

## Yuba IRWMP – RD 2103-02

### Project Short Form<sup>1</sup>

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 INFORMATION

Lead Agency/Organization	Reclamation District 2103
Name of Primary Contact(s)	Dean Webb
Mailing Address	PO Box 208, Wheatland, CA
Email Address	frankdwebb@yahoo.com
Phone (###) ###-####	530-633-4072
Project Partners/Collaborators	n/a
YWA Liaison	

#### GENERAL PROJECT INFORMATION

<b>Project Title</b>	Grasshopper Slough 100-year Improvements
<b>Project Total Budget</b> (Attach detailed budget, if available)	495,000
<b>Budget Breakdown</b>	Planning/Design Budget: Implementation Budget: 495,000
<b>Project Funding Match, if any</b>	None
<b>Total Project Funding Need</b>	495,000
<b>Project Location</b> (Attach map if available)	NE of Wheatland and south of Beale AFB
<b>City/Community</b>	NE of Wheatland
<b>Watershed/subwatershed</b>	Yuba
<b>Groundwater Basin</b>	Yuba
<b>Funding Area</b>	SRFA or MC
<b>Project Priority</b> (Select one)	High/Medium/Low
<b>Project Type</b> (highlight in gray <i>all</i> that apply)	Conceptual Feasibility Study Study/Assessment Planning Engineering/Design Permitting CEQA/NEPA Facility Construction Restoration Monitoring Best Management Practices Acquisition Demonstration/Pilot Project

<sup>1</sup> Completed Project Short Forms should be sent via email to Keri Rinne at [keri.rinne@gmail.com](mailto:keri.rinne@gmail.com)

**Please select the *status* of the CEQA/NEPA/Permitting for this project:**

<b>CEQA</b> (Select one)	Exempt - Not Started - Initial Study - EIR – Determination - Unknown if Required
<b>NEPA</b> (Select one)	Exempt - Not Started - Environmental Assessment - EIS – Record of Decision - Unknown if Required
<b>Permitting</b> (Select one)	Not Required - Not started – Identified – Consultations Complete – Application Submitted – Complete – Unknown if Required

**PROJECT DESCRIPTION**

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

RD 2103 has completed an analysis to identify the geotechnical and levee safety repairs required to support the proposed 100yr FEMA Certification of the Grasshopper Slough Levee. This included hydrologic and hydraulic analysis, erosion potential, review of geometry, evaluation of pipe crossings, and a geotechnical evaluation.

Based on the of levee features, the following is required to prepare the levee for 100-year FEMA certification:

- Installation of CIPP liners at Station 17+75 for two (2) – 24-inch diameter CMP pipes in order to mitigate existing pipe defects and extend the useful life of the facility. An approximate 190-foot CIPP liner will be installed within both pipes. No excavation or earth fill is required with this feature.
- Removal of a pipe penetration at Station 24+50. An existing 12-inch diameter welded steel pipe (WSP) is no longer in use and is not needed to provide any drainage function. Approximately 150 feet of pipe will be removed using a slope excavation extending to approximately 1 foot below the pipe invert. The pipe will be removed, and the excavation will be backfilled using a combination of excavated soil and import Type 1 Select Embankment Fill. A typical detail for pipe removal is included on Figure 5.
- Removal of a pipe penetration at Station 32+50. An existing 24-inch diameter CMP is no longer in use and is not needed to provide any drainage function. Approximately 120 feet of pipe will be removed using a slope excavation extending to approximately 1 foot below the pipe invert. The pipe will be removed, and the excavation will be backfilled using a combination of excavated soil and import Type 1 Select Embankment Fill.
- Removal of a pipe penetration at Station 1+50. An existing 24-inch diameter CMP is no longer in use and is not needed to provide any drainage function. Approximately 120 feet of pipe will be removed using a slope excavation extending to approximately 1 foot below the pipe invert. The pipe will be removed, and the excavation will be backfilled using a combination of excavated soil and import Type 1 Select Embankment Fill.
- Placement of approximately 1,466 tons of waterside rock rip rap between approximate Stations 2+00 and 14+00 to correct geometry deficiencies. Twelve-inch diameter rock will be placed at a 1.5H:1V slope in the channel extending from the invert of the channel to the top of the waterside bench. Figure 6 shows a typical detail for erosion repair.
- Backfilling of the un-lined ditch located at the landside levee toe between approximate Stations 17+60 and 29+00 to mitigate high underseepage gradients. Backfilling will be performed by filling the ditch and low areas adjacent to the levee to approximately Elevation 96 (NAVD88).

**PROJECT RATIONALE/ISSUES STATEMENT**

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

Construction of the recommended repairs will support FEMA Certification of the Grasshopper Slough Levee and lower flood insurance premiums in the project area. Additionally, the repairs will reduce the flood risk posed by the existing deficiencies in the area.

The project will extend the useful life of critical drainage facilities such as pipe and culvert facilities by installing CIPP pipe liner. The project removes no longer needed drainage facilities which may present a levee safety risk were a preferential seepage path were to develop within the levee embankment. The project repairs also reduce the risk of erosion along the waterside embankment slope by placing rip rap throughout the project area.