

RECLAMATION

Managing Water in the West

Finding of No Significant Impact – Coleman Barrier Weir Site Modifications

FONSI No. NC-11-04

**Central Valley Project, CA
Mid-Pacific Region**



Background and Project Purpose

In accordance with the National Environmental Policy Act (NEPA), the Pacific Southwest Regional Office of the U.S. Fish and Wildlife Service (Service) and the Northern California Area Office of the Bureau of Reclamation (Reclamation), co-lead agencies under NEPA, have prepared an Environmental Assessment (EA) for the Coleman Barrier Weir Site Modifications, dated September 2011.

Coleman National Fish Hatchery Complex (CNFHC) operates a fish barrier weir and fish ladder facilities in Battle Creek, CA. These facilities were significantly modified in 2007 and 2008 and are operated to manage the different runs of hatchery and natural salmonids in Battle Creek. While post-construction evaluation studies of the modifications demonstrated that most modifications were effective, the feature known as the overshot gate demonstrated a deficiency as it lacked ability to effectively block the upstream passage of fall-run Chinook salmon. Preventing fall-run Chinook salmon from accessing upstream spawning areas is a critical element for the on-going Battle Creek Restoration Program which is seeking to restore habitat for federally listed salmonids such as spring-run Chinook and steelhead. Consequently, the Service and Reclamation propose to modify the over shot gate to achieve this objective.

At the same time, upgrades will be made to the associated areas that are open to the public for viewing of the salmon. These areas will be modified to make them compliant with the Americans with Disabilities Act (ADA). Moreover, a new viewing platform will be constructed immediately downstream of the barrier weir to restore public viewing access that currently is not available at the facility.

Additional modifications will also be completed to diminish the opportunity for water and water-borne debris to enter key areas of the infrastructure that may lead to damage, compromise function, or strand fish. During periods of high flows in Battle Creek, water and water-borne debris are able to enter the old upstream fish ladder and the wasteway canal, as these structures are below the new deck elevation of the new fish ladder facilities. To protect the old fish ladder, a reinforced concrete cover will be installed, and the existing trash rack will be modified to prevent debris entry. To protect the wasteway canal and the entrance area of the fish ladder junction structures, the existing wasteway canal wall will be raised to levels consistent with high flow events which will prevent inundation of the entire structure.

The specific Project actions are:

1. The first action is to modify the overshot gate in a manner that will more effectively prevent fish from passing upstream. A steel extension will be added to the existing structure.
2. The second action is increasing the height of the wasteway canal wall. This action is necessary to prevent water-borne debris from entering into the adjacent concrete wasteway canal structure

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during periods of high flows in Battle Creek. This modification will be constructed of concrete, and its sole purpose is to limit debris entry into the wasteway canal, which augments water flow at the mouth of the fish ladder.

3. The third action involves minor modifications to the recently built infrastructure associated with the Fish Barrier Weir Modification project. Existing handrails and guardrails will be either modified and/or replaced to ensure ADA compliance. The concrete capping of the open areas of the old fish ladder will be approximately 8 inches (in) higher than the surrounding concrete infrastructure. Therefore, metal ramps and walkways that are ADA compliant will be placed to provide visitor access to the old fish ladder. Proposed improvements to handrails, guardrails, walkways, curbs, gratings, and ramps in the south slab area will be necessary to allow public access and be ADA compliant. These additions and modifications will restore public access to the original fish ladder facilities at the edge of Battle Creek.

4. The fourth action involves minor modifications to the old fish ladder. Concrete slabs will be poured to cover existing openings of the old fish ladder, in conjunction with the modification of a trash rack on the upstream end of the old fish ladder. These features will help prevent fish entrainment through the top of the old fish ladder. Also, the features prevent stream-borne debris from entering and clogging a bar rack, which separates the old fish ladder from the mouth of the new fish ladder.

5. The fifth action is the proposed construction of the visitor platform, a concrete platform approximately 30 feet by 30 feet to provide the visiting public with a direct view of the adult salmon, which congregate at the base of the barrier weir. The visitor platform additionally restores the spectacular views of salmon, as most of the fish viewing opportunities were lost upon construction of the previous 2006 project. This new visitor platform will be situated immediately downstream and adjacent to the north side of the barrier weir and will overhang Battle Creek.

Findings

In accordance with the National Environmental Policy Act of 1969, as amended, Reclamation's Northern California Area Office and the Service's Pacific Southwest Regional Office have found that the Proposed Project is not a major federal action that would significantly affect the quality of the human environment. Consequently, an environmental impact statement is not required. This finding of no significant impact is based on the following:

1. The project will not significantly affect water quality since construction specifications will employ Best Management Practices (BMP's) and other measures to prevent accidental spill of construction-related and/or hazardous materials.

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2. The Project will not significantly affect biological resources including special-status salmonids. Measures included in the Biological Assessment and the National Marine Fisheries Service's concurrence letter of not likely to adversely affect the threatened Central Valley spring-run Chinook salmon or the threatened Central Valley steelhead will be implemented. Wildlife species will not be significantly affected because construction windows will avoid impacts and BMP's will avoid or minimize species disturbance. In addition, the Project will not affect vegetation in the surrounding area. There would be no adverse impacts to biological resources.
3. The Project will prevent erosion or minimize increased sedimentation into Battle Creek through BMP's, sediment and erosion control and stabilization measures, decanting of waters, and monitoring of water quality in accordance with the Regional Water Quality Control Board's Sec. 401 water quality certification standards.
4. The Project will minimize disturbance to rearing and spawning habitat in Battle Creek as instream work being conducted during the time period of lower stream flows, the short time frames for cofferdam installation and removal. Federally listed spring-run Chinook salmon spawn in areas upstream of the Project site, and any impacts to juvenile salmonid rearing habitat will be temporary in duration and limited in scope (approximately 12% of the stream surface area immediately adjacent to the Project site).
5. The Project impacts to juvenile migration and upstream adult migration will be minimal to non-existent, as the stream will remain open to downstream movement of fish. The fish ladder remains open for adult salmonid passage through July 31st. Beginning on August 1, in accordance with fishery management protocols and independent of the Project actions, upstream adult fish migration is intentionally blocked.
6. Central Valley Project and critical hatchery operations will not be adversely affected. The Project actions are limited in size and duration.
7. Cultural resources will not be at risk because the existing facilities have been extensively modified in recent years and no cultural resources were found during a survey of the area that will be affected by the construction of the second viewing platform.
8. No Indian Trust Assets will be affected because the action will simply maintain existing operations in support of natural resources without causing change in the area of origin.
9. The project is consistent with federal policies on environmental justice because the proposed action will benefit lower- and higher-income neighborhoods equally.

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