**470252 Lower Granite JBS Post-Construction Evaluation**

CRFM Work Plan

January 2018

**1. Project Information**

* **Purpose/Objective**. This project will evaluate the safety (fish condition and travel times) of the recent changes made to the Lower Granite Juvenile Bypass System (JBS).

**Description**. The Lower Granite Dam Juvenile Bypass Facility is currently undergoing a wide variety of upgrades with completion expected for the 2018 juvenile outmigration season starting late March 2018. These upgrades focus on the upper portions of the JBS including enlarged orifices, widened collection channel, new primary dewatering structures and transportation channels, and new emergency and primary bypass outfalls.

The following objectives will be pursued in 2018:

1. Estimate and Compare survival of fish passing through upgraded Phase 1 components (i.e., gatewells through Primary Outfall; gatewells through facility bypass into separator)
2. Evaluate Travel Time through JBS Phase 1 components.
3. Determine fish condition (including injury and descaling) of fish passing through the LGR JBS Phase 1 components.
   1. Evaluate and Compare fish condition of fish passing through Primary Bypass routes (i.e., gatewells to tailrace)
   2. Evaluate and Compare fish condition of fish passing through Facility Bypass route (i.e., gatewells to Separator)

4. Characterize the hydraulic conditions of the new LGR JBS (e.g. sensor fish)

**2. Major Activities/Tasks**. FY18 – Conduct biological evaluation to provide survival, fish condition and passage behavior information through the upgraded JBS upon its expected completion and commissioning for the 2018 fish passage season. FY19 – Report review, report completion.

**3. Cost Estimate**. FY17 Final Obligations - $0

FY18 Budget - $350,000

**4. Information and Issues**.