Yuba IRWMP - RD10-07

Project Short Form¹

Please fill out the following information to the best of your ability/knowledge. Once the project has been received and a preliminary review completed, the project team will work with you to develop additional information.

Project Sponsor Contact Information

Lead Agency/Organization	Reclamation District No. 10
Name of Primary Contact(s)	Sarb Johl, President
Mailing Address	9274 HWY 70, Marysville, CA 95901
Email Address	
Phone (###) ###-####	Office: 530-682-9916
Project	YWA
Partners/Collaborators	

General Project Information

Project Title	RD 10 – Feather River Reach F10 Seepage & Stability Mitigation
Project Total Budget, based	Reach F10 Alternative 1 Cost - \$19,550,000
on current knowledge	Reach F10 Alternative 2 Cost - \$11,825,000
	Reach F10 Alternative 3 Cost - \$18,800,000
	Total Project Cost - \$11,825,000 to \$19,550,000
Project Funding Match, if	\$0
any	
Total Project Funding	\$19,550,000
Request	
Can a detailed cost	Yes
estimate be provided upon	
request?	
Project Location (map if	Project location map available upon request.
available)	
City/Community	Marysville (RD 10)
Watershed/subwatershed	Sacramento Valley
Groundwater Basin	Sacramento Valley North Yuba 5-021.60
Project Type	Conceptual
(highlight in gray all that	Feasibility Study
apply)	Study/Assessment
	Planning
	Engineering/Design
	Permitting
	CEQA/NEPA
	Facility Construction
	Restoration
	Monitoring
	Best Management Practices
	Acquisition

¹ Completed Project Short Forms should be sent via email to Katie Burdick at admin@burdico.net and Elizabeth Herrera at Elizabeth.herrera@fishsciences.net

Demonstration/Pilot Project

Project Description

Write a narrative briefly describing the project components and/or characteristics (maximum of 300 words).

In 2019 RD 10, through a grant from YWA, completed a Limited Geotechnical Problem Identification Report (PIR) to identify and prioritize geotechnical deficiencies and develop preliminary mitigation measures for the RD 10 basin. Reach F10 was identified as a critical reach and displayed through-seepage, underseepage, and landside slope stability concerns.

Reach F10 is a 3000 linear foot (If) reach along the left bank of the Feather River. The proposed project will complete design, permitting, CEQA/NEPA, land acquisition, and construction for the selected design alternative. The PIR developed 3 preliminary design alternatives for consideration, both of which meet geotechnical factors of safety for landside slope stability, and gradient criteria for through and underseepage.

The proposed alternatives consider either a combination drained seepage-stability berm, a fully penetrating (85ft) cutoff wall, or a fully penetrating (85ft) deep mix method (DMM) cutoff wall throughout the project reach.

I. Project Rationale/Issues Statement

Briefly describe the need for the project and the desired outcomes/deliverables (maximum of 200 words).

The RD 10 levees were initially constructed by the US Army Corps of Engineers as part of the Sacramento River Flood Control Project (SRFCP) from the early to mid 1900s. Over time, the levees have experienced numerous high-water events and performance related issues specifically along the Feather River. Typically, and as supported by the Limited Geotechnical PIR, the RD 10 levees experience seepage and sand boils during high water events. Additionally, 2 breaches occurred during the 1936-37 and 1937-38 flood seasons along the Feather River. In the absence of mitigation, flood risk due to seepage and stability concerns may lead to more broad levee safety concerns during high-water events including breach.

The proposed project would reduce flood risk along Reach F10 due to the existing seepage and stability concerns.

Deliverables include: project alternative analysis, design, CEQA/NEPA analysis, permitting, land acquisition, and construction.