TID Board Members

Division 1. Yves Teirlynck

Division 2. David Hampton

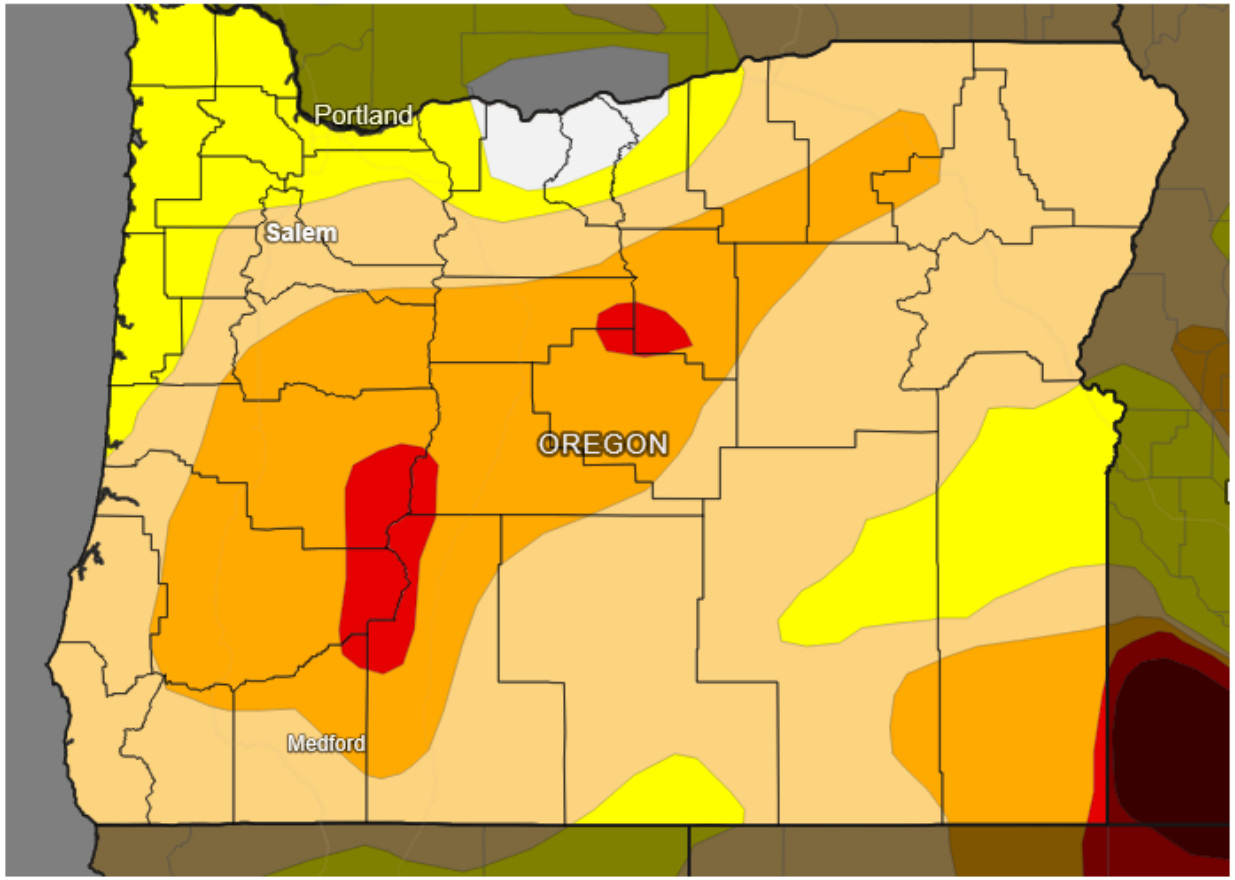
Division 3. Jack Billings

Division 4. Jeff Stuermer

Division 5. Dr. Martin Warbington

Water Year 2026 Tumalo's Water

Flows on Tumalo Creek don't currently allow for the District to operate and deliver 70% of a patron's water right. We are using both water sources Tumalo Creek and Crescent Lake to deliver the water to patrons



Drought & Dryness Categories	% of OR
D0 – Abnormally Dry	16.1%
D1 – Moderate Drought	51.1%
D2 – Severe Drought	28.4%
D3 – Extreme Drought	2.9%
D4 – Exceptional Drought	0.0%
Total Area in Drought (D1–D4)	82.4%

Source(s): NDMC, NOAA, USDA, NASA
Data Valid: 05/12/26

Drought.gov

Tumalo Creek Snowpack/ Drought

The 2025–2026 winter produced one of the worst snowpack years on record across much of Oregon, and the Tumalo Creek drainage was heavily impacted.

Tumalo Creek drainage size is relatively small (~59 square miles) roughly 37,760 acres of land

The primary issue was not simply lack of precipitation — it was temperature. Much of the winter precipitation arrived as rain instead of snow because temperatures remained unusually warm across the Cascades.

This Means:

Reduced snow accumulation at higher elevations

Earlier melting of whatever snow did accumulate

Lower sustained runoff into spring and summer

Reduced natural storage(snowpack) feeding Tumalo Creek later in the irrigation season

The 2026 run-off season behaved more like a “flash runoff” year.

This directly affects irrigation reliability for patrons because Tumalo Creek live flow typically depends on gradual snowmelt extending through spring and early summer. In 2026, much of that water has arrived too early to be efficiently captured naturally.

How Crescent Lake Works

Crescent Lake it the only naturally formed lake that is used for irrigation operations in the Deschutes Basin.

Crescent Lake captures runoff from roughly 57 square miles or 36,480 acres of land in the high Cascade watershed.

The watershed that feeds into Crane Prairie and Wickiup Reservoir is 320,000 Acres in size.

TID has rights to store up to 86,000 Acre feet of either snowmelt or rain runoff for irrigation purposes. That is equal to about 23 ft. of water behind the 38 ft. tall dam.

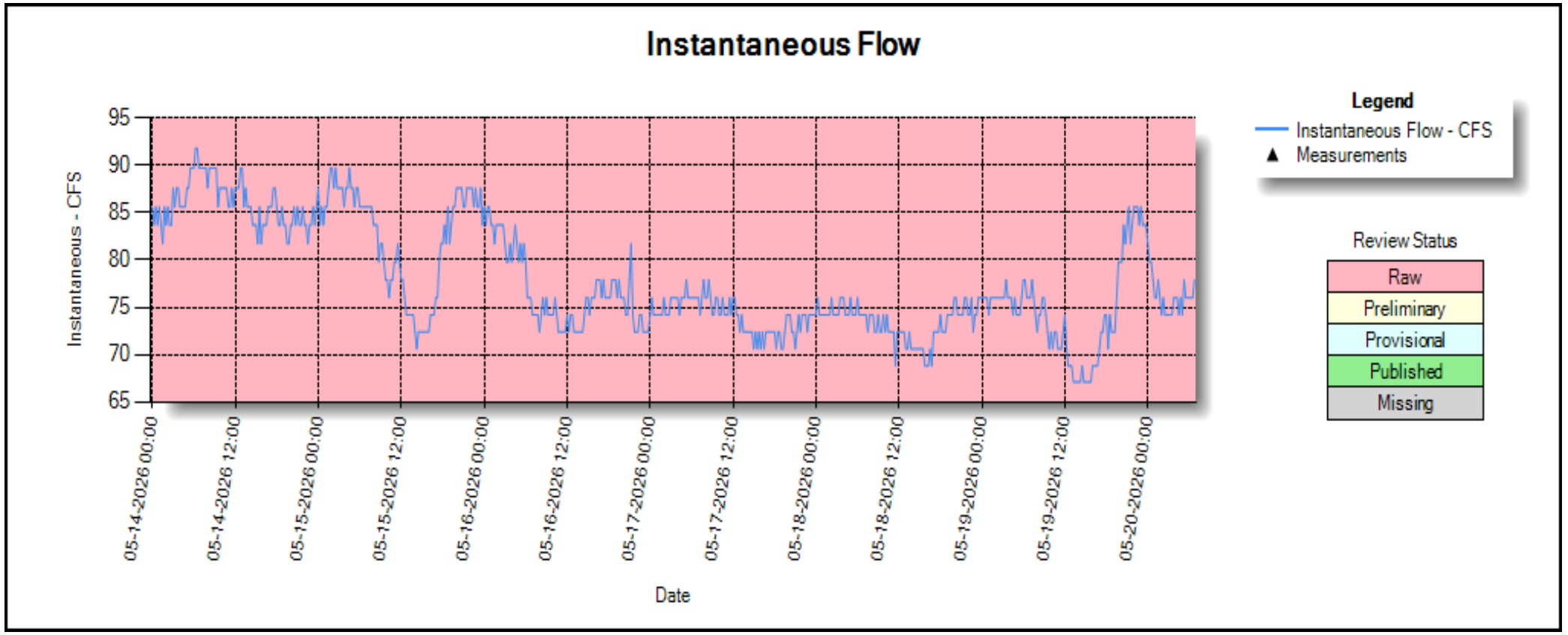
28,000 Acre feet is about equal to 7.2 vertical feet of water stored behind the Dam for irrigation season.

TID's Crescent Lake rights are supplemental stored water rights that allow the District to capture water during wetter periods and release it later in the irrigation season when Tumalo Creek flows decline. The storage system is critical to maintaining late-season reliability for patrons, especially during drought years, while also supporting instream restoration and habitat commitments through the Habitat Conservation Plan(HCP).

Tumalo Creek Current Conditions

This graph shows that flows on Tumalo creek remained relatively stable over the 7-day period, but within a very tight range. Staff are continuously adjusting flows to balance limited available water across the system during ongoing conditions. While fluctuations occurred, the creek did not experience a major outage or collapse but rather shows the challenges of water delivery on Tumalo Creek.

10 CFS total swing roughly a **13–14% variation** across the entire period



Crescent Lake Current Conditions

Current Water Level 27,000 Acre Ft.

Anticipated snowmelt into Crescent Lake was 1 Thousand Acre Ft.

Currently TID is using 1000 Acre ft. of water every seven days to supplement the lack of water on Tumalo creek. That volume will increase as the flows on Tumalo creek continue to decline.

For every Cubic Foot Per Second(CFS) released from Crescent lake TID can use 75% at our Bend Diversion.

Basic example 100 CFS release @ Crescent Lake = 75 CFS available @ Stidel Dam

Total water needed in Bend for a 70% delivery year is 18,000 Acre Ft.

Total Water that must be released from Crescent lake would be 22,000 to 25,000 Acre Ft.

TID loses flow control at Crescent lake at 10,000 Acre ft.

Current Deschutes River Live Flow Conditions that affect TID

- We're not seeing a strong natural runoff year. Flows across the basin are coming in below average, and what increase you're seeing in the Deschutes river right now is driven by reservoir releases from Wickiup and the start of irrigation operations—not a big snowmelt push. TID's 9.5 CFS of live flow water on the Deschutes River has been fluctuating on and off based on available water in the river and senior district's water usage.
- We expect the spring flow on Tumalo Creek to drop to historic lows once the snow runoff is complete. This will further impact the available live flow for delivery. Normal spring flow averages 55 to 60 CFS. We expect it to drop to 40 CFS or lower

This will lead to at least an additional 20 CFS shortage for the entire system

Water 101

1 Cubic Foot Per Second (CFS) = 449 Gallons Per Minute(GPM)

A single CFS flowing continuously for 24 hours delivers approximately: **646,000 Gallons Per Day(GPD)**

1 CFS serves 60 acres of land per TID water rights certificates.

TID acres served is 8,114 = 135.23 CFS at 100% delivery

Numbers below are when we are fully piped

135.23 CFS = **87,434,308 Gallons Per Day**

That is enough water to fill roughly 130 Olympic-size swimming pools every day.

69,027,840 Gallons Per Day = Is a 70% delivery rate

That volume is enough water to fill roughly 90–93 Olympic swimming pools every single day.

Current Carry Water Needed to deliver 70 % is 12,275,280 GPD

That's why even relatively small changes in streamflow or conveyance loss can materially affect deliveries across **the entire district system piped or open ditches.**

TID'S Current Math Problem

Piped Acre usage at 70 % =31,610,880 GPD (49CFS)

Ditch Acre usage at 70% = 25,159,680 GPD + Carry Water of 12,275,280 GPD = 37,416,960 GPD

(57CFS)

Current water in the system 64,512,000 GPD (99.8CFS)

Total water needs for 70% usage 69,027,840GPD (106CFS)

Amount of water short as of 5/19 4,515,840 GPD (6.99CFS)

Next lift of water from Crescent arrives in Bend 5/23

Amount of water available = 11,386,368 GPD (17.6CFS)

Piped served acres is 4,194.33

Ditch served acres is 3,227.66

Challenges of TID'S Gravity system

Water in our system does not move instantly—it moves by gravity.

We have a gravity pressurized pipe system up top and a gravity ditch system below it. Those are two completely different delivery methods tied to the same water source.

In a gravity system, water doesn't arrive when we release it—it arrives when it gets there.

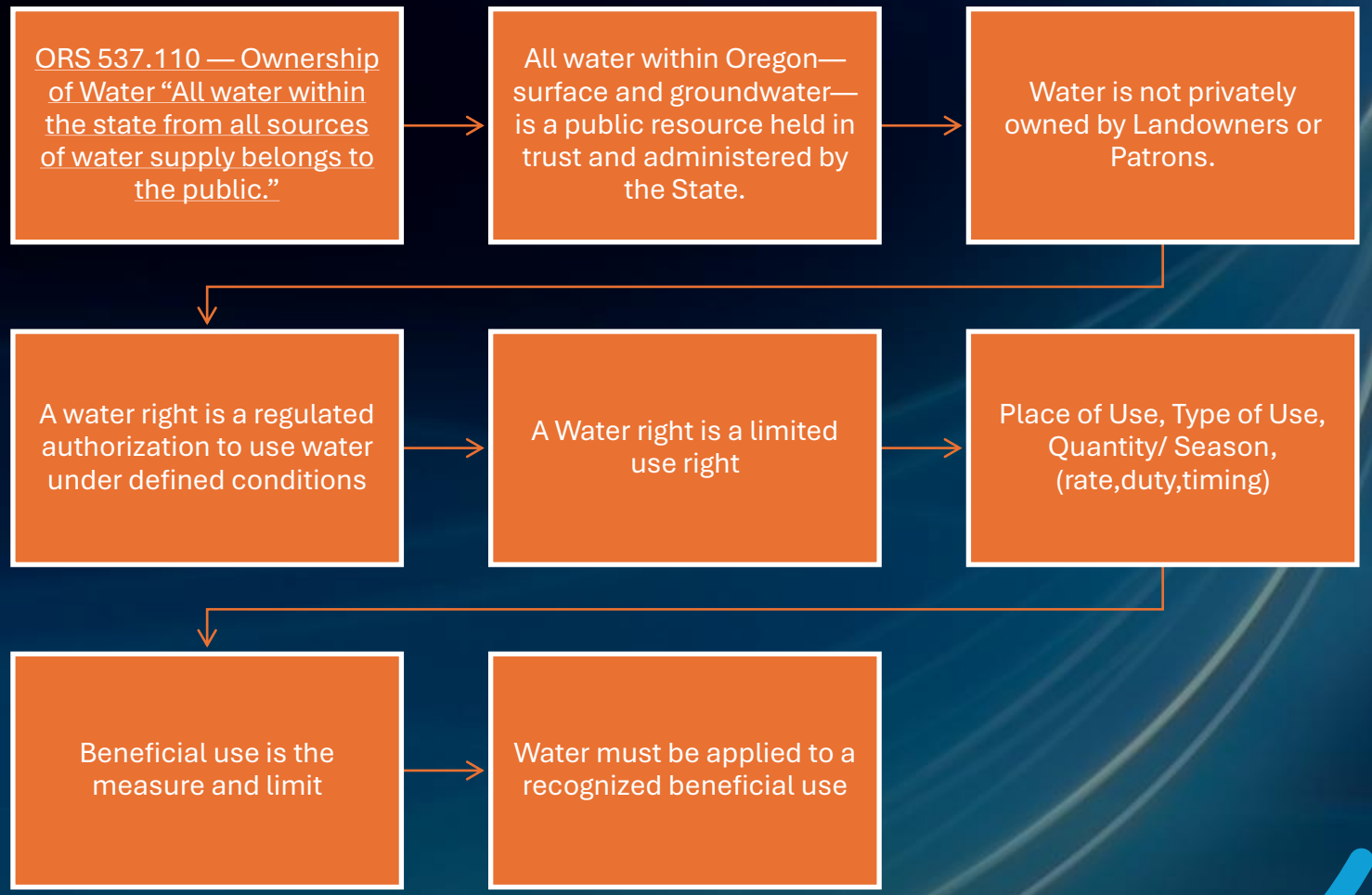
When we make a change, the pipe responds quickly because it's under pressure. The ditch doesn't. It has to physically move water, re-wet the canal, and build enough flow before anyone sees it.

We know the gap between what you see in the river and what you receive at your headgate is frustrating. That gap is real—but it reflects system limitations and supply conditions, not a lack of effort or attention to your delivery.

It's not that anyone is being prioritized differently—it's that the system itself behaves differently depending on where you are in it.

We will continue to move water as efficiently and fairly as possible. But we are not going to misrepresent system limitations to match perception.

Public Ownership of Water — ORS 537.110



ORS 537.110

Water rights are attached to the land

Irrigation district rights authorize:

- irrigation
- on specific lands
- within a defined place of use

They do not specify:

- hay only
- garlic only
- pasture only
- high-value crops only

Oregon water law is <u>NOT</u> based on crop profitability

People may believe that:

- one crop produces more jobs
- more tax base
- more revenue per acre-foot
- or better regional economics

Oregon's beneficial use doctrine does not authorize a district to deny water because another crop is considered "better."

Should TID Patrons pay for piping the District

The cost of piping the remainder of TID infrastructure: at a total estimated cost of **$29 million**, each of the District's **698 patrons** share would be nearly **$41,000** before interest. The annual cost would likely fall between **$1,000 and $3,000 per patron per year for decades**, depending on the repayment term and financing rate.

That level of assessment would be beyond what District patrons could reasonably absorb, especially when many small-acreage users of 10 acres or less are family farms, livestock operators, or rural properties. It would create a financial burden large enough to threaten affordability, and beneficial use compliance.

Upcoming Piping Projects

Project Group 6B, Winter 2026/2027 Piping Hwy 20 to Connarn Road

Project Group 5, Winter 2027/2028 Piping the Couch Lateral

Project Group 6C, Winter 2028/2029 Remaining canal from Connarn Road to White Rock Loop