

Farmers Conservation Alliance  
11 Third Street, Suite 101  
Hood River, Oregon 97031  
(541) 716-6085

Public and Interagency Meeting

Thursday, July 6<sup>th</sup>, 2017

5:30 – 6:30 PM

Tumalo Community Church  
64671 Bruce Avenue, Bend, OR 97701

Tumalo Irrigation District Irrigation Modernization Project

Purpose: To inform the community of the proposed Tumalo Irrigation District Irrigation Modernization Project to conserve water, improve fish habitat and enable in-conduit hydroelectric power generation; and to gather community comments on the proposed project.

Project Sponsor

Deschutes Basin Board of Control (DBBC)

Based on a

Preliminary Investigative Report (PIR)

prepared by Farmers Conservation Alliance

in cooperation with the Natural Resources Conservation Service (NRCS)

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Proposed Agenda

- I. Welcome
- II. Introduction: Description, Goal, and Objectives of the proposed Irrigation Modernization Project
- III. Spotted Frog Issues and Opportunities in the Upper Deschutes Watershed
- IV. Project Costs, Benefits, and Effects
- V. Contributions and Responsibilities of the USDA-NRCS, Sponsors, and Agricultural Landowners
- VI. Discussion, Questions, and Answers

Presenters

Tom Makowski, Natural Resources Conservation Service

Ken Rieck, Manager, Tumalo Irrigation District

Margi Hoffmann, Farmers Conservation Alliance

Bridget Moran, United States Fish and Wildlife Service

## Tumalo Irrigation District Irrigation Modernization Project

### *Project Goal*

The goal of the proposed project is to conserve water and improve Oregon Spotted Frog and fishery habitat in the Upper Deschutes Watershed while improving the economic sustainability of agriculture in the Deschutes Basin. This plan will help the agricultural community meet the requirements under the Clean Water Act and the Endangered Species Act.

### *Sponsors and Other Stakeholders*

The project sponsors are the Deschutes Basin Board of Control (DBBC) and the Tumalo Irrigation District (TID), in cooperation with the Natural Resources Conservation Service (NRCS) and Farmers Conservation Alliance (FCA). Other stakeholders include:

- United States Fish and Wildlife Service
- National Oceanic and Atmospheric Administration Fisheries
- United States Army Corps of Engineers
- United State Bureau of Land Management
- United States Department of Agriculture, United States Forest Service, Deschutes National Forest
- Oregon Department of Fish and Wildlife
- Oregon Water Resources Department
- State Historic Preservation Office
- Oregon Department of Environmental Quality
- Oregon Department of Agriculture
- Oregon Department of State Lands
- City of Bend
- Bend Parks and Recreation
- Deschutes County
- Oregon Department of Fish and Wildlife
- Oregon Water Resources Department
- Confederated Tribes of the Warm Springs
- Deschutes River Conservancy
- Water Watch
- Trout Unlimited
- Coalition for the Deschutes
- Central Oregon Land Watch
- Interested Public

### *Location*

- Deschutes, Jefferson and Klamath Counties

- 2<sup>nd</sup> Congressional District
- Hydrologic Units: Tumalo Creek and Deschutes River (17070301)

### *Resource Concerns*

The sponsors have identified the following resource concerns:

- Reduced habitat associated with low stream flows
- Inefficient irrigation water delivery and on-farm irrigation water management leading to low drought tolerance.
- Risk of open canals to human health and safety
- Poor water quality, elevated stream temperatures
- Inefficient energy conservation
- Economic instability of agricultural lands

### *Project Facts*

- The project area is the TID system within the Upper Deschutes watershed, irrigating approximately 7,417 acres using two primary diversions, one on the Deschutes River and one on Tumalo Creek.
- Water is delivered mostly through a series of open canals and on-farm ditches, losing 40 to 60% to seepage and evaporation.
- TID is struggling to deliver sufficient flows to its members due to an inefficient and outdated infrastructure, along with new environmental demands and drought.
- Water for the TID is diverted from the Deschutes River and Tumalo Creek, which experience low flows that diminish water and habitat quality throughout the Deschutes River.
- The project area is important for providing habitat for the Oregon Spotted Frog, an Endangered Species Act (ESA) listed species.

### *Project Measures*

- Funding will be requested from the USDA-NRCS Small Watershed Program (PL-566) and other sources to replace 2.5 miles of open canal with 84-inch diameter pipeline and over 67 miles of open laterals with 60-inch and smaller diameter pipe with pressurized high-density polyurethane (HDPE) pipe.
- TID is currently working under CW-37 (Conserved Water Agreement #37) for the remaining Tumalo Feed Canal which consists of 2.5 miles of 84-inch diameter pipe and 1.25 miles of 60-inch diameter pipe and places all of the conserved water in-stream.
- New Conserved Water Agreements will be made with the State of Oregon placing water instream for the remaining conserved water as funding is obtained.
- The USDA-NRCS Environmental Quality Incentive Program (EQIP) will be used to provide on-farm efficiency upgrades.

### *Project Benefits and Costs*

Direct Project Benefits Include:

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- Fully enclosing the District delivery system in pipe will allow for the pressurization of deliveries which will reduce or eliminate the need for pumping depending on the District members location
- Eliminate seepage and evaporation losses from the open canals of up to 50 cubic foot per second (CFS)
- Conserved water, (new water rights created under Oregon's Conserved Water Program) created from the elimination of seepage is placed instream thereby, enhancing stream flow in Tumalo Creek and the Deschutes River.
- More instream flow in Tumalo Creek in the summer will lower stream temperatures and targeted winter flow increases in Crescent Creek will improve available habitat for the Oregon Spotted Frog and other aquatic species.

Total cost for the installation of HDPE pipe is estimated to be \$50,000,000. The District has currently secured \$2,600,000 in grant funding.

- \$5,000,000 from PL-566
- \$1,300,000 Oregon Water Resources Department
- \$1,000,000 Bureau of Reclamation WaterSmart
- \$2,000,000 Oregon Department of Environmental Quality Clean Water State Revolving Loan Fund (pending)
- \$750,000 Oregon Watershed Enhancement Board (pending)
- \$200,000 In-kind services from TID