Arroyo Canal Fish Screen and Sack Dam Fish Passage Project

Finding of No Significant Impact

CGB-ED-2025-033

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U.S. Department of the Interior
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California Great-Basin
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The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated Island Communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Background

In 2013, the U.S. Bureau of Reclamation (Reclamation), as the federal lead agency, and Henry Miller Reclamation District #2131 (HMRD), as the state lead agency, prepared the Arroyo Canal Fish Screen and Sack Dam Fish Passage Project (Project) Environmental Assessment/Initial Study (2013 EA/IS) to analyze and disclose the environmental impacts of implementing fish passage improvements at the Arroyo Canal and Sack Dam facilities on the San Joaquin River as described in Paragraph 11(a)(6) and 11(a)(7) of the 2006 *Natural Resource Defense Council, et al., v. Kirk Rodgers, et al*. *Stipulation of Settlement* (Settlement); as authorized by the 2009 San Joaquin River Restoration Settlement Act, included in Public Law 111-11 (PL111-11); and as described in the 2012 San Joaquin River Restoration Program (SJRRP) Programmatic Environmental Impact Statement/Report (PEIS/R) and Record of Decision (ROD). However, as the Project neared 100 percent design, surveys revealed a significantly higher rate of regional land subsidence than anticipated at Sack Dam, and environmental compliance documentation efforts were paused to allow for design efforts to consider this new information. Since 2013, Reclamation has evaluated several design alternatives that have been eliminated from further consideration for a variety of technical reasons. Reclamation now has sufficient information to analyze the effects of a feasible design alternative for the Project. Therefore, Reclamation prepared a supplemental environmental assessment (SEA) to analyze and disclose any environmental impacts of the Project design refinements beyond those in the 2013 EA/IS. The 2013 EA/IS, 2013 finding of no significant impact (FONSI), and SEA are hereby incorporated by reference, as applicable.

Reclamation proposes to construct, operate, and maintain a fish screen at Arroyo Canal and fish passage facilities at Sack Dam in Reaches 3 and 4A of the Restoration Area. The proposed modifications are necessary to prevent entrainment of anadromous fish into Arroyo Canal and ensure fish passage at Sack Dam, as required by Paragraphs 11(a)(6) and 11(a)(7) of the Settlement. The proposed action includes the following key components, as further described below:

- Construct a new 700 cubic feet per second (cfs) flat-plate fish screen located on the left bank of the new channel.
- Construct a new 4,500 cfs channel around Sack Dam.
- Construct a new gated headworks structure to control flow releases into the river channel, consisting of 12 bays with operable gates.
- Construct a new vertical slot fishway around the gated headworks structure to provide salmonid passage.
- Construct a new berm downstream of the existing Sack Dam to direct fish to the fishway and river channel and prevent fish from reaching Sack Dam and possibly entering the backside of the screen and being vulnerable to entrainment into the Arroyo Canal.

- Install a new log boom placed within 50 feet upstream of the fish screen to protect the structure from debris and vegetation, aiding in encouraging juveniles to move toward the new river channel.
- Construct a new maintenance building in the area directly west of the fish screen structure on the left bank of the San Joaquin River to store equipment, including electrical controls.
- Relocate existing Pacific Gas and Electric (PG&E) gas and power lines.

As part of the proposed action, Reclamation will implement the environmental commitments as described in the SEA and will ensure that PG&E and their contractors implement all applicable environmental commitments for their utility relocation actions.

Findings

The 2013 EA/IS and SEA were prepared to analyze and disclose the potential impacts to the human environment associated with the proposed action in accordance with the National Environmental Policy Act of 1969, as amended (NEPA), Council on Environmental Quality regulations[1] (40 CFR 1500-1508), and Department of the Interior Regulations (43 CFR Part 46). In accordance with NEPA, Reclamation has determined that the proposed action of constructing, operating, and maintaining the fish passage improvements as described above is not a major Federal action that would significantly affect the human environment. Therefore, an environmental impact statement is not required.

Implementing the proposed action would have no impacts to the following resource categories beyond what was analyzed and disclosed in the 2013 EA/IS and FONSI: aesthetics, growth inducing impacts, hazardous materials and public health and safety, Indian trust assets, land use and agricultural resources, noise, and socioeconomic resources.

[1] Executive Order 14154, Unleashing American Energy (Jan. 20, 2025), and a Presidential Memorandum, Ending Illegal Discrimination and Restoring Merit-Based Opportunity (Jan. 21, 2025), require the Department to strictly adhere to the National Environmental Policy Act (NEPA), 42 U.S.C. §§ 4321 et seq. Further, such Order and Memorandum repeal Executive Orders 12898 (Feb. 11, 1994) and 14096 (Apr. 21, 2023). Because Executive Orders 12898 and 14096 have been repealed, complying with such Orders is a legal impossibility. Reclamation verifies that it has complied with the requirements of NEPA, including the Department's regulations and procedures implementing NEPA at 43 C.F.R. Part 46 and Part 516 of the Departmental Manual, consistent with the President's January 2025 Order and Memorandum.

The impacts of implementing the proposed action are not significant for the following reasons, with respect to the affected environment and degree of effects of the action.

- **Air Quality** Air quality impacts of constructing the proposed action would be similar to those described in the 2013 EA/IS. Project construction annual emissions would be below de minimis levels. Emissions associated with operating and maintaining the proposed action would be within those analyzed and disclosed in the 2013EA/IS and FONSI. Construction, operation, and maintenance of the proposed action would comply with Clean Air Act general conformity requirements and would therefore have less than significant impacts on air quality.

- **Fish and Marine Mammals** The impacts of constructing, operating, and maintaining the proposed action to this resource category would generally be within those analyzed and disclosed in the 2013 EA/IS, with a few specific updates to the analysis as described in the SEA and summarized below.

  In 2017, an adult North American green sturgeon (*Acipenser medirostris)* southern Distinct Population Segment (sDPS) (green sturgeon) was sighted and confirmed by eDNA in the Stanislaus River near Knights Ferry. In April 2020, an adult green sturgeon was captured in the lowest reach of the Restoration Area, near the confluence with the Merced River, representing the first verified evidence of green sturgeon in the Restoration Area. Green sturgeon are not anticipated to occur in the project area during construction, but may be affected by impacts of operating and maintaining the proposed action.

  While extremely unlikely, it is impossible to preclude the possibility that rainbow trout (*Onchorhynchus mykiss*) upstream of the action area may emigrate down the San Joaquin River and into the action area and could be affected by impacts of constructing the project. The SJRRP has been releasing juvenile non-essential experimental population Central Valley spring-run Chinook salmon (NEP spring-run Chinook salmon) into the San Joaquin River since 2014. Low numbers of adults returning from these juvenile releases are expected in the near-term; however, the SJRRP has genetic evidence that adult NEP spring-run Chinook salmon began returning in 2017. NEP spring-run Chinook salmon could be affected by impacts of constructing the project, should they be present in the proposed action area.

  Operation of the proposed facilities would provide protection from entrainment and provide upstream and downstream passage that does not currently exist to multiple life stages of various native fish species. Thus, the conservation value of this portion of the San Joaquin River as a migratory corridor would be greatly improved for all life stages of these fish, thereby enhancing the ability of the watershed to contribute to the recovery of the species that will be able to spawn and rear there.

  Since operating the Project would benefit Chinook salmon populations, a prey source for Southern Resident killer whale (*Orcinus orca*) (SRKW), Reclamation determined that

implementing the proposed action would be not likely to adversely affect and would indirectly benefit SRKW. Reclamation also determined that implementing the proposed action would have no effect on critical habitat, may affect and is likely to adversely affect Central Valley steelhead (*Oncorhynchus mykiss*) (steelhead) and green sturgeon, may affect but would not jeopardize NEP spring-run Chinook salmon, and would adversely affect essential fish habitat (EFH). However, implementation of environmental commitments as described in the SEA would avoid and minimize these adverse effects to the extent feasible, and it is anticipated that the long-term benefit to of improving fish passage conditions in the action area, in addition to the EFH improvements provided by Restoration Flows, would contribute to an overall benefit to these species and an improvement in quantity and quality of EFH. Reclamation requested consultation with NMFS on these determinations in accordance with the Endangered Species Act (ESA) Section 7(a)(2) and the Magnuson-Stevens Fishery Conservation and Management Act (MSA), respectively. Because Reclamation determined the proposed action would not jeopardize NEP spring-run Chinook salmon, conference with NMFS in accordance with ESA 7(a)(4) is not required.

In their 2025 biological opinion on the effects of the Project, NMFS concurred with Reclamation's determination of effects to SRKW, determined the proposed action would not jeopardize steelhead and green sturgeon, and provided conservation recommendations to avoid, minimize, or offset effects to EFH. As required by MSA Section 305(b)(4)(B), Reclamation will provide a detailed response to NMFS' EFH conservation recommendations. Impacts to fish would be avoided and minimized to the extent feasible with the implementation of the environmental commitments as described in the SEA and would be less than significant under the proposed action.

- **Vegetation and Wildlife** The effects of the proposed action on vegetation and wildlife would generally be as described in the 2013 EA/IS, with a few specific updates to the analysis as described in the SEA and summarized below. Construction of the river bypass, fish ramp, and fish ladder would result in the loss of approximately 3.73 acres of riparian vegetation. As described in the SJRRP ROD, Reclamation will compensate for loss of riparian habitat and other sensitive natural communities in accordance with the 2014 SJRRP Riparian Habitat Mitigation and Monitoring Plan (RHMMP): *credits for increased acreage or improved ecological function of riparian and wetland habitats resulting from the implementation of the SJRRP actions will be applied as compensatory mitigation before additional compensatory measures are required...*

  To ensure that there is no net loss of riparian habitat as a result of implementing the SJRRP, including the proposed action, areas of land adjacent to the fish passage facility that are disturbed but not permanently impacted by construction activities that are federally owned as part of the project footprint (approximately 1 acre) will be returned to original grade and planted with riparian vegetation to the extent feasible following

construction, and Reclamation will continue vegetation monitoring as described in the RHMMP in the vicinity of the action area - Reaches 3 and 4a.

Alteration of aquatic habitat under the proposed action would include permanent impacts to approximately 5.93 acres of wetlands and Waters of the U.S.; however, the proposed action would provide the beneficial effects of screening Arroyo Canal and providing passage around Sack Dam and access to areas of improved habitat being created by other SJRRP actions in a degraded system that has not had a spawning population of salmonids in decades. As described above, the proposed action is necessary to prevent entrainment of anadromous fish into Arroyo Canal and ensure fish passage at Sack Dam, as required by Paragraphs 11(a)(6) and 11(a)(7) of the Settlement. These proposed improvements are interrelated actions to the SJRRP, in that they are part of and depend on the implementation of the SJRRP for their justification. Based on the mapping of the low flow channel that was done for the 2014 SJRRP Wetland Delineation Planning Report, and the current channel capacity constraint of approximately 300 cfs, release of Restoration Flows in accordance with the Settlement has reconnected approximately 805 acres of aquatic habitat in the Restoration Area downstream of Sack Dam to the confluence with the Merced River (approximately 52 miles), which was dry prior to 2016.

Therefore, the proposed action is anticipated to:

- Result in no net loss of wetlands or riparian habitat
- Contribute to restoring function and value to the project area
- Establish fish passage to additional habitat, including areas of habitat being restored or created by the SJRRP

Although some wetlands and other waters of the U.S. will be lost as a result of this Project, the overall improvement to the wetland and riverine system's functions and values and the increase in total wetland acreages being provided by the release of Restoration Flows are considered net benefits.

In their December 18, 2024, memo, the United States Fish and Wildlife Service concurred with Reclamation's determination that the proposed action would be not likely to adversely affect San Joaquin kit fox (*Vulpes macrotis mutica*), Fresno kangaroo rat (*Dipodomys nitratoides exilis*), and giant garter snake (*Thamnophis gigas*).

No impacts beyond those analyzed and disclosed in the 2013 EA/IS are anticipated to occur in regards to the updated information on non-native invasive species included in the SEA. Impacts to vegetation and wildlife would be avoided and minimized to the

extent feasible with the implementation of the environmental commitments as described in the SEA and would be less than significant under the proposed action.

- **Cultural Resources** Reclamation initiated consultation with the SHPO's office on November 7, 2023, and sought concurrence for a finding of no adverse effect for the Project (12 SCAO-043.002). Reclamation found that Project activities would not adversely affect historic properties such as Valeria Avenue, Arroyo Canal, Poso Canal, and the East Bank Levee and Roads pursuant to 36 CFR § 800.5(b). On December 11, 2023, Reclamation notified the SHPO's office that it was moving forward with the original Project (12-SCAO-043.002) as no response was received within the 30-day review period.

  On November 5, 2024, Reclamation continued consultation with the SHPO's office and reaffirmed and sought concurrence for their finding of no adverse effect for the PG&E Utility Modifications Project (12-SCAO-043.005). Reclamation found that the supplemental Utility Modifications Project would not adversely affect Valeria Avenue, East Bank Levee and Roads, and the PG&E Distribution Line. The SHPO responded on December 18, 2024, and concurred with Reclamation's finding of no adverse effect. Impacts to this resource category would remain less than significant under the proposed action.

- **Indian Sacred Sites** Pursuant to 36 CFR § 800.4(a)(4) and Executive Order 13007, Reclamation invited eight federally recognized tribes (the Big Sandy Rancheria; the California Valley Miwok Tribe; the North Fork Rancheria of Mono Indians; the Picayune Rancheria of Chukchansi Indians; the Santa Rosa Rancheria Tachi/Yokut Tribe; the Table Mountain Rancheria; the Tejon Indian Tribe and the Tule River Indian Tribe of the Tule River Reservation) to assist in identifying sites of religious and cultural significance on April 4, 2023 and on June 14, 2024. To date, only the Tule River Indian Tribe of the Tule River Reservation and the Santa Rosa Rancheria Tachi/Yokut Tribe responded to these consultation requests. The Santa Rosa Rancheria Tachi/Yokut Tribe initially requested a site visit. Between April and August 2023, Reclamation staff attempted to coordinate a site visit with the Tribe to discuss the project. No response was received to any of these site visit requests and subsequently no Indian Sacred Sites were identified inside the area of potential effect (APE). As a result, Reclamation consultations did not identify Indian sacred sites inside the APE; therefore, there would be no impacts to Indian sacred sites under the proposed action.

- **Geology and Soils** Impacts associated with project construction would be generally the same as analyzed and disclosed in the 2013 EA/IS and FONSI, except that the area of disturbance would be larger under the current proposed action. Implementation of the environmental commitments as described in the SEA would avoid and minimize construction impacts to the extent feasible. Operation of the Project would have an overall beneficial effect on geology and soil resources adjacent to Sack Dam, as the hardened features of the fish passage facilities would inhibit streambank erosion from

occurring under normal conditions. These features would, however, have the potential to exacerbate soil loss via bed and bank erosion upstream and downstream of these hardened features. Both upstream and downstream of the proposed new infrastructure, higher-energy flows associated with Restoration Flows could potentially be focused towards portions of the river bank (inside and outside the project influence area) that lack revetment, which would lead to increased bed and bank erosion. Over time, it is expected that any channel adjustments occurring as a result of Restoration Flows would achieve an equilibrium state. Therefore, impacts to geology and soils would be less than significant under the proposed action.

- **Climate Change** The impacts of the proposed action would be similar to those described in the 2013 EA/IS and FONSI. Construction of the proposed action would not make a considerable contribution to significant cumulative impacts due to greenhouse gas emissions or global climate change impacts. Greenhouse gas emissions for operation and maintenance of the proposed action would be within those analyzed and disclosed in the 2013 EA/IS and FONSI. The Project has been designed to consider the potential effects of climate change over the life of the Project. Therefore, this impact would remain less than significant under the proposed action.

- **Public Utilities** The construction impacts of the PG&E utility relocations as previously described are included in the impact analysis section for each resource category as applicable. Operational impacts would be within those analyzed and disclosed in the 2013 EA/IS and FONSI. Therefore, this impact would remain less than significant under the proposed action.

- **Recreation** The impacts of constructing, operating and maintaining the proposed action would be generally the same as described in the 2013 EA/IS and FONSI, with the following update to the analysis. The proposed action area would be unavailable for recreational access during construction, due to safety concerns. This impact would be temporary, however. Following construction, portage at the future facility will be available to the east of the new infrastructure allowing for boaters and recreational users to transfer their vessel around the facility on the bank and safely downstream of the structure. Therefore, impacts to recreation under the proposed action would be less than significant.

- **Transportation and Traffic** The impacts of implementing the proposed action would generally be within those described in the 2013 EA/IS, with the exception of an additional access route on the east side of the project area, as previously described. Therefore, this impact would remain less than significant under the proposed action.

- **Water Resources** Impacts of constructing, operating and maintaining the proposed action would remain within what was analyzed and disclosed in the 2013 EA/IS.

During construction, it is anticipated that Restoration Flows, Arroyo Canal deliveries, and flood flows would occur that could inundate portions of the project area. To accommodate flood flows, Arroyo Canal deliveries and Restoration Flows, the contractor would use in-river construction methods as described in the SEA. Construction methods would allow flood flows and Restoration Flows to move beyond the project area.

As described in the SEA, in-river construction activities would occur within an approximate 32-month timeframe. Arroyo Canal diverts water year-round, and potential disruptions to water diversions could occur as a result of construction activities but would be coordinated with HMRD prior to a disruption occurring and would be avoided to the extent feasible by implementing the environmental commitment to provide continuous service to HMRD, as described in the SEA.

Operation of the proposed facilities will allow for HMRD to operate consistent with their operations prior to the implementation of Restoration Flows. HEC-RAS and SRH2D model results demonstrated no measurable increase in the water surface elevation (WSE) at the Reach 3 channel capacity (4,500 cfs) and the highest recorded flood flow (5,900 cfs) as a result of Project facilities holding the existing water delivery WSE. The model did not show changes in the WSE in localized areas around the structure for the purposes of continued operation. The potential for future water surface changes would be caused by regional subsidence and the need to increase the WSE for the purposes of water delivery to the Arroyo Canal. Therefore, impacts to water resources would remain less than significant under the proposed action.

The proposed action, when added to other past, present, and reasonably foreseeable actions, will not contribute to significant cumulative increases or decreases in environmental conditions in any resource category.