

## HANDBOOK FOR WATER USERS

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## **BOARD OF DIRECTORS**

Stephan L. Putnam	DIVISION #1
Jack Farley	DIVISION #2
Carol Shull	DIVISION #3
Ronald W. Cochran	DIVISION #4
Martin Warbington	DIVISION #5

## **STAFF**

Christopher Schull	DISTRICT MANAGER
April L. Harris Spath	OFFICE MANAGER
Deborah Simenson	BOOKKEEPER/OFFICE ASSISTANT
Robert D. Varco	FIELD SUPERVISOR
Brent Christensen	MAINTENANCE SUPERVISOR
Kirby Lugo	DITCHRIDER/MAINTENANCE
Matt Lane	DITCHRIDER/MAINTENANCE

## INTRODUCTION

Tumalo Irrigation District is a municipality which administers and delivers, ~8,110 acres of irrigation water rights. These rights are for use of Tumalo Creek, Deschutes River water, and supplemental water stored in Crescent Lake located in the upper Deschutes River drainage in Klamath County.

Tumalo Irrigation District water rights are delivered to approximately 680 landowners in the vicinity of Tumalo Oregon, an unincorporated community seven miles northwest of Bend Oregon. The irrigated lands are located on a semi-arid volcanic plateau at approximately 3,200 feet elevation west of the Deschutes River. The major crops are pasture, hemp, and hay.

The Tumalo Creek drainage is southeast of Broken Top Mountain (elevation 9,175 feet) in the Cascade Range. Water is diverted from Tumalo Creek north (downstream) of Shevlin Park and from the Deschutes River near the 1<sup>st</sup> street rapids in Bend. The water travels through two main pipelines to the Tumalo area where it is delivered through another 65 miles of open canals and pipelines. The City of Bend also shares use of Tumalo Creek for a major portion of its water supply.

Tumalo Irrigation District is governed by an elected Board of Directors, one Director from each of five electoral divisions within the District's boundaries, which in total, encompass approximately 45 square miles. Regular staff consists of a Manager, Watermaster, Office Manager, Office Assistant, and four field employees engaged in ditch riding, water delivery, construction, and maintenance.

A history of the District, and its By-Laws, are available both online and at the District office, which is in the former Laidlaw Banking and Trust Company building (1905), in Tumalo.

The office address is:

Tumalo Irrigation District  
64697 Cook Ave  
Bend, Oregon 97703

Phone 541-382-3053

Web site: [www.tumalo.org](http://www.tumalo.org)

Email: [staff@tumalo.org](mailto:staff@tumalo.org)

## **ELECTIONS**

Nomination to the Board of Directors is by petition during October of each year. You will be notified prior to and election in the division you reside. An election is held the second Tuesday in November if more than one candidate is nominated to fill one vacancy. To be eligible to run for the board, sign a nominating petition and to vote, a person must be at least 18 years old, and must own land located within and assessed by the District. A document showing ownership must have been recorded not less than 21 days prior to Election Day. Directors serve a staggered three-year term. There is a provision for absentee voting, please contact the District office for details.

## **FINANCES**

The District operates on an annual budget developed over the preceding three months and adopted each year at the annual meeting in January by its elected Board of Directors. Both the annual meeting and regular monthly board meetings are open to the public.

The District finances its operation primarily with an annual assessment levied against each irrigable acre and against each account with irrigation rights. Additional revenue derives from the sale of land and cell tower income.

## **MAJOR SYSTEM STRUCTURES**

Tumalo Diversion Dam and Tumalo Feed Pipeline: Originally built in 1913-1914 and partially rehabilitated in 1975 and 2007, this system diverts and carries water from Tumalo Creek, at a point 1/2 mile downstream from Shevlin Park, north and into Upper Tumalo Reservoir. This pipeline consists of 6 miles of both 90 and 84 inch pipelines.

Crater Creek Diversion Canal: Completed in 1915, this open, unlined canal diverts water at timberline from Crater and Little Crater Creeks, which drain the southerly slopes of Broken Top Mountain, westerly into Tumalo Creek. It is about 2 miles long and has a capacity of 75 cfs but rarely exceeds 20 cfs.

Upper Tumalo Reservoir: At elevation 3,510, this small reservoir holds 1,100-acre feet of water and is the District's only storage facility for water diverted from Tumalo Creek. Upper Tumalo Reservoir is the remaining portion of Tumalo Reservoir, a failed project from the early 1900's. Tumalo Reservoir provides short-term storage and helps to compensate for fluctuations in the flow of Tumalo Creek. The property around Tumalo Reservoir is currently closed to the public due to vandalism, please respect the no trespassing signs.

Crescent Lake Dam and Reservoir: Crescent Lake (elevation 4,845) is in the Cascade Range about 12 miles east of Willamette Pass, about 84 miles south of Bend Oregon. The water released from Crescent Lake travels down Crescent Creek, to the Little Deschutes River then onto the Deschutes River where TID diverts the water into its Bend Feed Pipeline. The total travel time is roughly 5 days. Crescent Lake Dam is a 38-foot high earth filled dam with concrete outlet works rebuilt in 1956. Crescent Lake has an active storage capacity of 86,050 acre-feet of water on top of a natural lake but only averages about 45,000 acre-feet.

Bend Diversion and Bend Feed Pipeline: Originally built in 1922, and extensively rehabilitated in 1975, the Bend Feed diversion dam forms the pool on the Deschutes River at Pioneer Park in Bend Oregon. The structure diverts water from the Deschutes River into the Bend Feed Pipeline and transports the water north to where it joins the Tumalo Feed Canal.

Secondary canals and laterals: The remaining open canals and small pipelines totaling about 65 miles, deliver the water out to individual farms and ranches in Tumalo. The open canals are scheduled to be piped if they are not already, to conserve water lost to seepage and evaporation for fish and wildlife and to allow for better consistency in deliveries.

## **WATER RIGHTS AND IRRIGATION**

In Oregon, irrigation water is public property. Private individuals can own the right to use irrigation water, subject to certain conditions. The State of Oregon, through its Water Resources Department, administers and enforces those conditions. Tumalo Irrigation District administers and delivers irrigation water under the terms of the water rights which are appurtenant (assigned) to the lands served by its delivery system.

The use of irrigation water is subject to two general conditions. First, the water must be used "beneficially" at least once every five years. Second, the water must be used on the same number of acres and on the actual acres of land where it is "appurtenant" (that is where it has been officially field-surveyed or located by the State). Land area occupied by buildings, driveways and large storage ponds is not counted as irrigated acreage.

Beneficial use of irrigation water is a concept which does not have a fixed and complete definition. It has to do in part with the intent of the water user, in part with what can be observed at the location where the right is appurtenant, and in part with what a reasonable and prudent farmer would do. It is beneficial use to irrigate: a crop (hay, grain, potatoes, strawberries, nursery stock), pasture, vegetable garden, lawn, and landscaping. Use which is not beneficial is called waste. It is waste to irrigate sagebrush, rock piles, feedlots, roadways, and equipment yards. If you have questions, please call our office.

Certificates: Each irrigated acre in our District has one primary and at least one supplemental certificate. Each certificate states the source of the water, the location where the water is to be used; the allowed number of irrigated acres at that location; the date of priority of the water right, and the duty. Tumalo Irrigation District rights have dates of priority from 1900 to 1913. Most every TID patron has 1913 rights or 1913 supplemental rights as the 1900 to 1907 rights were insufficient to irrigate crops in Tumalo.

The District measures your water at your point of delivery which is a weir for open canals and a meter for pipelines. Your water may also be measured combined with your neighbors then divided proportionally in a divider box. TID rights typically, including supplemental rights, allow a delivery not to exceed a rate of flow of ~7.48 GPM per acre in the main summer season.

The TID water right certificates are divided up into what are called 'Seasons'. These seasons limit the amount of water TID is legally allowed to deliver even if it is available in excess. The seasons are divided as follows and assume ~7.48 GPM/Acre is 100% flow.

April 1 to May 1 <sup>st</sup>	35% (2.6 GPM/Acre) flow cap
May 1 to May 15 <sup>th</sup>	50% (3.75 GPM/Acre) flow cap
May 15 to Sept 15 <sup>th</sup>	100% (7.48 GPM/Acre) flow cap
Sept 15 to Oct 1 <sup>st</sup>	50% (3.75 GPM/Acre) flow cap
Oct 1 to Nov 1 <sup>st</sup>	35% (2.6 GPM/Acre) flow cap

These percentages are approximate for discussion, and they are a cap to what TID can deliver.

TIDs other cap is what water is available to deliver. TID can only deliver what it receives, its job is to ensure it delivers a fair and equitable division of the water it receives, as per the TID water rights.

You are never entitled to more water than you can use beneficially, nor to irrigate more nor less acres of land than the number of acres of water right you own.

Sprinkler irrigation (all types). Irrigation systems should be designed with the above limits in mind, your system should be able to function in a range of 2.6 to 7.48 GPM per acre.

Flood irrigation: works well only with larger irrigated acreage because it requires a strong flow of water to push the water across each portion of the land to be irrigated. Under normal conditions, you will need about 10-20 acres of water right on order to flood irrigate satisfactorily.

Crop information: Call Deschutes County Extension Service: 541-548-6088.

## **OPERATION**

The Ditch rider: Know your ditch rider and keep your ditch rider informed of your water needs. Your ditch rider is the person responsible for getting the correct amount of water to your point of delivery.

The Rules and Regulations: Know the Rules and Regulations and follow them. Their purpose is to help the whole District operate to the benefit of each water user.

Fluctuation in Flow: Flow fluctuates in the waterways because of the rate of snow melt into Tumalo Creek, or because someone on your waterway changed the amount of delivery without calling the ditch rider. An ample pond often is the best answer.

**Questions? Water Problems? Call 541-382-3053**