

Juniper Flat District Improvement Company Water Management and Conservation Plan Update

Funding Category: Water Management and Conservation Plan Development

Applicant:

**Wasco County Soil and Water Conservation District
2325 River Rd. Ste. 3
The Dalles, OR 97058
P: 541-296-6178 x116
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Project Manager:

**Joshua Thompson
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Josh.thompson@or.nacdnet.net

Co-Applicant:

**Juniper Flat District Improvement
Company
82529 Hwy 216
Maupin, OR 97037
541-395-9705**

President:

**Tim Morelli
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Organization Backgrounds

Wasco County Soil and Water Conservation District (WCSWCD) is an Oregon Special District organized under Oregon Revised Statue 568. Wasco County SWCD is a “sister agency” to USDA Natural Resources Conservation Service (NRCS) and employs six USDA NRCS Certified Conservation Planners. Located in The Dalles, Oregon WCSWCD serves all of Wasco County Oregon with a mission: *To work cooperatively with others to promote and encourage conservation and wise use of natural resources.*

Juniper Flat District Improvement Company (JFDIC) is part of the Wapinitia Project. It is located east of Maupin, Oregon just North of the Warm Springs Indian Reservation. Initially started by non-governmental organizations, the Reclamation Service started investigating potential improvement as early as 1910. The project was authorized by congress in 1956 and included the construction of Wasco Dam, which creates Clear Lake Reservoir and stores of 11,900 acre feet of water, serving roughly 2107 acres.

Proposed Activity

The proposed project will update the JFDIC’s Water Management and Conservation Plan. The plan was created in 1999 and includes:

- Detailed Description of the project and its history

- Inventory of existing resources and infrastructure
- District Water Budget
- Existing Water Management Measures and Programs
- Problems, Opportunities and Goals
- Evaluations of Potential Water Management Measures
- Drought Contingency Plan, Curtailment and Allocation Procedures
- Legal, Institutional and Environmental Considerations
- Long Range Supply
- Adopted Plan Elements

In the last twenty years, many factors have changed that warrant a complete overhaul of the plan. The desired outcome is to have an up to date plan that outlines the needs of the irrigations district, current infrastructure, and a strategy for conserving water while serving the needs of its constituents. This new plan will evaluate and consider, water conveyance and application efficiencies throughout the system, climate change, changes in land use, land use planning, presence of listed and or sensitive species and potential impacts from existing and proposed management practices.

JFDIC and WCSWCD are both local units of government and are applying for these grant funds as partners. WCSWCD has greater administrative capacity and will serve as the contracting agency and fiscal administrator for this plan update.

Work to Be Conducted

- The existing Water Management and Conservation Plan will be updated to reflect the changes in the last 20 years. The updates will include, but are not limited to the following:
 - I. Description of the Project
 - a. History and Area of District
 - b. Maps, location, climate and soils
 - c. Water Rights
 - d. District Facilities
 - e. Points of Diversion
 - f. Major Features and District Operations
 - g. Operation and Maintenance
 - II. Inventory of Water Resources
 - a. Existing water diversions
 - b. Water storages releases
 - c. Return flows
 - d. Acreage of commonly grown crops
 - e. Types of irrigation systems
 - f. Summary of Classification of water usage
 - g. Water Quality
 - III. District Water Budget

- a. Seasonal Water usage
 - b. Surface return flows from irrigated lands
 - c. Subsurface flows
 - d. Ditch and reservoir seepage losses, etc.
 - e. Operational spills
 - f. Farm deliveries
 - g. Environmental requirements
 - h. Summary – Water Budget
- IV. Existing Water Management Measures and Programs
- a. District program for measuring water
 - b. Current water conservation programs sponsored by the district
- V. Problems, Opportunities and Goals
- a. District Goals
 - b. Compare the Supply vs. the Demand
 - c. Measures to reduce losses to reduce deficit supplies
 - d. Alternative to finance conservation programs
- VI. Evaluations of Potential Water Management Measures
- a. Energy Audits
 - b. Alternative Rate Structure
 - c. Lining / Piping of Canals
 - d. Potential water conservation projects
 - e. Piping of laterals
 - f. Re-regulation reservoirs
 - g. Educational programs
 - h. Sharing of water delivery
 - i. Flexibility of water delivery
 - j. Retirement of irrigated lands, water pricing, water rate structure
 - k. Conversion to metered and pressurized deliveries in developments with parcels less than one acre in size
 - l. New storage reservoirs / wells
 - m. Conversion of flood to sprinkler irrigation
- VII. Drought Contingency Plan, Curtailment and Allocation Procedures
- a. Drought History / Assessment of Vulnerability
 - b. Planning for Drought
 - c. Triggers
 - d. Courses of Action
 - e. Curtailment and allocation plan and procedures
 - f. Education / Cooperation
- VIII. Legal / Institutional / Environmental Consideration
- a. Legal / Institutional considerations
 - b. Environmental Considerations
- IX. Long Range Supply
- a. Projection of water demand in 20 years.
 - b. Potential new sources of water

- X. Adopted Plan Elements
 - a. Schedule for Conservation Program Initiation
 - b. Flow Measurement Program
 - c. Schedule of Plan Update
 - d. Monitoring of Implemented Projects / Measures

Each element will be evaluated for change in the last 20 years. Many studies have taken place by different agencies including JFDIC, US Forest Service, WCSWCD and Oregon Department of Fish and Wildlife.

In 2017, Anderson Perry Engineering completed a water Conservation Feasibility Study that will be incorporated into the updated plan. One of the major aspect that will be updated is the presence / absence of threatened and endangered species with the irrigation district and it may affect management activities.

To accomplish this update, WCSWCD and JFDIC will solicit a minimum of 3 quotes from qualified environmental consultants. The company demonstrating the best plan for the update will be chosen. The selection will not be made based on lowest bid.

- Identify benefit outcome of the proposed activity. Describe how the project will achieve the benefit(s) and provide numerical estimates, where applicable.
- Explain how performance of the proposed activity will be measured or evaluated upon completion of the activity.

Milestone Schedule

Task	June 19	July 19	Aug 19	Sep 19	Oct 19	Nov 19
Solicit Bids for update	X					
Select Recipient	X					
Contractor begins update		X				
Contractor completes 30% update			X			
Agency Progress review #1				X		
Contractor completes 60% update				X		
Agency Progress review #2					X	
Contractor completes 90% update					X	
Agency Progress review #3						X
Contractor Presents first Draft						X
Agency final review #1						X
Contractor finalizes Plan Update						X
JFDIC accepts Final Update						X

Benefit Outcome

The benefit outcome of the updated plan will be an up to date document that will clearly outline the direction the district need to go in the next 20 years, and the obstacle they may face. This will benefit the patrons of the irrigation district as well as the numerous partner, funding and regulatory agencies. The plan will also enable JFDIC to be eligible for Oregon Water Resources grant funding.

- Explain how performance of the proposed activity will be measured or evaluated upon completion of the activity.

Performance Measurement

Performance of the proposed activity will be based on a 30%, 60%, 90% 100% review of the document. There are 10 sections to the plan and roughly 50 subsections. A 30% completion will update 15 subsections, A 60% completion will have updated 30 subsections, a 90% completion will have updated 45 subsections and a 100% completion will have updated all of the plan.

Project-Applicable Criteria

- A. **Association with Reclamation Project Water Supplies**
 - I. **YES, JFDIC is a reclamation project.**
- B. **Extent to which the completed activity will improve the applicant's ability to modernize their existing water delivery infrastructure**
 - I. **The proposed activity will greatly enable JFDIC ability to modernize its infrastructure based on a clear vision and increased opportunity for funding**
- C. **Reasonableness of Cost**
 - I. **JFDIC and WCSWCD feels the costs are reasonable based on past expenditures of evaluations and written reports.**
- D. **Extent to which Federal funding would promote completion of an activity that might otherwise be delayed or postponed**
 - I. **Without this funding opportunity, JFDIC would not be able to complete this plan update.**
- E. **Amount and sources of non-Federal funding**
 - I. Total Match funding is 50%, with 37% coming from Juniper Flat District Improvement Company and 13% coming from Wasco County Soil and Water Conservation District.
- F. **DOI Priorities**
 - I. *Creating a conservation stewardship legacy second only to Teddy Roosevelt*
 - a. This plan update will include the use of technology in the form of LiDAR survey taken by WCSWCD, it will identify new technology that may benefit the irrigation District.
 - b. A land use regulation review will be undertaken in cooperation with the USFS and Wasco County Planning Dept.
 - c. Environment and regulatory review will be updated.

- d. The storage, conveyance and distribution system was reviewed in 2017 and will be updated in the plan.
- e. This plan update will involve numerous partnering agencies and will strengthen partnerships between them.
- f. NA
- g. NA
- II. *Utilizing our natural resources*
 - a. *This project has been identified as having a 1.5 megawatt hydroelectric potential. This element will be incorporated in the plan update.*
 - b. NA
 - c. *WCSWCD as a project partner is a member of the forest stewardship collaborative that supports healthy forests through proper management.*
 - d. NA
- III. Restoring trust with local communities
 - a. Updating this plan will open a dialogue with neighbors that will foster a better relationship and include their concerns in management approaches.
 - b. This plan update will include input from all stakeholder partners.
- IV. Striking a Regulatory Balance
 - a. NA
 - b. NA
- V. Modernizing our Infrastructure.
 - a. This Plan update will support the White House Public/Private Partnership Initiative to modernize U.S. infrastructure;
 - b. NA
 - c. This plan update will prioritize infrastructure needs on a DOI project.

Detailed Budget Narrative

The budget for this plan update is simple. It is anticipated based on conversation with a consultant familiar with the district that the plan can be updated for \$7,500 or less. This will be put out to bid following Oregon public contracting laws. This will also involve and estimate 80 hours of research, communication and document acquisition by the President of Juniper Flat District Improvement Company. This time is at a billing rate of \$50 per hour and will be an in-kind contribution by the president of JFDIC. The Ditch Walker is a paid employee and will be consulted at an estimated 20 hours, at a rate of \$35 per hour. This is a cash contribution by JFDIC. Wasco County SWCD will facilitate meetings, communication and handle the contracting and reporting for the Plan update. No administration will be charged by Wasco County SWCD, and all of their staff time will be covered by Wasco SWCD funds as non-federal cash match.

BUDGET ITEM DESCRIPTION	COMPUTATION	Quantity	TOTAL COST

SALARIES AND WAGES --Position title x hourly wage/salary x estimated hours for assisted activity.	Price/Unit		
JFDIC President	\$50.00	80	\$4,000.00
JFDIC Ditch Walker	\$35.00	20	\$700.00
WCSWCD Planner	\$44.00	40	\$1,760
CONTRACTUAL —Explain any contracts or sub-Agreements that will be awarded			
Engineering Consultant	FIXED BID	1	\$7,500
INDIRECT COSTS			
NONE			
TOTAL ESTIMATED PROJECT COST (Total Costs Rounded to Nearest \$)			\$13,960

Funding Plan

Juniper Flat District Improvement Company
82529 Hwy 216
Maupin, OR 97037
541-395-9705

Principal Contact: Tim Morelli, President 541-993-3600

Total Funds \$5,220
Total Cash to contract \$520
Total employee wage \$700
Total in-kind contribution in manager time \$4,000

Wasco County Soil and Water Conservation District
2325 River Rd. Ste. 3
The Dalles, OR 97058
P:541-296-6178
F:541-296-7868

Primary Contact: Josh Thompson, Senior Conservation Planner, 541-993-3419

Total Funds: \$1,760
Total Employee Wages: \$1,760

TOTAL FUNDS REQUESTED FROM **BOR-PN-18-F010** **\$6,980**

Official Resolution

Official resolution from Juniper Flat District Improvement Company will be approved on 1/3/2019 at their regular board meeting.

Official Resolution from Wasco County Soil and Water Conservation Will be approved on 1/2/2019.

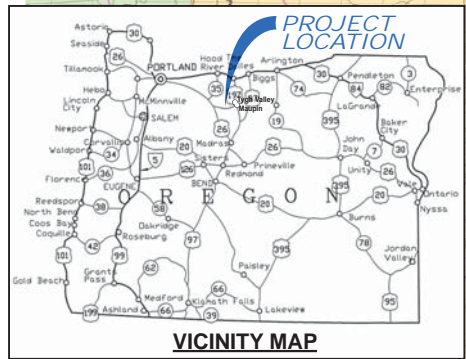
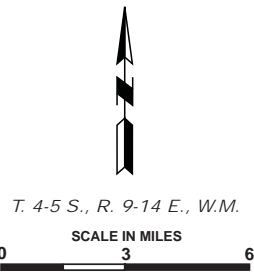
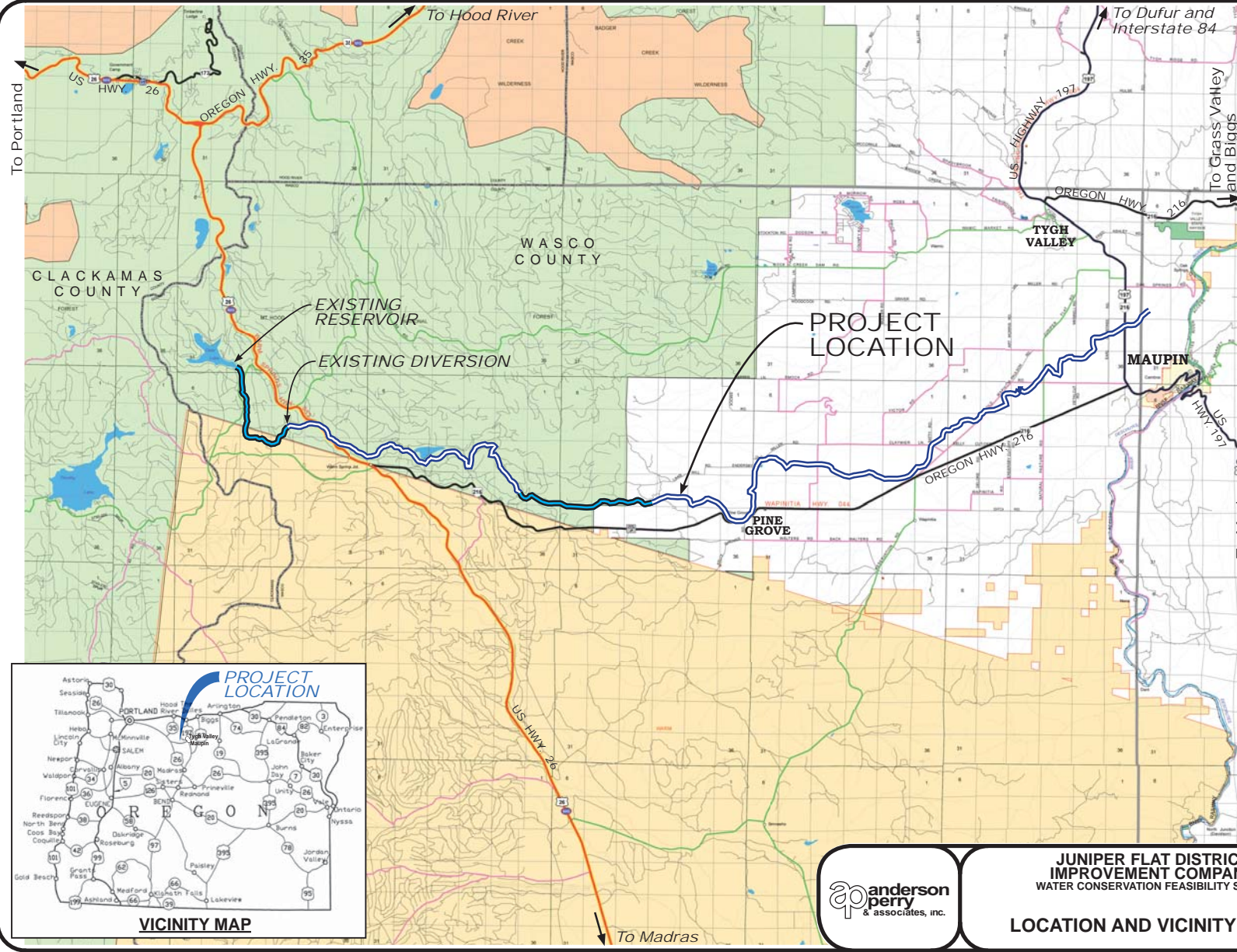
Both resolution will be provided to Reclamation when available.

Environmental Compliance

This is a Plan update and Environmental Compliance is not applicable. No undertakings will occur with funds from this grant award.

Indirect Costs

No indirect costs will be charged in this grant or used as match.



**JUNIPER FLAT DISTRICT
IMPROVEMENT COMPANY**
WATER CONSERVATION FEASIBILITY STUDY

LOCATION AND VICINITY MAPS

**FIGURE
1**