



Applicant Contact:

Bev Bridgewater, District Manager West Extension Irrigation District 840 E. Highway 730 P.O. Box 100 Irrigon, OR, 97844 (541) 922-3814 bbridge@oregontrail.net

Table of Contents

Technical Proposal and Evaluation Criteria	3
Executive Summary	
Applicant Information	
Project Summary	
Project Location	
Technical Project Description	5
Evaluation Criteria	7
Evaluation Criteria A – Project Benefits	7
Evaluation Criteria B – Planning Efforts Supporting the Project	
Evaluation Criteria C – Project Implementation	
Evaluation Criteria D – Nexus to Reclamation	
Evaluation Criteria E – Presidential and Dol Priorities	
Project Budget	14
Funding Plan and Letters of Commitment	
Budget Proposal	
Overlap Statement	15
Budget Narrative	
Environmental and Cultural Resources Compliance	
Required Permits or Approvals	
Official Resolution	19
Appendices	20
A. 2011 Water Management and Conservation Plan Excerpts	

Technical Proposal and Evaluation Criteria

Executive Summary

Applicant Information

Application Date: April 27th, 2022 Applicant Name: West Extension Irrigation District City, County, State: 840 Highway 730 P.O. Box 100 Irrigon, OR 97844 Project Manager: Bev Bridgewater West Extension Irrigation District (541) 922-3814 bbridge@oregontrail.net Requested Reclamation Funding: \$70,000; Total Project Cost: \$144,104

Project Summary

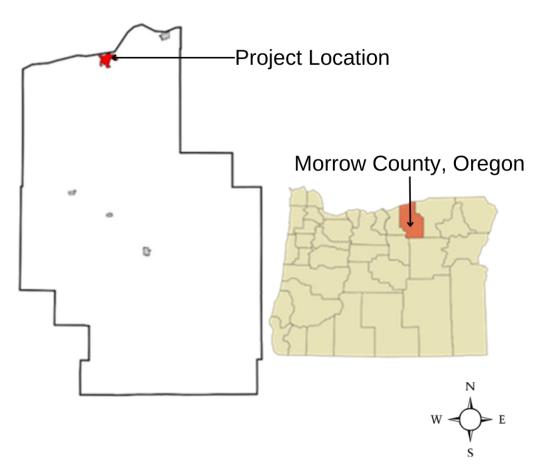
Provide a one paragraph project summary that provides the location of the project, a brief description of the work that will be carried out, any partners involved, expected benefits and how those benefits relate to the water management issues you plan to address.

West Extension Irrigation District (WEID or District) is a Category A applicant. This project is part of a federally owned irrigation project – the West End of the Umatilla Project, authorized in 1905. The West Extension Irrigation District, located in the Umatilla Basin in Northeastern Oregon, proposes to install three Rubicon water automated precision gates for its Relocation Canal, located south of Irrigon. The ability of Rubicon's automated gates to accurately measure high and low flow rates and automatically adjust will increase water use efficiency by 5-10%. The addition of these gates will automate the canal operations and provide valuable flow data. The automation of the canal will tie into the District's current SCADA system. It will lead to better management of the resource, greater safety, water savings, and improved service. Flow data that is collected from these features will add to the District's understanding of water usage patterns and will enhance district water saving efforts while allowing the tracking of water savings amounts realized. The project is slated to be completed in March 2024. It meets the goals of WEID's 2011 Water Management and Conservation Plan, being called out specifically in several sections of the plan.

Project Location

Provide detailed information on the proposed project location or project area including a map showing the geographic location.

The WEID is located in NE Oregon and covers portions of Umatilla and Morrow counties. Included in the service area are the cities of Umatilla, Irrigon and Boardman. 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. The project coordinates are as follows: Site 1 – HG, 45° 53' 00.24" N, 119° 28' 18.13" W, elevation 387-feet; Site 2 – RL3 , 45° 52' 58.34" N, 119° 29' 56.98" W, elevation 338-feet, Site 3 – Endspill, 45° 52' 45.61" N, 119° 30' 30.73" W, elevation 328-feet.



Technical Project Description

Provide a more comprehensive description of the technical aspects of your project, including the work to be accomplished and the approach to complete the work



Figure 1 Proposed project Site 1, Headgate

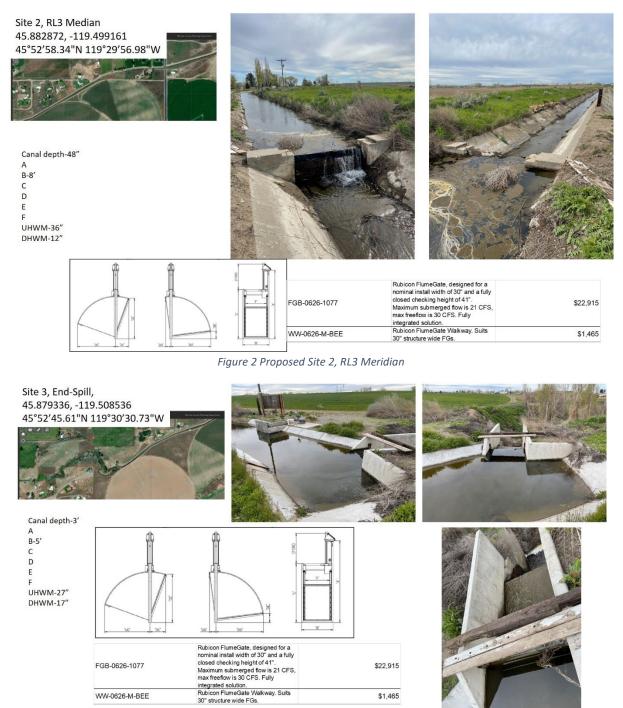


Figure 3 Proposed Site 3, End-Spill

Each of the above sites will require the same general work but to varying extents for each step. The first objective at each site will be to cut the concrete of the existing board-slot check structure. This will be accomplished by District crews using a gas-powered concrete saw. The concrete will then be removed and disposed using prybars, excavator, and dump truck. The site will be prepped with any fill and compaction thereof needed for the placement of the concrete structure to house the new gate. A contractor will fabricate concrete forms out of plywood, 2x4's and snap ties for the placement of the concrete. Reinforced concrete will be poured for the new structures by District crews, who will do the concrete finishing.

After curing time, the frame of the new automated check gate will then be affixed to the concrete using concrete anchor bolts drilled into the new structure and secured with adhesive. Any gaps between the frame and the structure will be filled with speed plug concrete mortar. The solar panel will be set into the concrete pad and the gate will be installed in the frame. Lastly, with the help of a technician from the gate manufacturer, the gate will be wired and calibrated. The gates to be used will likely be provided by Rubicon to match the district's existing gates and make the SCADA system integration seamless.

Once the installation work is complete, the District's technical contractor will upload all information to the District's existing SCADA system.

Evaluation Criteria

Evaluation Criteria A – Project Benefits

Benefits to the Category A Applicant's Water Delivery System: Describe the expected benefits to the Category A applicant's water delivery system.

- Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.
 - WEID's proposed automation and monitoring project will increase water savings through the elimination of spillage and other delivery losses incurred throughout the season. The Relocation Canal is currently a demand-driven system which takes approximately 3 hours for water to flow through headgate to spill. The automation of the canal would allow in-canal storage at Site 2. This will accommodate draws with accuracy and efficiency. The gates will work to allow for minimal tailwater at the end of the system while assuring water gets to the patrons on time. The addition of these flow measuring and water control devices will give the district flow information that is currently unavailable. With this information and technology, the district can better time the diversion and delivery of system water in the Relocation Canal to minimize waste and improve service to patrons.
- Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers. o Are customers not currently getting their full water right at certain times of year?

o Does this project have the potential to prevent lawsuits or water calls?

o What are the consequences of not making the improvement?

o Are customer water restrictions currently required?

o Other significant concerns that support the need for the project.

- The tailwater from the Relocation Canal flows about ¼ mile to a pond where Reclamation has a flowage easement. The pond fluctuates in size during the season. Controlling the endspill will significantly decrease the wastewater. The farmer on whose land the pond lies, will benefit from controlling this water and will have the ability to farm more of his ground without interference.
- The irrigators at the end of the Relocation Canal often have their pumps shut-off due to water shortage. The control gates will allow for quicker response time as demand changes, thus eliminating downtime for those irrigators.
- WEID is a water-short District. It relies upon return flows from upland irrigators and these flows continue to diminish due to a number of factors not controlled by the District. With a tribal water right settlement looming, the district is concerned about meeting its irrigator demands, droughts, and climate change.
- WEID has previously endured water shortages. Over the past 25 years, it has taken active steps towards water conservation and protecting its water resources. It uses water scheduling within the District and failure to take action would further reduce water availability to its end users.

Broader Benefits: Describe the broader benefits that are expected to occur as a result of the project.

- Will the project improve broader water supply reliability at sub-basin or basin scale?
 - Water saved within the District remains in the Umatilla and Columbia River for fisheries purposes. The water savings from this project will be important to local fisheries efforts, especially during the summer and fall months.
- Will the proposed project increase collaboration and information sharing among water managers in the region? Please explain.
 - The project is expected to improve the district's data and thereby provide more data available for request for other stake holders in the region.
- Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area (e.g., impacts to agriculture, environment, recreation, and tourism)? Please explain.
 - Yes, the project will positively impact agricultural providers in the region by increasing water use efficiency and water delivery reliability. As stated above, the fisheries will benefit from saved water left instream.

- Will the project complement work being done in coordination with NRCS in the area (e.g., the area with a direct connection to the districts water supply)? Please explain.
 - Yes, WEID's proposed project compliments water-saving activities that NRCS is conducting with agricultural providers within the district's boundaries.
- Will the project help address drought conditions at the sub-basin or basin scale? Please explain.
 - Northeast Oregon has experienced moderate to severe drought conditions on a yearly basis since the district was formed in 1919. Canal automation through this project is another important step in reducing the drought conditions regionally. The grant will improve the reliability and consistency of the water supply, especially during drought years. Through the reduction of drought risk, the district will decrease the possibility of crop loss due to drought. Additionally, this important conservation project will help preserve the limited water supply for irrigation, wildlife, and the environment.

Evaluation Criteria B – Planning Efforts Supporting the Project

Plan Development: Describe how your project is supported by an existing planning effort. Identify the planning effort and who developed it.

Yes, see Appendix A. Automation is identified within the district's 2011 Water Management and Conservation Plan (WMCP). The WMCP adopted by WEID not only meets the requirements of the State of Oregon and Bureau of Reclamation for such document, but it also serves as the long-term planning document for the district.

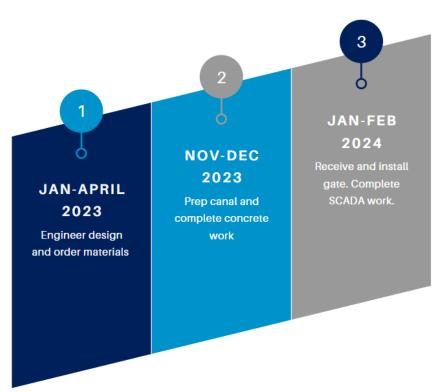
Support for the Project: Describe to what extend the proposed project is supported by the identified plan. Address the following:

- Is the project identified specifically in the planning effort?
 - Yes, automation was identified in the district's 2011 Water Management and Conservation Plan (WMCP).
- Explain whether the proposed project implement a goal or address a need or problem identified in the existing planning effort?
 - Yes, the WMCP identifies prioritized projects and methods that will save water. Automation is defined within the plan as a goal that addresses long-term efficiency enhancements. The Relocation Canal is Item 11 of the 14 items listed as "Future Conservation Projects" in the WMCP. This will make 13 of the 14 completed or underway.

- Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.
 - This project has been identified as a priority due to the amount of water that could be saved and the management improvement that will happen as a result of this effort. Piping the lateral was considered, but not selected. Automation has been successful in the Boardman area of the main canal and will be at this location. The Rubicon or like gate was identified within the plan as a priority due to the high level of delivery and operation efficiency associated with the product.

Evaluation Criteria C – Implementation and Results

- Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.
 - Implementation of this project will be done in three phases. In January 2023, the engineer will complete their work and design. A vendor will be selected and gates ordered. The District will begin all necessary site prep and retrofitting after the 2023 irrigation season. The gates are anticipated to arrive approximately January 2024.



WEID PROPOSED PROJECT TIMELINE

- Describe any permits that will be required, along with the process for obtaining such permits No permits will be required.
- Identify and describe any engineering or design work performed specifically in support of the proposed project.
 - Pre-engineer work has been done in vendor selection for this grant.
 - The District engineer will determine modifications needed to be made to the existing concrete structure, and evaluate gate sizing and requirements.
- Describe any new policies or administrative actions required to implement the project.
 - Following the installation, the timing, measurement, and movement of water will be refined for operational efficiency. No new policies are anticipated.
- Describe the timeline for completion of environmental and cultural resource compliance. Was the timeline for completion of environmental and cultural resource compliance discussed with the local Reclamation office?
 - WEID intends to work with the local officer, Chet Sater, and anticipates the environmental compliance to be completed prior to the onset of the project.

Evaluation Criteria D – Nexus to Reclamation

Describe the nexus between the proposed project and a Reclamation project or activity, including: Is the proposed project connected to a Reclamation project or activity? If so, how? Please consider the following:

- Does the applicant receive Reclamation project water?
 Yes.
- Is the project on Reclamation project lands or involving Reclamation facilities?
 - Yes, the WEID is part of the 1905 Umatilla Project, Oregon and the 1988 Umatilla Basin Act, Exchange Program.
- Is the project in the same basin as a Reclamation project or activity?
 - ✤ Yes the Umatilla Basin.
- Will the proposed work contribute water to a basin where a Reclamation project is located?
 - Yes, the project will better manage and conserve water for the patrons of the Umatilla Project, thus providing benefit under the 1988 Umatilla Basin Act, Exchange program with water left in the river for fisheries.

Evaluation Criteria E – Presidential and Dol Priorities

Sub-criterion No. E1. Climate Change

Please describe how the project will address climate change, including:

- Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.
 - Creating automation within the district's canal will address the impacts of climate change through the responsible usage of available water. The automated gates will conserve water while the automation of the canal lessens the need for employees to travel to the site for canal management. The elimination of routine vehicle travel reduces the overall carbon emissions associated with manual operations of gates.
- Does this proposed project strengthen water supply sustainability to increase resilience to climate change?
 - Yes, the project will increase the efficiency and sustainability of the delivery of water to agricultural providers by minimizing spillage through automation. Correctly timed releases aid in application efficiency that increase sustainability and resiliency during times of drought brought on by climate change.
- Does the proposed project contribute to climate change resiliency in other ways not described above?
 - Data generated by the automated gates will quantify fluctuations of water in the canal which will lead to improved long-term resource management and drought planning.

Sub-criterion No. E2. Disadvantaged or Underserved Communities

- Will the proposed project serve or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to, public health and safety by addressing water quality, new water supplies, or economic growth opportunities.
 - Yes, the project will positively impact agricultural producers in the district's service area that stand to be disproportionately impacted by the effects of climate change.
- Please describe in detail how the community is disadvantaged based on a combination of variables that may include:
 - Low income, high and/or persistent poverty
 - High unemployment and underemployment
 - Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities
 - Linguistic isolation
 - High housing cost burden and substandard housing

- Distressed neighborhoods
- High transportation cost burden and/or low transportation access
- o Disproportionate environmental stressor burden and high cumulative impacts
- Limited water and sanitation access and affordability
- Disproportionate impacts from climate change
- High energy cost burden and low energy access
- o Jobs lost through energy transition
- Access to healthcare
 - The Irrigon/Boardman area in Morrow County is a small agricultural area. The growth of the Port of Morrow (including Tillamook Cheese Plant, data processing centers, and the ag processing industry) and the expansion of the Three Mile Dairy Farm facility just west of Boardman are adding to the distressed housing market in the area. Many of WEID patrons are lower or fixed income and it works to keep its water costs as low as possible.
- If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.
 - The Irrigon/Boardman area has a non-white population of 25% with 16% considered low-income.

E.1.5.3. Sub-criterion No. E.3. Tribal Benefits

Points will be awarded based on the extent to which the Project will honor the Federal government's commitments to Tribal Nations.

- Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for a Tribe?
 - Yes, saved water will be left in the Umatilla River and Columbia River which will benefit the fisheries of the Confederated Tribes of the Umatilla Indian Reservation.
- Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?
 - Yes. An increase in available water in the Umatilla and Columbia Rivers increases stability of the Confederated Tribes of the Umatilla Nation's fish populations in years of drought and lowered flows throughout the rivers.

Project Budget

Funding Plan and Letters of Commitment

Please identify the sources of the non-Federal cost-share contribution for the project, including:

- Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments)
 - Annual assessments and reserve funds will be used.
 - ✤ Any costs that will be contributed by the applicant As above.
 - ✤ Any third-party in-kind costs None
 - ✤ Any cash requested or received from other non-Federal entities None
- Any pending funding requests (i.e., grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied
 - ✤ No other funding requests are pending for the proposed project.

Budget Proposal

Table 1.—Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT	
Non-Federal Entities		
West Extension Irrigation District In-kind	\$ 26,804	
West Extension Irrigation District Reserve Funds	\$ 47,300	
Non-Federal Subtotal	\$ 74,104	
REQESTED RECLAMATION FUNDING	\$ 70,000	

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	\$ 70,000
Costs to be paid by the applicant	\$ 74,104
Value of third-party contributions	\$ 0.00
TOTAL PROJECT COST	\$144,104

Table 2. — Total Project Cost Table

Table 3. —Budget Proposal Relocation	Canal Automation and Monitoring Project
--------------------------------------	---

BUDGET ITEM	CO	MPUTATION	Quantity	TOTAL
DESCRIPTION	\$/Unit	Quantity	Туре	COST
Sa	laries and W	ages		
Manager	\$38.00/hr	48 hrs.	Proj Mgr, contracts, reporting	\$ 1,824
Supervisor	\$26.00/hr	120 hrs.	Supervise & perform work	\$ 3,120
Senior crew	\$24.00/hr	136 hrs.	Site prep, clean-up installation	\$ 3,264
Crew	\$22.00/hr	160 hrs.	Site prep, installation, clean-up	\$ 3,520
Fringe Benefits				
Manager	70%	\$1824		\$ 1,277
Field Crew	60%	\$9904		\$ 5,942
Contractual/ Cons	truction			
Engineer	\$200/hr	40 hrs.	Site investigation, design	\$ 8,000
Contractor	\$145/hr	40 hrs.	Concrete framing for gates	\$ 5,800
SCADA tech	\$175/hr	24 hrs.	SCADA system work	\$ 4,200
Equipment				
Trackhoe/Loader	\$22.55/hr	40 hrs.	Site prep & installation	\$ 902
Backhoe/Loader	\$22.23/hr	40 hrs.	Site prep and clean-up	\$ 889
Dump Truck	\$34.48/hr	40 hrs.	Hauling material & fill	\$ 1,379
Water Truck	\$750/wk	3 weeks	Rental for soil compaction	\$ 2,250
Supplies and Mate	Supplies and Materials			
Concrete		Lot	Canal work	\$ 8,950
Gates/Materials		Lot	3 gates, controllers, commission	\$ 86,750
Radios/Antenna		Lot	Interface to existing SCADA	\$ 3,000
Fill & Gravel		Lot	Fill and gravel for work & cleanup	\$ 600
Other				
Other				\$ 0.00
TOTAL DIRECT COSTS		\$ 141,667		
Indirect Costs				
Type of rate	10%	\$24,367		\$ 2,437
TOTAL INDIRECT COSTS		\$ 2,437		
TOTAL PROJECT COSTS		\$ 144,104		

Overlap Statement

There is not any overlap between this proposed project and any other active or anticipated proposal or project in terms of activities, costs, or commitment of key personnel. This proposed project does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source, federal or non-federal.

Budget Narrative

Salaries and Wages

This narrative certifies that the labor rates included in the budget proposal are the actual labor rates of the identified personnel and are applied consistently to all Federal and Non-Federal activities of WEID. If the proposal is selected for award and the awarding Grants Officer determines that the provided rates all within Bureau of Labor Statistic average for personnel with similar job description, no further documentation for this item of cost shall be requested during budget negotiations.

The Project Manager will be Bev Bridgewater and the Supervisor will be Ben de los Santos.

Bev Bridgewater, District Manager –Rate of \$38.00 per hour. 40 hours for planning, oversight, working with engineer and surveyors and reporting.

Ben de los Santos, Field Supervisor - Rate of \$26.00 per hour. 120 hours for planning, ordering & receiving materials, working with contractors, installing, and supervising all phases of project.

Crew – 1 man with hourly rate of \$24.00 per hour. 3 weeks and 2 days for 136 hours. Will operate equipment for site prep, installation, fill and clean-up; 2 men, 2 weeks, concrete work, assisting with prep and clean-up. Total of 160 hours

Fringe Benefits

The district has paid leave, health insurance, PERS, and the standard state and federal payroll tax benefits. The Manager has a higher PERS rate than the others, thus her fringe has a higher percentage. The actual calculated rate is used in the budget.

Travel

There is no travel authorized in association with this project.

Equipment

All equipment to be used on this project is owned by WEID or will be rented by WEID. The equipment budget is therefore shown as in-kind contribution by WEID. The rates in the budget proposal are in accordance with the USACE equipment rates for region 8. The time estimate for each piece of equipment was determined from the average usage on similar past District projects.

Materials and Supplies

The materials and supplies listed in the budget proposal are all for construction efforts related to the gate site prep and installation. The costs for materials were estimated from budgetary quotes obtained from distributors and expenses on past District projects.

Other Expenses

None.

Indirect Costs

A 10% indirect costs has been used on past District projects and is included here.

Environmental and Regulatory Compliance Costs

Work will be completed prior to the onset of the project. The District anticipates little cost for this work as it is all within the canal or canal prism, so no cost is budgeted.

Contractual

The District has contractors for the work proposed that have been previously selected. They will be asked for a bid if the proposal is accepted. The budget amount is based on experience.

Third-Party In-Kind Contributions

N/A

Environmental & Cultural Resource Compliance

Please answer the questions from Section H.1. Environmental and Cultural Resource Considerations in this section.

- Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.
 - There will be some equipment noise and work along the ditchroad. There will be limited dust from concrete cutting in the initial phase and it is only projected to last for up to three hours per site for one day. Housing is not close to the sites.

- Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project? No.
- Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States"? If so, please describe and estimate any impacts the proposed project may have. **No.**
- When was the water delivery system constructed? **1916**
- Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.
 - The project will add automation apparatus to existing structures.
- Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.
 - Yes, Oregon has recommended Reclamation Districts be included on the National Register.
 - ✤ Are there any known archeological sites in the proposed project area? No.
 - Will the proposed project have a disproportionately high and adverse effect on low income or minority populations? No.
 - Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on tribal lands? No.
 - Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area? No.

Required Permits and Approvals

N/A, there are no required permits because the work will be done within current District facilities and rights-of-way.

Page 18

Official Resolution

WEST EXTENSION IRRIGATION DISTRICT RESOLUTION NO. <u>22-007</u> WATERSMART: SMALE SCALE WATER EFFICIENCY PROGRAM (SWEP) FUNDING OPPORTUNITY NO. R22AS0195

RELOCATION CANAL MANAGEMENT & SCADA

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 Board of Directors (BOD) has implemented the WCMP and made improvements to its delivery system, and

WHEREAS, the BOD has decided that it is in the best interest of the WEID, now

THEREFORE BE IT RESOLVED that the BOD of the WEID authorizes an application to the Bureau of Reclamation WaterSMART program for the amount up to \$100,000 for District improvements and SCADA on its Relocation Canal in Irrigon. The application will be prepared by the WEID Manager and the Manager is authorized to sign the application on behalf of the WEID. The Board commits the match of up to \$100,000 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 behalf of the WEID.

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

alani Om

Dalarie Philippi, Chairman

V-Q. pl

Vern Frederickson, Vice Chairman

Robert M. Muellu

Robert Mueller, Director

Whitney Coffman, Director

Abe McNamee, Director