

SPRING  
2023

# WATER FRONT

TUMALO IRRIGATION DISTRICT

## STATE OF THE DISTRICT & WATER OUTLOOK

I want to thank K&E Excavation for all their hard work this winter to get more of the District piped. This additional piping will help us more efficiently and effectively deliver water during this drought. We are looking at a slight improvement in water conditions that should help the Rotation work smoother this year. We are not seeing the snowmelt forecast for the Crescent Lake drainage showing much improvement over the two years of in-flows.

So far this year, the local snowmelt on Tumalo Creek has been very challenging, as the cold nights in the mountains have caused fluctuations in the total volume available to the entire District. We have seen a high volume of 60 cubic feet per second (CFS) down to 40 CFS for the entire District. In contrast, we need at least 130 CFS to deliver 70 percent of water simultaneously to everyone.

We appreciate the patience that our patrons have shown during these challenging conditions.

TID will start to turn on Crescent Lake for usage around the first or second week of July as the local snowmelt from Tumalo Creek ends. We will begin a 7-day water-on and 7-day water-off Rotation at that time. This year we will be implementing an A&B Rotation. Most all the open ditches will be on one Rotation, and the folks with piping will be on the other Rotation. Monday will be the day that we will switch water from the "A Rotation" to the "B Rotation." The Rotation schedule and map will be posted on the website in June.

Staff will be working to make this transition as smooth as possible. If you don't need or want to use your water, I encourage you to please get in touch with the office so we can spread any unused water around to the patrons who are growing crops.

***Are you interested in sharing your water?  
Please call TID at 541-382-3053***



### INVESTING IN OUR SYSTEM

As everyone is well aware, the drought has been extraordinarily difficult for farmers in the Deschutes Basin. Over the past several years, Districts that rely primarily or exclusively on live flow are ending up short, while districts that also use stored water have had to rely on those supplies earlier and more extensively than normal.

Adapting to change is not easy. TID is committed to managing the system in the best way possible to ensure reliable water delivery. Working together, the Deschutes Basin irrigation districts have been resourceful and innovative in securing funding and approvals for irrigation modernization efforts. Our commitment:

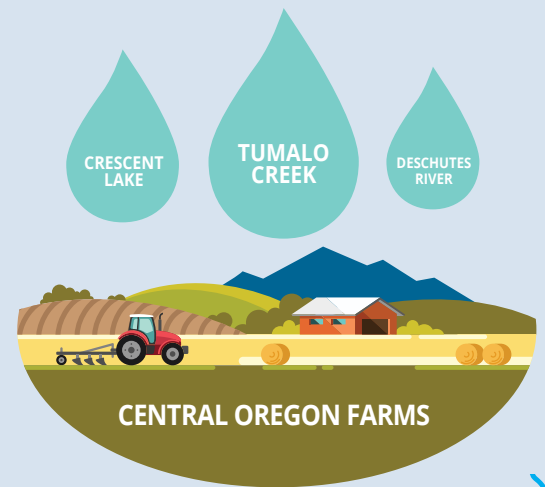
- ✓ **Delivering water efficiently**
- ✓ **Managing and maintaining infrastructure**
- ✓ **Implementing conservation measures outlined in the Deschutes Basin Habitat Conservation Plan (HCP)**
- ✓ **Investing in system improvements to increase efficiency**



# TUMALO CREEK: FOLLOWING THE FLOW

Water from Tumalo Creek plays a critical role in Central Oregon. In 1883, the first documented canal was dug to divert water from Tumalo Creek to surrounding farms and ranches to support crops and livestock.

TID's primary live flow supply comes from Tumalo Creek, which is fed by local mountains snow melt. The District first tries to meet its 140cfs demand using live "natural" flow rights. However, due to the nature of Tumalo Creek and its flashy flows, the flow can change over 100cfs in 24 hours. The significant fluctuation of flows make it difficult to manage flows and often results in a challenging start to the irrigation season.



## FACTORS THAT AFFECT TUMALO CREEK FLOWS



**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.*

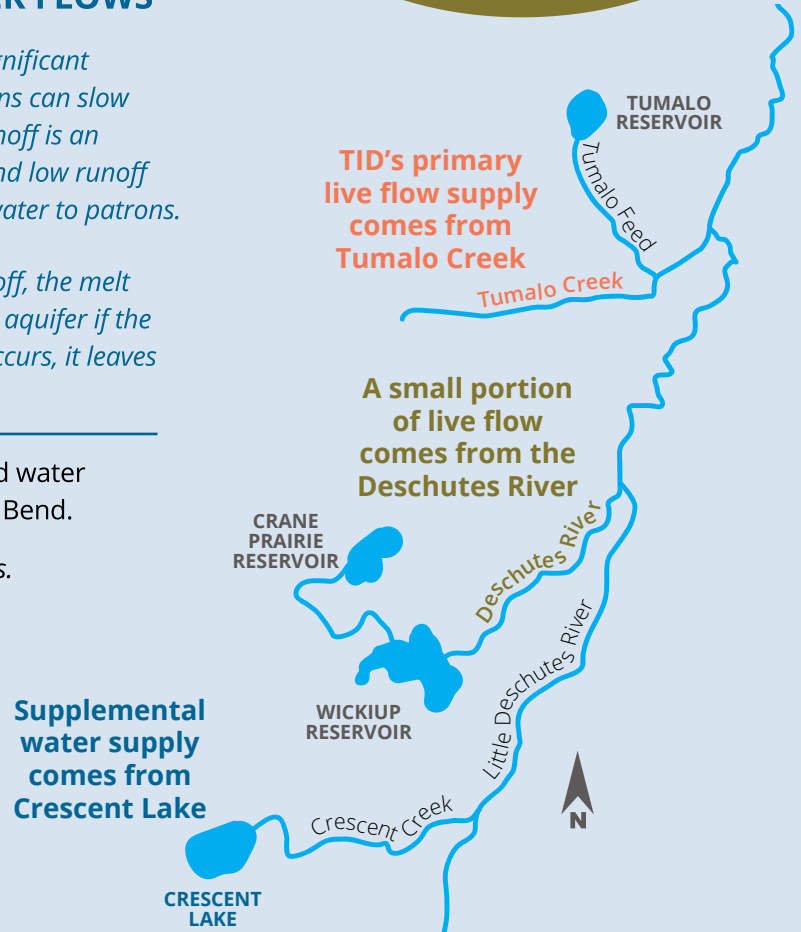
When Tumalo Creek runs low, a supplemental stored water supply comes from Crescent Lake, 80 miles south of Bend.

**LIVE FLOW:** *water that originates in streams and creeks.*

**STORED WATER:** *water contained in reservoirs.*

### 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.



# IN THE DESCHUTES BASIN: ESA LITIGATION THREATENED

On January 12, 2023, the Center for Biological Diversity (CBD) sent a letter to the U.S. Fish and Wildlife Service and U.S. Bureau of Reclamation, alleging that the two federal agencies are violating the Endangered Species Act (ESA). Among other things, the letter alleges that Reclamation is violating the ESA by continuing to operate the Deschutes River Basin Project, and that the Service is violating the ESA because it approved the Deschutes Basin Habitat Conservation Plan (HCP) and issued an incidental take permit under the ESA to the DBBC irrigation districts. At its core, CBD's allegation is that the Service and Reclamation are not doing enough to protect the Oregon spotted frog, a species that is listed as threatened under the ESA. The letter serves to notify the Service and Reclamation that CBD intends to sue them in federal court for these alleged ESA violations.

Under the ESA, CBD was required to wait at least 60 days after sending its notice letter before it could formally sue the agencies. While this 60-day period ended in mid-March, as of the date of this newsletter, CBD has not yet followed through on its notice of intent and has not formally sued either the Service or Reclamation. We will continue to monitor the situation and provide our members with any updates. In the meantime, all of the DBBC districts are moving forward with irrigation water storage and delivery activities consistent with the conservation measures set forth in the HCP, and as required by the permit issued to them by the Service at the end of 2020.

## HABITAT CONSERVATION PLAN: HOW DOES IT BENEFIT TID?

The collective effort that resulted in the HCP has opened the door to many millions of dollars of investments in the modernization of basin infrastructure. It's this same collective effort that is needed to secure drought relief, facilitate voluntary water right transfers between farmers, and generate support and funding for larger-scale water management projects that benefit both farmers and ranchers, fish, and wildlife. Unlike some other basins in the West, the HCP provides some water supply protection. In 2022, District patrons were able to access much of their live flow and stored water supplies that were available even with the drought, while simultaneously supporting fish and wildlife habitat and remaining in compliance with the Endangered Species Act (ESA). This was not an accidental or unanticipated outcome of the HCP. Rather, it was something the districts, their regional partners, and the U.S. Fish and Wildlife Service spent 12 years planning for. 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.

## WATER DELIVERIES & REQUESTS

TID expects a water year like 2022; however, it is impossible to predict live flow and how it translates to reductions or deliveries. As drought conditions continue, please be prepared for water reductions (curtailment). We expected it will be necessary to implement a rotation schedule, of 7-days on and 7-days off, beginning in early July that will run through the end of season. We will send a text in June when the rotation schedule is posted to the website at [www.tumalo.org](http://www.tumalo.org).

### Water Request Reminder

Please call the office 24 hours in advance to request to have water started so that our ditch riders can open the head gate. Requests for water must be made by phone or in-person.





## TUMALO IRRIGATION DISTRICT

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### SIGN UP FOR TEXT ALERTS



**Don't miss out  
on important  
district updates!**

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

## OREGON DROUGHT MONITOR

The last time Oregon was free from exceptional drought was in March 2021.

For the first time in two years, Oregon is free of the most serious levels of drought, according to the U.S. Drought Monitor map released in mid-April. Eighty-seven percent of Oregon is considered abnormally dry or in moderate, severe, or extreme drought.

These are indeed challenging times; the Board and District management will keep you informed of water conditions and their impact on your irrigation supply as we all navigate these unprecedented conditions.

**23<sup>rd</sup>**  
driest year to date  
over the past 129 years  
(January to March 2023)

↓ **2.6253**  
inches from normal

Sources: U.S. Drought Monitor

The U.S. Drought Monitor is updated each Thursday to show the location and intensity of drought across the country.

**View Deschutes County  
drought conditions at  
[www.drought.gov](http://www.drought.gov)**



## THE DIRT: SOIL TEMP & PLANT GROWTH

Temperature is a key environmental factor affecting plant growth, development, and yield. Soil temperature has a direct impact on plant growth and can influence plant processes such as photosynthesis, respiration, and water uptake. Learn about optimal planting schedules in "Growing Your Own," a comprehensive publication with schedules for planting 45 vegetables in all regions of Oregon.

**Available to purchase at  
[www.catalog.extension.oregonstate.edu](http://www.catalog.extension.oregonstate.edu)**