WEST EXTENSION IRRIGATION DISTRICT UMATILLA PROJECT DUNS NO. 082619339 Unique Identifier No. QJDBCVDHKKV7

COLUMBIA-PACIFIC NORTHWEST REGION WATER CONSERVATION FIELD SERVICES PROGRAM Funding Opportunity Announcement No. R22AS00105



Three Mile Falls Diversion Dam Spring (above) and Summer (R) photos.



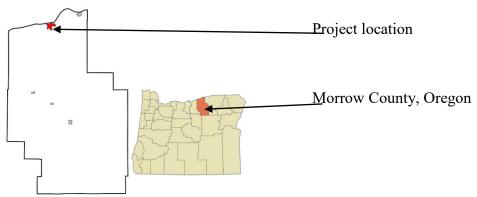
WEID MAIN CANAL MODERNIZATION PLANNING PROJECT System Optimization Review Project

This review is an analysis of the WEID main canal with a focus on modernizing. It is Phase II of the District's System Optimization Review. The District has been piping open laterals, installing VFDs, and working its Water Management and Conservation Plan (WMCP). It realizes that a plan for its 27-mile long main canal is needed in order to continue efficient operation in this more urbanized, water-conscious and climate-challenging time.

Applicant/Project Manager Bev Bridgewater, District Manager WEST EXTENSION IRRIGATION DISTRICT 840 HIGHWAY 730, P. O. BOX 100 IRRIGON, OR 97844 541-922-3814 <u>bbridge@oregontrail.net</u>

BACKGROUND

LOCATION: West Extension Irrigation District (WEID or District) is located in the Umatilla Basin in Northeastern Oregon. It diverts irrigation water from the Umatilla River at Three Mile Falls Diversion Dam (completed in 1914) for delivery to 9,235 acres on the federal project. The 9,235 acres extend from the confluence of the Umatilla and Columbia Rivers, westward for 27 miles, to form a long, narrow irrigated band lying south of the Columbia River. It is 160 miles east of Portland, Oregon and 220 miles west of Boise, Idaho.



FEDERAL NEXUS: The District was formed in 1919 to be the operating entity for the west end of the Umatilla Project. It currently has four active contracts with Reclamation: 1) 1926 O&M Contract. 2) 1954 Repayment Contract. 3) 1990 Exchange Contract. 4) 1994 Conjunctive Use Contract. The irrigation facilities are owned by Reclamation. The canal and lateral rights-of-way were reserved for the federal project or quit-claimed by a 1914 court degree.

WATER RIGHTS: The District has four primary water rights from the Umatilla River and one supplemental from the Columbia. Reclamation holds one primary water right from the Umatilla River and one supplemental for return flows from McKay reservoir for the project benefit.

PROJECT NEED: The District completed a System Optimization Review in 2011. The review analyzed the system-wide efficiency of the WEID with a focus on improving the operation and management of the irrigation delivery system resulting in conserved water. The information in that SOR was incorporated into the WEID WMCP. The District has completed most of the projects planned in its WMCP. This and continued conservation work is resulting in water savings, meaning less flow in the main canal.

Now, 106 years after being built with significantly less water flowing, it is time to plan and prioritize how the main canal will be modernized, maintained and operated moving forward. This Main Canal Modernization Planning Project is System Optimization Review, Phase II. It is the need and opportunity to assess, prioritize and set action plans for the canal to continue its service in an efficient manner.

TECHNICAL DESCRIPTION

The project will take a comprehensive look at the current and future operation of the District's main canal. Tasks will include assessing the canal, compiling the information, reviewing opportunities and possibilities for operation for lower flows and related issues, setting priorities, preparing information and reports, reviewing with Board members and the public. All reports will go into a single document.

The District employees will work with its engineer (J-U-B Engineers in Kennewick, WA) and consultant (GSI Water Solutions, Portland, OR) who are both familiar with the District and its operating system.

TASK NO. 1: IDENTIFY CURRENT CONDITIONS OF MAIN CANAL: Investigate and report the current physical and operation condition of the main canal. Use Reclamation O&M reviews as resources as well as field observations and studies.

TASK NO. 2: RELOCATE DELIVERIES IN THE MAIN CANAL. Relocating or lowering main canal deliveries will allow irrigators to take water at the lower flow levels than the canal was built for. Identifying the deliveries, cost and a plan of action will result.

TASK NO. 3: REDESIGN CHECK STRUCTURES: The check structures in many areas are large boards used to hold back water. The project will identify new designs and perhaps some automated gates to work with the lower water level.

TASK NO. 4: IDENTIFY AREAS OF SPECIAL NEED: Areas that need special attention, such as the siphon at I-84, the RR bridge and deteriorating structures will be called out. Work to replace or repair the structures will be planned with cost estimates.

TASK NO. 5: IDENTIFY & PLANNING FOR WATER-LOGGED AREAS: There are approximately 9 miles along the upper canal and 6 miles along the Boardman canal where the main canal is impacted on the back side by high groundwater or subsurface water. The project will identify the areas, the scope of the issue and make a plan for the best remedy to mediate the issue and protect the canal.

TASK NO. 6: CANAL LINING VS. CONCRETE VS. PIPING: What does the future hold for the current 27-mile long canal? The project will look at this and develop a plan for canal renovation. All potential products will be considered,

EVALUATION CRITERIA/SYSTEM OPTIMIZATION REVIEW

- A. Association with Reclamation: As described on Page 2, WEID is a federal irrigation water project. It is also part of the Umatilla Basin Exchange program for fisheries.
- B. Extent to which WMCP is complete and updated. The WMCP was completed in 2011. The WEID will update it in 2022 and provide Reclamation with a copy. The work done under this proposed project will be added to the revised WMCP when it is complete and become a part of that document.

- C. Extent to which the proposed analysis will result in an action plan to improve water conservation and water use efficiency, and lead to modernized water delivery infrastructure. After completing the tasks listed, a written action plan will be the end product. The District will use this to assist with future funding.
- D. Extent to which the SOR is likely to address water resource challenges. Currently, water is "wasted" in the canal in order to deliver water to inefficient withdrawal systems, especially early and late in the season when demand is less. Adding "extra" water for this plus for weed control in windy weather, and dilapidated structures is the normal practice. This SOR will study these issues and identify corrective action.
- *E. Reasonableness of cost.* Because the District is using its personnel and professionals already familiar with its facilities, the cost is reasonable.
- F. Extent to which federal funding would promote completion of an activity that might otherwise be delayed or postponed. The funding of this project is timely and will follow the work the District will do to update its WMCP. This creates a seamless action. Without the additional funding for the SOR, the canal modernization will likely be delayed due to time and financial constraints.
- G. Amount and sources of Non-Federal funding. The District will use In-Kind (\$35,892) and funds from its 2023 budget (\$18,320) for this project for a total of \$54,302.
- H. *Presidential and Department of the Interior priorities*. Water conservation and resiliency has been well-discussed in this document.

The WEID serves patrons in the City of Umatilla in Umatilla County and the Irrigon and Boardman areas in Morrow County. There is a large Hispanic population and many of the patrons are on low or fixed incomes. Here is what we find on the web to support the idea that this is a disadvantaged or underserved area.

• Umatilla is part of the Hermiston-Pendleton Micropolitan Statistical Area, but has the highest poverty rate (24%) and lowest Median Household Income (\$38,796), of all communities in the area; trailing neighboring Hermiston by nearly 23%.

• According to the Morrow County Health Assessment (2018), County population is at 11,274 with increasing growth occurring at the north end of the county (the area that the WEID project serves). This area also experienced growth in the Hispanic population with Boardman now at 65% and Irrigon at 29% (State is 13%). The site reports that 79% of the school students are enrolled in free and reduced school lunch programs. Over 30% of the population older than five years of age speaks English less than very well in Boardman.

• In Morrow County, **14.7 percent of the population live under the poverty level**, which is higher than the national average of 13.1 percent (Delliote, 2020).

PROJECT SCHEDULE

	Feb - May	Feb - May	May - June
March 2023	2023	2023	2023
XXXX			
XXXX			
	XXXX		
		XXXX	
			XXXX
	March 2023 XXXX	March 2023 2023 XXXX XXXX	March 2023 2023 2023 XXXX

PROJECT BUDGET

Budget Item	Quantity	Price/Unit	Cost
Description			
Salary/Wages			
Manager	360 hrs	\$38.00/hr	\$ 13,680
Op Supervisor	240 hrs	\$26.00/hr	\$ 6,240
Office Admin	60 hrs	\$26.00.hr	\$ 1,560
Sub-total Labor			\$ 21,480
Fringe - Mgr		70.00%	\$ 9,576
Fringe - Supervisor		60.00%	\$ 3,744
Fringe - Office Admin		70.00%	\$ 1,092
Sub-total Fringe			\$ 14,412
Mileage-Travel	920	.565/mile	\$ 520
In-Kind - Directors 12 hrs each/5 directors	80 hrs	\$35.00/hr	\$ 2,800
Contractors			
Engineering		\$20,000	\$ 20,000
Water Loss		\$20,000	\$ 20,000
consultant			
TOTAL DIRECT COSTS			\$ 79,212

WEID costs: \$54,212 68%

Federal costs: \$25,000 32%

BUDGET NARRATIVE

Salaries and Wages:

Bev Bridgewater, District Manager - Over 25 years of experience in irrigation administration, scheduling, project design, and project management. She will be the key person for organizing, managing, preparing, reviewing the document; meeting with various contractors; assist with Board and stakeholder review;

Ben de los Santos, Field Supervisor will assist with analysis of the facilities, including identification of seepage and tailwater areas; he will work with the engineer and consultants; will tour regional sites and be involved with discussions at all levels for this project.

Lisa Baum, Administrative Services Manager - Will take notes at meetings; organize reports, pictures and materials, assist with final document; make copies and distribute.

Fringe Benefits - The district has paid leave, health insurance, PERS, and the standard state and federal payroll tax benefits. Two of the employees - Bridgewater and Baum are PERS Tier Two, so their rates are higher than de los Santos.

Travel - Travel is needed to sites, engineer and consultant and for touring of other regional districts.. Manager will use her vehicle and the standard federal rate will be used to reimburse her.

Engineer/Consultants - The district will use its engineer firm - J-U-B Engineers, in Kennewick, WA. They have been selected on a competitive bid basis to represent the district and have done so for the past 12 years. Marcus Miller will be the lead engineer on this project. J-U-B has done extensive work in the water industry. They will do the comprehensive analysis of the main canal and recommend modernization components. The District will also use GSI Water Solutions who will work on the groundwater, water loss and conservation components of the overall plan.

Environmental and Regulatory Compliance Costs - No work is needed.

Other Costs - Other costs include the time for the District's five-member Board of Directors to study, discuss, and review the information and to guide the final document.

Indirect Costs - No indirect costs have been included.

NO CONFLICT STATEMENT: This statement confirms that no actual or potential conflict of interest exists at the time of submission. If the project is awarded, the District will establish internal controls to assure that conflicts will be avoided and if an actual conflict arises, the Federal Assistance Officer will be notified in writing.

OFFICIAL BOARD RESOLUTION

WEST EXTENSION IRRIGATION DISTRICT **RESOLUTION NO. 22-006** WATERSMART: WATER CONSERVATION FIELD SERVICES **PROGRAM (WCFSP)** FUNDING OPPORTUNITY NO. R21AS0105

WATER CONSERVATION MANAGEMENT & PLANNING

WHEREAS, the Board of Directors (BOD) of the West Extension Irrigation District (WEID) has an approved Water Management and Conservation Plan (WCMP), and

WHEREAS, the Plan is ten years old and needs to be updated, and

WHEREAS, the District, in cooperation with Reclamation and others, did a System Optimatization Review in 2008-2011, and

WHEREAS, a study looking at the water supply, identifying other sources such as groundwater and recharge within the area, and setting a focus for the next 10-20 years of water management in the District is critical to drought planning, NOW

THEREFORE BE IT RESOLVED that the BOD of the WEID authorizes an application to the Bureau of Reclamation WaterSMART WCFSP program for the amount up to \$25,000 for District to update its System Optiminzation Plan as part of its Water Management and Conservation Plan. The application will be prepared by the WEID Manager who is authorized to sign the application on behalf of the WEID. The Board commits the match of up to \$25,000 in funding or in-kind specified in the funding plan. The WEID will work with Reclamation to meet established deadlines for entering into a cooperative agreement and authorizes its Manager to sign such agreements on its behalf.

ADOPTED BY THE BOARD OF DIRECTORS OF THE WEST EXTENSION IRRGATION DISTRICT THIS 21st DAY OF APRIL, 2022.

Salari Phili

Dalarie Philippi, Chairman

Robert Mueller, Director

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Vern Frederickson, Vice Chairman

Whitney Coffman, Director

Abe McNamee, Director

WCFSP Grant App- West Extension Irrigation District R22AS00105 Page 7