

UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM

FY 2022-23 SCOPE OF WORK

PROJECT: C-34

**Project Title**

Orchard Mesa Canal Automation Project O&M

**Bureau of Reclamation Agreement Number:**

Contract No. 12-WC-40-445

**Reclamation Agreement Term**

September 27, 2013 through September 27, 2053

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*Note: Recovery Program FY22-23 scopes of work are drafted in May 2021. They often are revised before final Program approval and may subsequently be revised again in response to changing Program needs. Program participants also recognize the need and allow for some flexibility in scopes of work to accommodate new information (especially in nonnative fish management projects) and changing hydrological conditions.*

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**Lead Agency:**

Orchard Mesa Irrigation District

**Principal Investigator:**

Max Schmidt, Manager  
Orchard Mesa Irrigation District  
668 38 Road  
Palisade, CO, 81526  
Phone: (970) 464-7885  
Email: info@omirrigation.com

Category:

- Ongoing project
- Ongoing-revised project
- Requested new project
- Unsolicited proposal

Expected Funding Source:

- Annual funds
- Capital funds
- Other [explain]

**Relationship to RIPRAP:**

Colorado River Action Plan: Mainstem I.A.5.m.(1) Orchard Mesa Irrigation District (OMID) Canal Automation

**Study Background/Rationale and Hypotheses:**

The Orchard Mesa Irrigation District (District) obtains its water supply from the Colorado River. When completed, the canal automation system will include 33 canal check structures, 60 acre-foot regulating reservoir, Canal 1 – Canal 2 interconnect and SCADA system. The objective of the canal automation system is to reduce the volume of water diverted from the Colorado River for irrigation use by more closely matching the volume of water diverted with actual irrigation demand. Water no longer diverted from the river for irrigation uses will be redirected to the Grand Valley Project Power Plant thereby indirectly improving flows for endangered fish in the Colorado River. When complete,

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the estimated volume of water that will be redirected to the Grand Valley Project Power Plant and indirectly augment flows in the Colorado River is 17,000 acre-feet annually. Colorado State Engineer, Water Division 5 records will be used to determine the volume of reduced irrigation diversions pre and post project and annually reported to the Recovery Program.

During the 2020 irrigation season we completed the installation of the throttle valve upgrades which included a new flow meter, new gate actuator, reducer gear box, temporary programmable logic controller, cellular modem, and SCADA monitoring system. The remaining items for this site include the permanent PLC, alignment corrections on the butterfly valve and documentation. For the reservoir site, a temporary PLC was installed, and the remote monitoring was completed. The remote monitoring included a cellular modem and SCADA monitoring system. Work remaining at this site includes replacing the temporary PLC, replacing a defective radio link and documentation.

### **Study Goals, Objectives, End Product(s):**

The specific objective of this scope-of-work is to fund the District to operate and maintain the canal automation system in accordance with terms and conditions of Contract No. 12-WC-40-445.

### **Study Area:**

Orchard Mesa Irrigation District

### **Study Methods/Approach:**

District will operate and maintain facilities using District staff and equipment and specialty contractors as appropriate.

### **Task Description, Deliverables and Schedule :**

Perform routine operation and maintenance of canal automation facilities constructed to date consisting of 33 canal check structures and regulating reservoir. Major anticipated activities include: active management of canal flows to more closely match irrigation demand using canal automation facilities, debris removal from check structures, sediment removal from regulating reservoir, weed control on regulating reservoir property. Operation and maintenance activities will take place throughout the FY.

### **Budget Summary:**

FY Year	Estimated Total
2022	\$88,000
2023	\$88,000
2024	\$88,000
2025	\$88,000
2026	\$88,000
Total	\$440,000

**UPPER COLORADO RIVER ENDANGERED FISH RECOVERY PROGRAM**

<b>WORK PROGRAM (PLAN)</b>							
<u>O &amp; M AGREEMENT NO. 12-WC-40-445. OM&amp;M for Orchard Mesa Canal Automation Improvements</u>							
<b>WORK PLAN</b>	<b>FY2022</b>	DESCRIPTION OF WORK					
Operation, Maintenance and Modification of Orchard Mesa Canal Automation Improvements							
<b>DATES COVERED</b>	<b>01-Jan-22</b>	to	<b>31-Dec-22</b>				
ITEM OR FEATURE	ACCOUNT NUMBER	UNIT COST	EQUIPMENT	MATERIALS	LABOR	OTHER	TOTAL
<b>Reservoir and Weir Sites</b>							
<b>2022 O &amp; M Plan (funds disbursed from Annual Fund pg 14)</b>							
<b>O &amp; M</b>							
Miscellaneous Operations	5010.90	\$1,000.00					\$1,000.00
Safety Supplies	5011.90	\$1,000.00					\$1,000.00
Small Tools	5015.90	\$500.00					\$500.00
Utilities	5220.90	\$500.00					\$500.00
General Maintenance & Repair O&M Specific	5029.90	\$36,000.00					\$36,000.00
Equipment Maintenance & Repair O&M Specific	5032.90	\$18,000.00					\$18,000.00
Equipment/General Cost 15% of 257117k (excluding hydro, BOR O&M & BOR Const classes)	5005-5015-5029-5032-5047-5048	\$30,000.00					\$30,000.00
Outside Service	5070.90	\$20,000.00					\$20,000.00
Salaries	6065&6.90	\$65,000.00					\$65,000.00
Payroll Tax	6070.90	\$4,000.00					\$4,000.00
Total Costs for FY 2022							\$176,000.00
Less In-Kind Services							\$88,000.00
TOTAL Reimbursement Request Due OMID							\$88,000.00

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**Reviewers:**

Recovery Program Directors Office and Water Acquisition Committee.

**References:**

NA