

# STATE OF THE DISTRICT & WATER OUTLOOK

We made significant progress piping the District this past winter, thanks to the efforts of Taylor Northwest. By replacing our leaky, open canals with closed pipes, we can be more efficient and effective in delivering water.

Efficient delivery is more critical than ever as we face the driest conditions on record in 129 years. Crescent Lake levels are comparable with what we experienced in 1993-94, which was the last time we rotated water among patrons.

As of April 1, the Upper Deschutes and Crooked Basins snowpack was 108% of normal. But, unfortunately, a robust snowpack doesn't automatically translate to full reservoirs.

Due to the ongoing drought, Tumalo Creek and Crescent Creek flows have been at or near historic lows. When the local snowmelt is over on Tumalo Creek, the District will rely on Crescent Lake for usage. At that time, we will start a 7-day water on and 7-day water off rotation. Monday's will be the days that we will be switching water from the south side to the north side of the District. Staff will be working to make this transition as smooth as possible.

While we cannot create new water, supplies can be conserved and reallocated. Please contact TID if you don't want or aren't able to use your water efficiently. The water you don't use can be passed along to a farmer to produce crops. The small steps we take as individuals to conserve water adds up and can make a significant difference for our region.

Wildfire presents unique challenges to ranches and farms that typically do not apply to urban homeowners and neighborhoods. Now is a good time to revisit (or create) a farm and

### **BEFORE FIRE STRIKES:**

ranch fire safety plan.

- Establish and maintain firebreaks around pastures.
- Create defensible space around all structures.
- ✓ Clear vegetation around fuel tanks.
- ✓ Create a livestock evacuation plan.
- ✓ Ensure proper registration and branding of livestock.
- Have spare keys, combinations, and property maps available for firefighters.
- ✓ Clearly mark water tanks, ponds, and other water supplies available for fire department use.
- ✓ Properly mark all storage areas used for chemicals.





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.



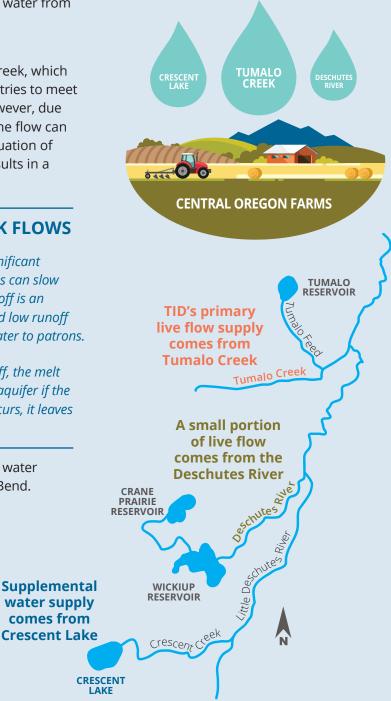
**Drought:** When the snow begins melting off, the melt will go directly into the ground to the local aquifer if the ground is dry and not frozen. When this occurs, it leaves less runoff for irrigation.

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?**

Tumalo Irrigation District manages two primary diversion sources: Tumalo Creek below Shevlin Park and the Deschutes River near Pioneer Park and Crescent Lake storage.





Tumalo Irrigation District, along with seven other irrigation districts and the City of Prineville, worked with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and basin stakeholders on the Deschutes Basin Habitat Conservation Plan (DBHCP). The DBHCP will result in the implementation of restoration and enhancement projects to protect and improve fish and wildlife habitat. The Plan addresses the effects of the irrigation districts and the City on over 480 miles of rivers and creeks. The activities covered by the DBHCP modify the timing and magnitude of flow in the Deschutes River and a number of its tributaries through the storage, release, diversion, and return of irrigation water. These changes in surface hydrology alter the quantity and quality of aquatic habitats for listed species in both positive and negative ways.



# The changes to surface hydrology will be phased over time, for two reasons:

#### 1. Restoration

First, many of the stream channels and floodplains in the basin have been altered from their natural conditions by several decades of irrigation storage and release. The increases in winter flows and corresponding decreases in summer flows under the DBHCP will be phased to accommodate channel restoration activities.

#### 2. Economics

The conservation and movement of water will require several years and several hundred million dollars to complete. Phasing of the conservation measures under the DBHCP will allow time for the irrigation districts and City of Prineville to accomplish the conservation projects and water movements, so that they aren't faced with the risk of having insufficient water to support agriculture.

# Irrigation reservoirs and diversion dams will be managed to improve:

for fish in the	for fish in
Deschutes River.	Ochoco Creek.
Winter flows,	Summer flows
smolt migration	for fish in McKay
lows and summer	Creek and
flows for fish in	Whychus
he Crooked River.	Creek.

Winter flows | Year-round flows

Year-round habitat for Oregon spotted frogs in Crane Prairie Reservoir, upper Deschutes River, Crescent Creek, and the Little Deschutes River.



# **BENEFICIAL USE**

Beneficial use is use of irrigation water to produce a crop, grass or landscape areas. This means that the irrigation water must be used on land that is designated for this purpose — irrigable land, not rock piles, driveways, roadways, or under structures.

If the water on your property has not been used in several years, and, if for any reason, you are unable to irrigate your property in 2021 fully, we encourage you to contact us to discuss the options available to protect the water.



Call us at 541-382-3053 to schedule an appointment if you have any questions or concerns regarding the water on your property and beneficial use.



## **IN MEMORIAM**

Dr. Wally Zimmerman, Division #3 Director February 16, 1941 — December 2, 2020

Dr. Wally Zimmerman, 79, died Wed. Dec. 2, 2020, at his home in the company of his family, after a sudden onset of Lymphoma cancer.

He was born Waldon Christian Zimmerman on Feb. 16, 1941, in Pipestone, Minnesota, to Waldon "Mike" and Frances "Frankie" Zimmerman. He was raised in Pendleton, Oregon, with his siblings, Dennis, Gary, and Jeff, where he graduated from high school. He attended Lewis & Clark College where he received a bachelor's degree in chemistry in 1964 and went on to the University of Oregon where he was awarded his Doctor of Dental Medicine degree in 1969.

Upon graduation he served in the Navy Medical Corps as a dentist to the Hopi and Navajo reservations of the American Southwest.

He had a love for rural life and ranching. He and his wife Carol operated a ranch in the Tumalo area where they enjoyed horses and a small hay operation.

Dr. Wally Zimmerman is survived by his wife, Carol Shull, and her children, Javan Shull, Michal Shull, Rachel Jonas, and Ben Shull, and seven grandchildren. He is also survived by his first wife, Linda Zimmerman, and their children, Michael Zimmerman, and Megan Miller, four grandchildren and two greatgrandchildren. He was preceded in death by his second wife, Sharon "Shari" Zimmerman, and her son, Matt Hahn, and survived by her children, Mike Hahn, David Hahn, and Stacy Hahn. He is survived by his siblings, Dennis Zimmerman, Gary Zimmerman, and Jeff Zimmerman. His parents, Mike and Frankie Zimmerman, preceded him in death.



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Sign up today to receive important irrigation district alerts and notifications. To sign up, text "TUMALO" to 541-253-4321.

### **OFFICE OPEN**

TID's office is open and following Oregon OSHA COVID-19 Rules. Payments can be delivered to the office, through the mail slot in our front door or mailed to: 64697 Cook Avenue, Bend, OR 97703. Thank you for your cooperation.



Good water management requires an understanding of when to irrigate, how much water to apply, and how to uniformly apply the water over the field. The first step to becoming an efficient water manager is to understand units of water measurement.

There are two basic units of water measurement from a water management perspective. For water that is in motion, cubic feet per second (cfs) is the unit of measure. For water that is stored or impounded, the acre-foot (af) is how water is measured.

TID has an average yearly demand of 52,443 acre feet to serve over 7,000 acres and 685 patrons.

### **CUBIC FEET PER SECOND (CFS):**

1 cubic foot per second or 1 cfs is a rate of water flow which will supply 1 cubic foot of water in one second.

1 cubic foot per second = 7.4805 gallons flowing by a particular point in 1 second

### **ACRE FOOT:**

Volume of water. Amount of water to cover an acre of land, one foot deep.

1 acre foot = 325,851 gallons