

WATER FRONT

TUMALO IRRIGATION DISTRICT

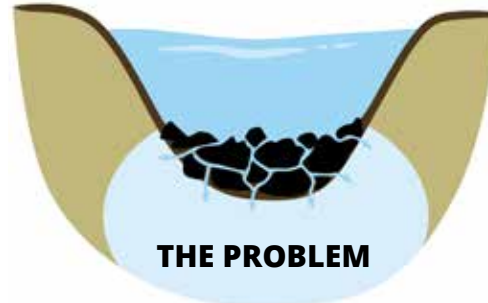
INVESTING IN INFRASTRUCTURE

Efforts to revamp irrigation systems in the basin go back to 2015, when environmental groups sued to protect spotted frog habitat. As part of a settlement agreement, irrigation districts agreed to provide more water in streams and rivers.

By replacing leaky, open canals with closed pipes, TID irrigation can help farmers do much more with much less.

Water saved from seepage below and evaporation above can now go to the farm or stay in the river to help support wildlife conservation, while gravity-pressurized water eliminates the need for farmers to maintain costly pumps.

Over the past two decades, TID and their partners have been making significant investments by enclosing the canals into pipe. Each piped portion immediately conserves the water previously lost to seepage. The water conserved will be certificated as an instream water right under Oregon's Allocation of Conserved Water Program.



THE PROBLEM

Irrigators need to divert more water out of the river to account for the water lost through the porous lava beds and sandy soil of the canals

Outdated canals can lose up to 50% of diverted river water through seepage



THE SOLUTION
Piping leaky
canals

- 1 Eliminates water lost through seepage
- 2 Saved water is permanently protected in the river by the State of Oregon
- 3 Creates an opportunity for pressurized hydropower that doesn't have a negative impact on the river

Promising Results

Over fifty-five miles (7%) of the leakiest sections of canals have been piped to restore 93 cubic feet per second to our local rivers. That is enough water to fill 3.8 Olympic-sized pools per hour!

Courtesy of Deschutes River Conservancy

\$8M
ECONOMIC
IMPACT

40
ANNUAL
JOBS

\$45M
CAPITAL
CONSTRUCTION

48CFS
SAVED
TUMALO CREEK &
CRESCENT CREEK

ECONOMIC IMPACT Tumalo Irrigation District's conversion of its 13.5 miles of canals provided 135 jobs between October 2019 and April 2020. Renewed construction in Fall 2020 to pipe 12,837 linear feet of the Allen Lateral will create 40 annual jobs.

STATE *of the* DISTRICT

I want to congratulate the field staff and patrons of our District on the excellent job everyone has done conserving water in another extremely dry year. The amount of water we diverted from Tumalo Creek and the amount we withdrew from Crescent Lake are some of the lowest numbers I have seen in 30 years.

This year we saw three irrigation districts run out of water and shut down. The drought affected many properties and families and brought the stark realization to local communities that the water available to any district, regardless of priority in time, is a limited resource and can only be used when available. Yes, we will have to depend on a good snowpack in the mountains to make it through next year without a rotation of some kind, but we made it through this year, and that is enough for now.

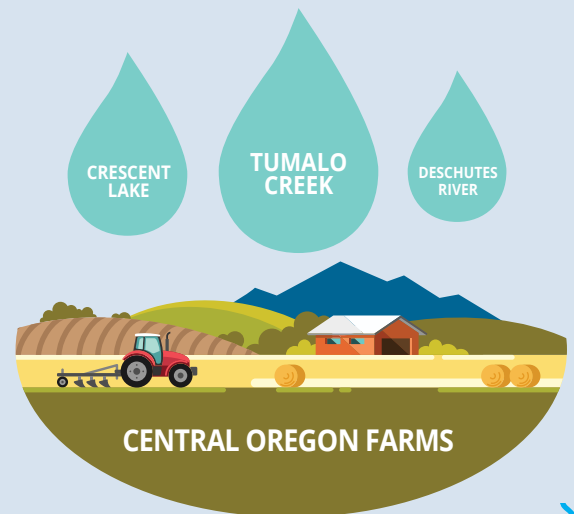
As a District, we ranked number one in State rankings for grant funding on Group 3, The Allen Lateral. Our application was the highest scoring application. The last time we applied, we ranked number three, so we are getting better with practice! These grants allow us to match our Federal funding through the Natural Resources Conservation Service we received a few years ago.

Enjoy the clear skies!

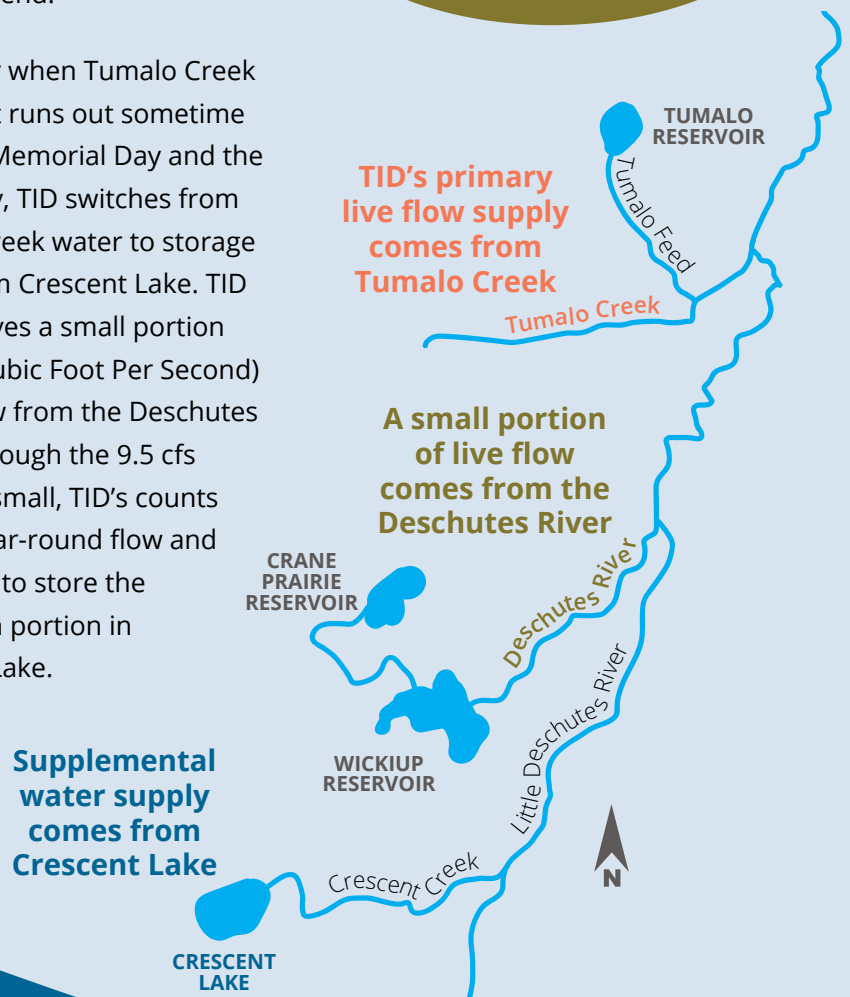


WHERE DOES TUMALO IRRIGATION DISTRICT WATER COME FROM?

Tumalo Irrigation is a dual source system that obtains most of its water supply from a few natural sources. TID's primary live flow supply comes from Tumalo Creek, which is fed by local mountains snow melt. When Tumalo Creek runs low, a supplemental stored water supply comes from Crescent Lake, 80 miles south of Bend.



Every year when Tumalo Creek snow melt runs out sometime between Memorial Day and the end of July, TID switches from Tumalo Creek water to storage water from Crescent Lake. TID also receives a small portion (9.5 cfs, Cubic Foot Per Second) of live flow from the Deschutes River. Although the 9.5 cfs source is small, TID's counts on this year-round flow and the ability to store the off-season portion in Crescent Lake.



IN MY VIEW: MODERNIZING TID

Patron Spotlight on Bruce Edwards and Annette Coulon

TID patrons, Bruce Edwards and Annette Coulon, operate a small hay and horse farm off Tumalo Reservoir Road, where they raise Icelandic Horses and grow Orchard Grass Hay. TID provides them with water to irrigate their pastures and twenty-three acres.

The Parkhurst Lateral that supplies Bruce and Annette's property crossed diagonally across their entire acreage. Half of the lateral was in an open ditch, and the other half was in an old pipe with a significant elevation change. The old system required a lot of maintenance as the pipe was near the surface and was easily damaged. In addition, the grate where the ditch entered the pipe was constantly plugged with trash and debris, which required daily cleaning to prevent the ditch from overflowing. They constantly battled invasive nonnative weeds on the ditch bank.

TID contacted Bruce and Annette early on about the piping project. They attended planning meetings and voiced concerns about noise, damage and state their property would be left after completion of the piping project.

IN BRUCE'S WORDS: As they tore into our property, it was a total mess. It was certainly depressing to see our hay fields torn up. To our amazement, they did it quickly, were respectful of not starting earlier than 8am, where they passed our bedroom. The best part was they repaired the land incredibly well, smoothing it where there was a hill, removing the rock and debris, and re-haying the sections destroyed. They accidentally hit a section of fencing and repaired it better than they found it. As we entered the water season, we didn't know what to expect. The good news is the water came on as advertised. We were careful to flush our system on the first day. TID had discussed that the system would be pressurized, but I was skeptical. We averaged +/-45 psi all season. We ran our pivot and several K-Lines simultaneously without using our pump. We only had about 18 days total in peak summer, where we ran the pump, but only to boost the psi during peak heat and irrigation.

"This season's power savings was \$1,410 (not including September). From a long-term financial standpoint, that's a great savings for me as a TID customer."

I have read the "Stop the Pipe" website, and while I agree on the actual process of piping, the system is very intrusive. From an environmental standpoint, any existing environmental impact caused by removing a ditch and ultimately putting water back into a natural watershed is restoring the ecosystem to its more natural state. The Tumalo elk herd spends quite a few days on our fields and have been there in force after the piping project. Perhaps I had an unusual experience, but I believe that we, as a community, have to plan for the future, so the next generations have water and the beautiful environment that surrounds us, especially the Deschutes River.

PLAN UPDATE: HABITAT CONSERVATION

The goal of the HCP is to provide sufficient, reliable water for residents and farmers while conserving fish, wildlife, and water resources.

The City of Prineville and the Deschutes Basin Board of Control (DBBC), made up of eight irrigation districts in Central Oregon, have developed a Deschutes River Basin Habitat Conservation Plan (HCP).

The U.S. Fish and Wildlife Service, which is currently reviewing the plan, could publish the final version of the conservation plan and the final environmental impact statement by

November, according to Bridget Moran, the service's field supervisor in Bend. That would lead to a final permit decision by year's end. Permit approval would allow irrigators in Central Oregon to continue to channel water away from the Deschutes River without the threat of litigation, as long as they follow the conditions in the final plan.

[Learn more at www.dbbcirrigation.com](http://www.dbbcirrigation.com)

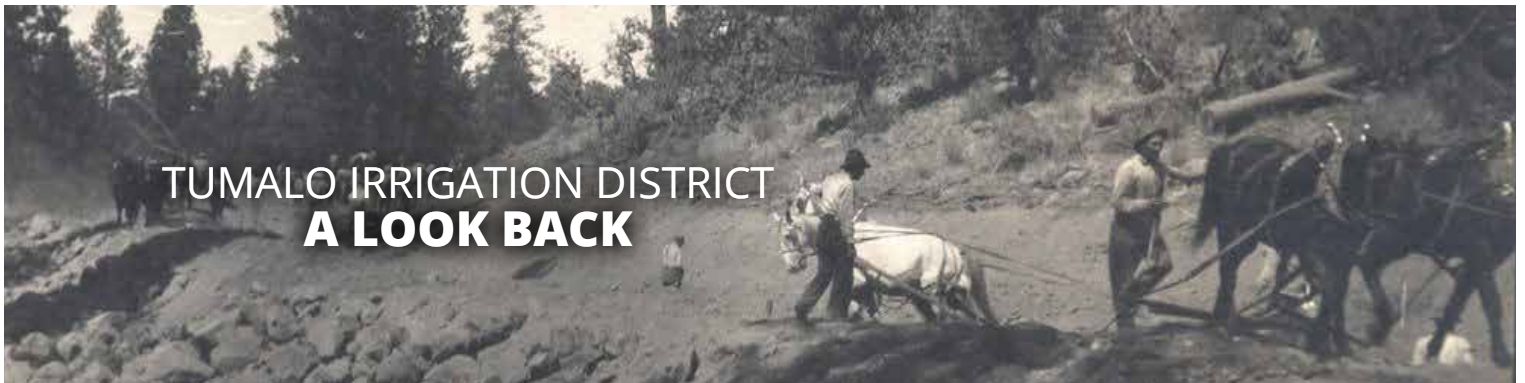
2020-2021 STOCK RUNS

Weather permitting, TID plans to resume stock runs this year for select laterals. Due to construction, the Columbia Southern and laterals which flow from it will be excluded from having a stock run during construction. We apologize for the inconvenience.

TID is planning a stock run for the week before Thanksgiving. Please note, patrons must call 541-382-3053 to request delivery of stock water.

OFFICE CLOSED

Due to COVID-19, TID's office is closed to visitors until further notice. Payments can be delivered through the mail slot in our front door or mailed to 64697 Cook Avenue, Bend, OR 97703. For all other matters, call 541-382-3053. Thank you for your cooperation and understanding.



TUMALO IRRIGATION DISTRICT A LOOK BACK

The first documented irrigation canal in Central Oregon was dug in 1883 to divert water from Tumalo Creek to surrounding farms and ranches. Over the next few decades as more settlers arrived in the area, the system of open irrigation canals grew and was formalized in 1902 as the Tumalo Project to irrigate lands under the Carey Act. While these canals are credited with development and prosperity in the region 100 years ago, the canals were dug through porous fractured basalt that result in about half the water withdrawn to be lost due to seepage in the bottom of the canals.

TID administers, distributes, and delivers 7,414 acres of irrigation to 685 landowners in the vicinity of Tumalo.

These rights are to the use of Tumalo Creek and water stored in Crescent Lake Reservoir, in the upper Deschutes drainage.



TUMALO IRRIGATION DISTRICT

64697 Cook Ave, Bend, OR 97703
541-382-3053 | staff@tumalo.org
www.tumalo.org

Follow us on Facebook