

## Yuba IRWMP – YWA-03

### 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 Contact Information

Lead Agency/Organization	Yuba Water Agency
Name of Primary Contact(s)	Willie Whittlesey
Mailing Address	Yuba Water Agency 1220 F Street Marysville, CA 95901
Email Address	wwhittlesey@yubawater.org
Phone (###) ###-####	(530) 741-5017
Project Partners/Collaborators	YWA member units

#### General Project Information

Project Title	New Bullards Bar Secondary Spillway (S2)
Project Total Budget, based on current knowledge	\$160,000,000
Project Funding Match, if any	
Total Project Funding Request	\$160,000,000
Can a detailed cost estimate be provided upon request?	Yes
Project Location (map if available)	New Bullards Bar Dam
City/Community	Dobbins
Watershed/subwatershed	Yuba/North Yuba
Groundwater Basin	Hard Rock Aquifer
Project Type (highlight in gray all 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 Katie Burdick at [admin@burdico.net](mailto:admin@burdico.net)

## Project Description

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

Project consists of a new spillway through the left abutment of New Bullards Bar dam and is now named the "New Bullards Bar Secondary Spillway" or "Secondary Spillway". The purpose of this new facility is to allow the release of water from the reservoir, in advance of large, threatening storm events, when there is enough downstream channel capacity to handle the flows. This will free up space in the reservoir to store water during peak inflows, resulting in a reduced stage elevation on downstream levees. The operation of the Secondary Spillway will require revision of the Army Corps of Engineer's Flood Control Manual to add Forecast-Informed Reservoir Operations (FIRO). The use of the Secondary Spillway in conjunction with the revised WCM will also yield water supply benefits by allowing additional water to be stored during dry periods.

The second spillway will significantly improve flood protection in Yuba County in many ways, such as:

- Create the ability to release additional water from New Bullards Bar Reservoir before, and early in a major storm event when there is excess downstream flood channel capacity, which creates more flood space in New Bullards Bar Reservoir to absorb the peak inflow into the reservoir and reduce downstream peak flow.
- The Forecast Informed Reservoir Operations (FIRO) of New Bullards Bar Dam, with the Secondary Spillway, and coordinated Oroville Dam flood releases results in a peak flood stage reduction of about 2 feet on the Yuba and Feather rivers at Marysville in a 1 in 200 year event. This is a significant flood stage reduction.
- Provide a cost effective flood risk reduction project with a benefit cost ratio of 2.14 at a Federal discount rate of 3.125 percent.
- If the existing spillway was inoperable, the Secondary Spillway could accommodate the 1997 flood of record.
- Provide additional dam safety enhancement by providing a large volume release capability at lower reservoir elevation.

## I. Project Rationale/Issues Statement

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

In response to the 1997 flood, a 1-in-100 year flood event, YWA commissioned a study to identify potential flood risk reduction measures. The study found that releases from New Bullards Bar Reservoir are limited by the relatively small flow capacity of the low-level outlet and Colgate Powerhouse, and the relatively high elevation of the existing spillway crest, prohibiting the release of significant volumes of water when major storm events are forecast. One of the study recommendations was a second spillway at New Bullards Bar Dam.