MODEL** that shows local entities working together can resolve potential ESA and agricultural conflicts.



TUMALO IRRIGATION DISTRICT

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*TID is committed to
delivering water to
our patrons in the most
efficient way possible.*

SIGN UP FOR TEXT ALERTS



Don't miss out on important district updates!

Sign up today by texting
"TUMALO" to 541-253-4321
and be sure to follow us
on Facebook.



Since 2017, TID has been successful in securing and investing over **\$37 million** in Federal and State Grants to pipe **41.5** miles of **68.8** miles of canals, serving **367** patrons and over **3,939** acres of irrigated ground.

A History of Conservation

Since the mid-1990s, Tumalo Irrigation District has aggressively pursued a water conservation program via piping to provide a permanent solution to system-wide water losses and to add drought tolerance to ensure the consistent delivery of irrigation water to District members. In addition, the District is committed to improving fish and wildlife habitat, including for the Oregon spotted frog, in the Deschutes River, Tumalo Creek and Crescent Creek.

Over \$2 Million Coming to TID Water Conservation Project

TID was successful in securing a \$2.1 million grant to help conserve water and restore stream flows. A large portion of the money comes from the Oregon Water Resources Department. The project will pipe two miles of TID's open canals, restoring 0.85 cubic feet per second of streamflow to Tumalo Creek and Crescent Creek, improving habitat and water quality for redband trout and Oregon spotted frog.