

Watershed Planning for Tumalo Irrigation District



TUMALO IRRIGATION DISTRICT



United States Department of Agriculture

Natural Resources Conservation Service



Watershed Plan Process

- NRCS initiated the process for TID's project: June 16, 2017
- Public scoping meeting: July 6, 2017
- Public scoping comment period: July 6, 2017 - July 24, 2017
- Incorporate all public comments into Draft Watershed Plan-Environmental Assessment (EA)
- **Public review of Draft Watershed Plan-EA**
 - **30-day public comment period: April 16 - May 22, 2018**
 - **Public meeting: May 8, 2018**
- Incorporate all public comments into Draft Watershed Plan-EA
- NRCS Chief issues an Authorized Watershed Plan-EA
- TID eligible to receive funding if NRCS issues a Finding of No Significant Impact



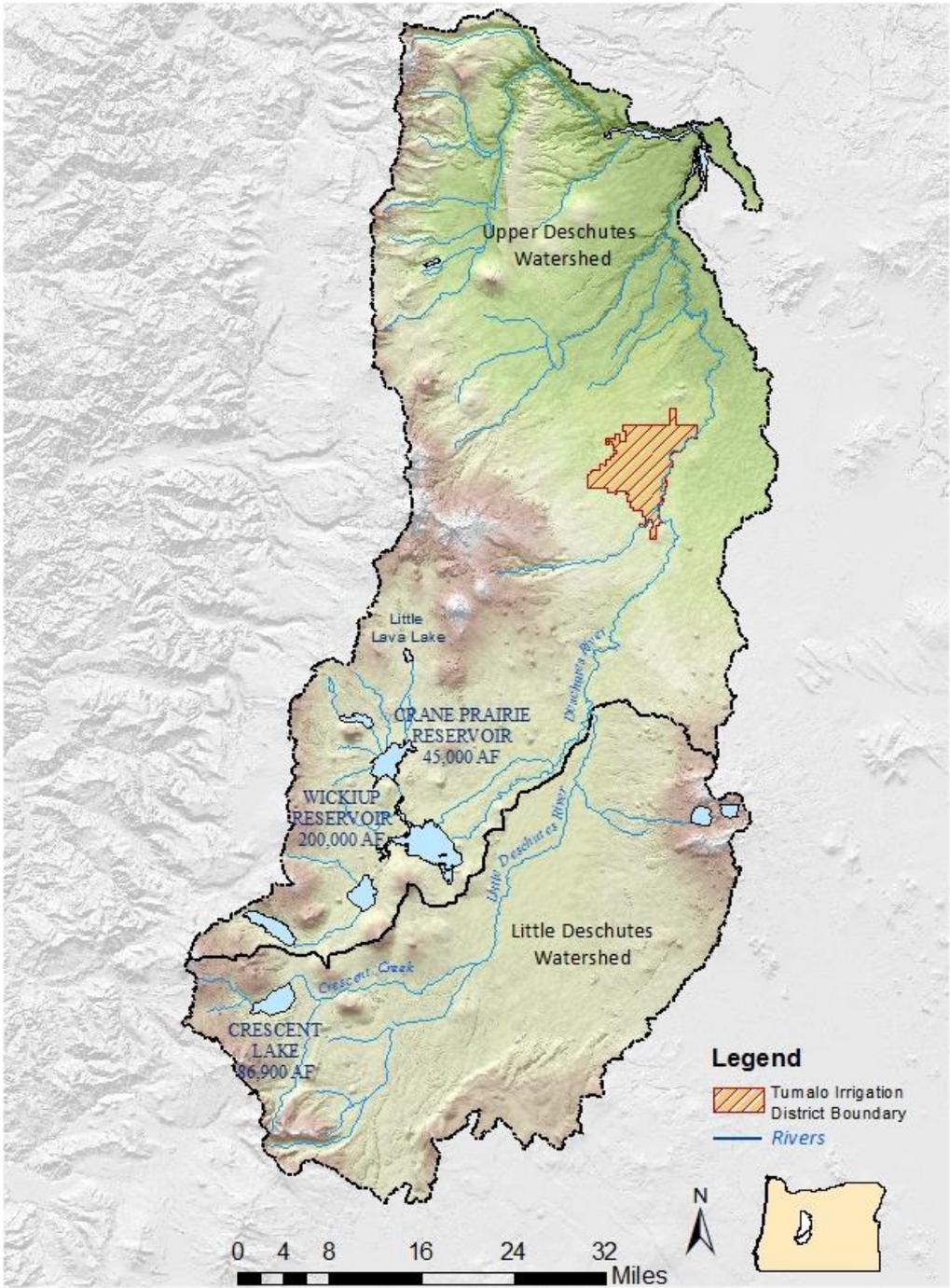
Tumalo Irrigation District Public Comment Meeting Draft Watershed Plan-EA



TUMALO IRRIGATION DISTRICT



District Location Related to Rivers and Reservoirs



District Map

667 Patrons

7,417 water right acres

1900-1913 priority water rights

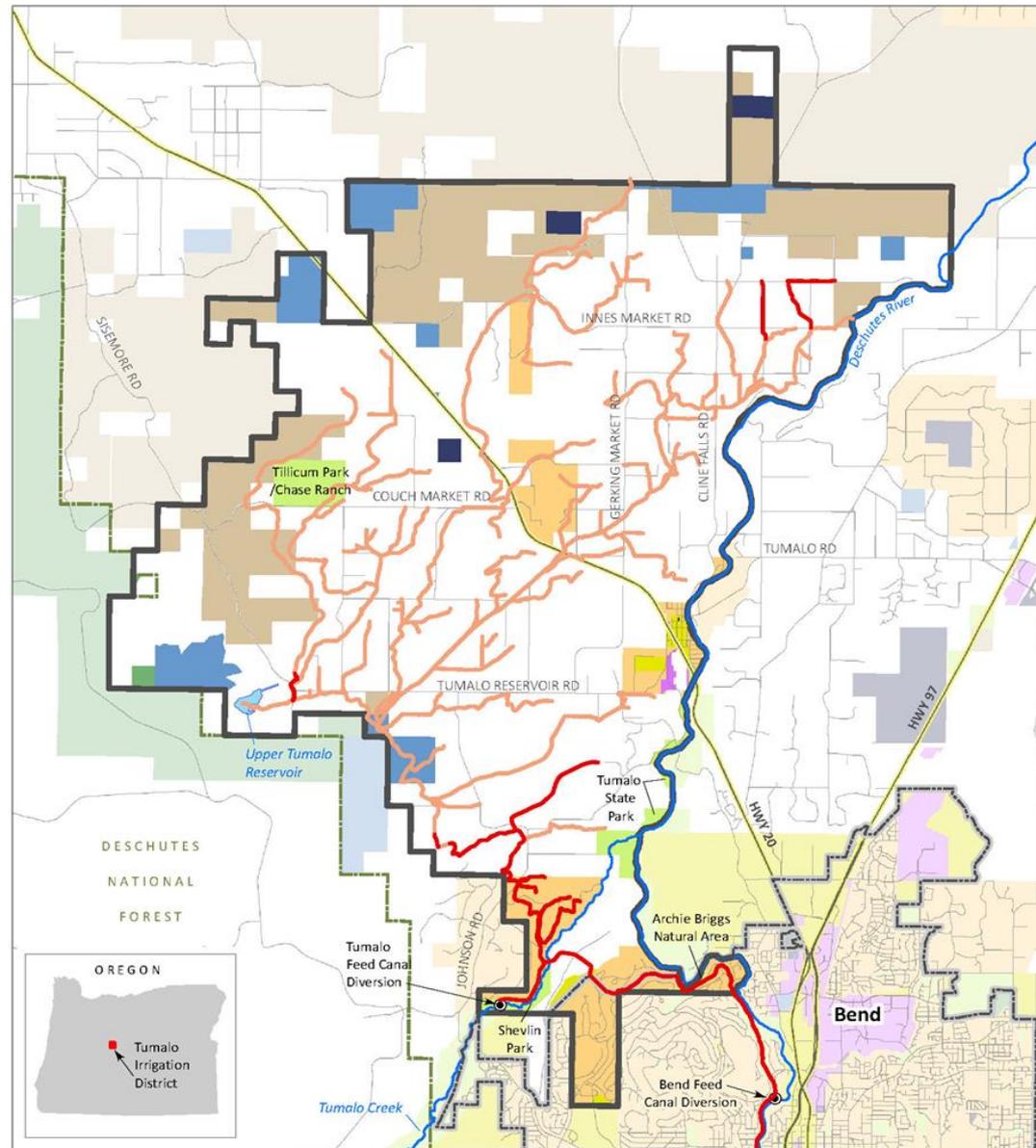
77-mile system

- 8 miles piped
- 69 miles open

Irrigation season **April-October**

Typical peak diversion **178 cfs**

Loses **30% or 48 cubic feet per second (cfs)** of water diverted to seepage and evaporation



Source:
Deschutes County GIS, USFS,
BLM, FCA TID boundary
TID_project.mxd, 04/09/18

- | | | |
|----------------------------|-------------------|-------------------------|
| Tumalo Irrigation District | Industrial Area | Proposed action |
| Forest Boundary | Deschutes County | Not part of the project |
| City Limit | State or Oregon | River/Stream |
| Park Area | US Forest Service | Street |
| Urban Area | BLM | |
| Suburban Area | Diversion | |



Tumalo Irrigation District's Mission...

Manage water resources to meet present and future needs of its patrons in ways that are economically and environmentally responsible.

The District's priorities are water conservation, improving water delivery efficiencies, preserving and restoring native habitat in the Deschutes River Basin, and protecting native species.

The District is part of the Deschutes Basic Board of Control, a group of irrigation districts that collaborate on issues facing Central Oregon and water users.



Why Water Conservation and Piping?

- **Water loss and delivery inefficiencies**
 - Canal seepage and evaporation
 - TID often unable to provide full deliveries to users
- **Public safety**
 - Risk from drowning
 - Aging infrastructure and threat of canal breaches
- **Environmental issues**
 - Instream flows
 - Water quality
 - Endangered Species Act



Aging Infrastructure



TUMALO IRRIGATION DISTRICT

Completed Modernization Projects

- Approximately 8 miles of pipe installed in TID since 2000, saving 17.6 cfs of water in Tumalo Creek, Crescent Creek, the Little Deschutes River, and the Deschutes River
- Bend Feed Canal fish screen
- Tumalo Feed Canal fish screen
- Tumalo Creek fish ladder
- Tumalo Creek stream gage





Modernizing Infrastructure



TUMALO IRRIGATION DISTRICT

History of Conserved Water

- **Conserved Water Applications**
 - Conserved Water Application #09 (5.82 cfs instream in Tumalo Creek; 1,873 acre-feet to the state from Crescent Lake)
 - Conserved Water Application #37 (11.8 cfs instream in Tumalo Creek; 2,732 acre-feet to the state from Crescent Lake)
- **Water Leasing**
 - TID has leased 2-6 cfs of water instream annually since 2001



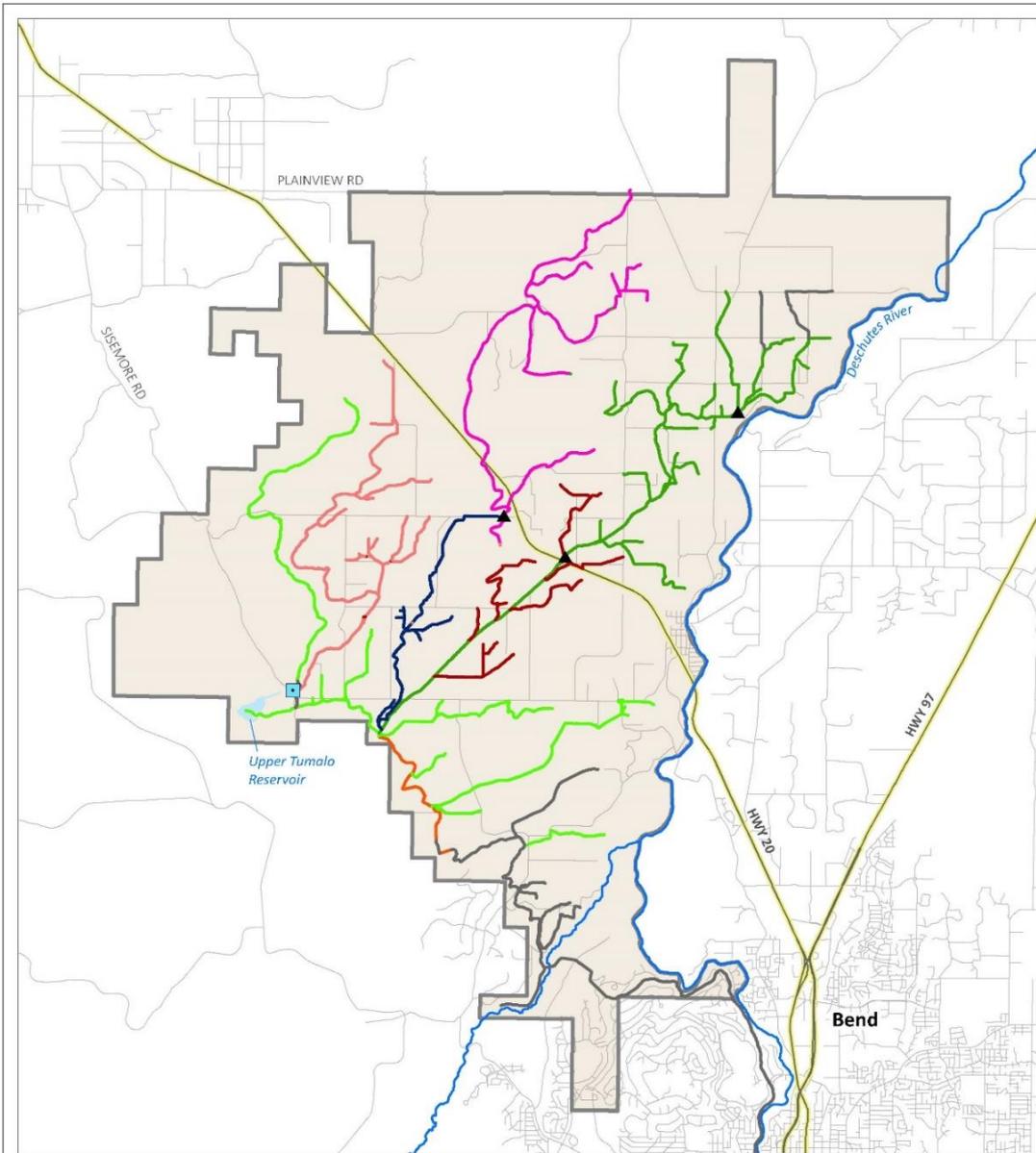
PL 83-566 TID Irrigation Modernization Project

2018-2028

- **Install approximately 68.8 miles of High Density Polyethylene pipe**
- **11-year construction period**
- **Total Costs: \$42.6 million**
 - PL 83-566: \$30.1 million
 - Match funding required: \$12.6 million



Project Groups for the PL 83-566 TID Irrigation Modernization Project 2018-2028



Source:
Deschutes County GIS,
FCA- TID boundary, phasing
TID_phasing.mxd, 04/09/18



**Proposed Pipeline
Project Group**

- 1
- 2
- 3
- 4
- 5
- 6
- 7

- Existing Pipeline/Not Included in HDPE Pressurized Pipeline Alternative
- Pump

- ▲ Pressure Reducing Valve
- Tumalo Irrigation District
- ~ River/Stream
- Highway

Total Project Benefits

- **Eliminate up to 48 cfs of water loss**
- Permanently protect up to 100% of conserved water instream
- Enhance streamflow, habitat for fish and aquatic species
 - Tumalo Creek, Crescent Creek, Little Deschutes River, Deschutes River
- Improve water quality
- Improve water delivery reliability for TID patrons
- Provide pressurization to patrons, reducing pumping costs
- **\$385,000 per year in savings to patrons**
- Improve public safety



PL 83-566 Irrigation Modernization Project

Proposed First Project Group

Tumalo Feed Canal

- Pipe remaining open portions of the Tumalo Feed Canal
- 84 inch High Density Polyethylene pipe
- Timeline: Winter 2018/2019
- Est. Water Conserved: 8.5 cfs in Tumalo Creek and 2,677 acre-feet in Crescent Creek
- **Cost: \$6.2 million**



How will conserved water be protected instream?

- **Tumalo Irrigation District Board Policy**
 - The Board has agreed that 100% of publicly funded conserved water be protected instream
- **Existing Conserved Water Agreement**
 - Project Group 1 (Tumalo Feed Canal) will use existing CW #37
- **Plan for Permanently Protecting All Conserved Water**
 - Prior to piping a new conserved water application will be submitted for each individual project group
 - Water will be placed instream at the completion of each project group



Opportunity to Provide Comments

- Your input helps local irrigation districts and agencies make informed decisions
- Submit comments during TID's official comment period at this meeting or via email, mail, or telephone
- Sign up for email notices
- Learn more at www.oregonwatershedplans.org
- Submit comments to WSP@Tumalo.org

Public Comment Period Ends May 22, 2018



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Collecting Public Comments

- Computers are set up to submit comments
- Comments must be specific to TID's project
- Staff from NRCS and FCA are available to assist
- Your comment and contact information may be publicly available in the Authorized Watershed Plan-EA

