



— BUREAU OF —
RECLAMATION

Mitigated Finding of No Significant Impact and Decision Record

2026-2027 North to South Water Transfers

Interior Region 10 • California-Great Basin

CGB-ED-2024-025

Prepared by:

Deanne Weber _____ Date: _____

Natural Resources Specialist

Interior Region 10 • California-Great Basin, Bureau of Reclamation

Approved by:

Scott Springer _____ Date: _____

Acting Regional Resources Manager

Interior Region 10 • California-Great Basin, Bureau of Reclamation

Mission Statements

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.

Introduction

In accordance with section 102(2) of the National Environmental Policy Act (NEPA) of 1969, as amended, the Bureau of Reclamation (Reclamation) prepared an Environmental Assessment (EA) to examine the potential effects to the environment associated with Reclamation's Proposed Action to facilitate voluntary water transfers of up to 250,000 acre-feet annually from willing sellers upstream of the Sacramento–San Joaquin Delta (Delta) to willing buyers south of the Delta and in the Bay Area during 2026–2027. Transfers would occur through groundwater substitution, where sellers pump groundwater and make surface water available, and make reservoir releases under agreements that protect downstream users. Water would be conveyed using existing Central Valley Project (CVP) and State Water Project (SWP) facilities under operational requirements, including compliance with applicable biological opinions and water quality standards. Transfers will only occur within the designated transfer window¹ when the Delta is in balanced conditions⁰ and carriage water will be required to maintain water quality. This action aims to meet buyer demands while adhering to Federal and state laws and water rights.

This mitigated Finding of No Significant Impact (FONSI) was developed in compliance with the Department of the Interior's (DOI) implementing regulations at 43 CFR Part 46 and the DOI Handbook of NEPA Implementation Procedures (516 DM 1). This mitigated FONSI is supported by Reclamation's 2026-2027 Water Transfers EA (CGB-ED-2024-025), incorporated here by reference.

Purpose and Need

Hydrologic conditions and precipitation in California are unpredictable. Despite above-normal conditions in water year 2024, the 2020–2022 drought severely depleted reservoir storage, exposing supply vulnerabilities. If dry conditions return, agricultural and municipal and industrial (M&I) users could face critical shortages, requiring transfers to sustain existing demands. The Proposed Action to transfer water from north of the Delta to south of the Delta is needed by water users that are at risk of experiencing water shortages and require these supplemental water supplies to meet the level of anticipated annual existing demands. Reclamation's primary purpose for the Proposed Action is to review and consider whether or not to approve, in accordance with applicable Federal law, policy, rules, regulations and contracts, then in effect, the

¹ Transfers under this FONSI would only occur as analyzed in the EA, generally between July and November, subject to contract, and possibly other limitations. See Table 2-1 of the EA.

voluntary transfer of water from willing sellers located primarily upstream of the Delta, to willing buyers located primarily south of the Delta, and in the San Francisco Bay Area.

Proposed Action

The Proposed Action is described in the EA, summarized in the Introduction Section, and incorporated by reference in this mitigated FONSI. The Proposed Action meets the purpose and need of the project by providing flexible water transfers through groundwater substitution and reservoir releases to supplement water shortages and maintain water supply reliability South of the Delta. The Proposed Action includes mitigation measures to avoid potentially significant adverse effects on water supply, groundwater-related resources, including those associated with groundwater-level declines, such as impacts to other legal water users; land subsidence; groundwater-dependent ecosystems (GDEs); or migration of reduced quality groundwater; and air quality. These mitigation measures, including the authority and mechanisms to ensure implementation, are summarized below.

Mitigation Measures

The following sections summarize the mitigation measures detailed in the Final EA. Refer to the Final EA for the complete description of mitigation measures.

Mitigation Measure WS-1

Groundwater substitution transfers could decrease surface water flows following a transfer while groundwater basins recharge, which could decrease pumping at Jones and Banks Pumping Plants and/or require additional water releases from upstream CVP reservoirs to meet river flow and water quality standards on the Sacramento River, its tributaries, and within the Delta, thus resulting in adverse effects. Implementation of Mitigation Measure WS-1 would avoid potentially significant water supply impacts to the CVP and SWP by implementing a no less than 20 percent streamflow depletion factor to offset possible decreases in river flows resulting from groundwater substitution transfers, ensuring protection of CVP and SWP water supplies. Entities with an existing streamflow depletion factor that has already been identified as higher than 20 percent will remain greater. Reclamation and DWR will regularly review and, with appropriate coordination with Technical Advisory Group/Policy Advisory Group, may adjust this factor based on hydrologic conditions, modeling, and monitoring data.
(Final EA Section 3.1)

Authority and Mechanisms to Ensure Implementation

The authority to implement Mitigation Measure WS-1 is under the conditions for transfers provisions of the Central Valley Project Improvement Act (CVPIA), Section 3405 (a)(1). In addition, Reclamation and DWR require the imposition of a streamflow depletion factor to ensure transfers do not violate the no injury rule (California Water Code § 1702, 1706, and 1725), and other applicable laws, regulations, and policies. Reclamation and DWR must review each individual transfer and will coordinate with applicants on the appropriate streamflow depletion factor before the transfer occurs. (Final EA Section 3.1)

Mitigation Measure GW-1

Groundwater substitution transfers could result in groundwater level declines causing adverse effects on other legal users of water; land subsidence; groundwater-dependent vegetation; and migration of reduced groundwater quality. Implementation of Mitigation Measure GW-1 would avoid potentially significant adverse effects by implementing a comprehensive monitoring and mitigation framework that addresses multiple risk factors associated with groundwater substitution pumping. Together, the requirements in Mitigation Measure GW-1 ensure that groundwater pumping remains controlled and that impacts are promptly mitigated so that potentially significant adverse effects on water users, GDEs, and groundwater quality are avoided.

Authority and Mechanism to Ensure Implementation

The authority to implement Mitigation Measure GW-1 is under the conditions for transfers provisions of the CVPIA, Section 3405 (a)(1). Mitigation Measure GW-1 avoids the potential for significant adverse effects associated with land subsidence by implementing a comprehensive monitoring and management program that prevents groundwater levels from dropping below historic lows², a condition under which irreversible subsidence has the potential to occur (U.S. Geological Survey 2018).

² If a Representative Monitoring Site (RMS) meets the criteria for a suitable monitoring well—such as being within the required radius, located in the same subbasin, and having similar screen depths—it can be used in place of relying solely on historical low groundwater levels for establishing triggers. In this case, the minimum thresholds for groundwater levels set by the local Groundwater Sustainability Agency (GSA) in its DWR-approved GSP can serve as the established trigger instead of the historical low level. This provides flexibility because RMSs are part of the Sustainable Groundwater Management Act (SGMA) compliance and already have defined sustainability thresholds, which are considered protective of groundwater resources. Using RMS thresholds ensures consistency with regional groundwater management objectives while still preventing significant impacts like subsidence or significant harm to GDEs. This footnote applies to all uses of the term *historic lows* or *historical low level* in this document.

The measure requires sellers to establish a monitoring network that includes both the participating transfer pumping wells and suitable nearby monitoring wells. Groundwater levels would be tracked before, during, and after pumping and protective thresholds would be enforced: a groundwater level trigger is set, and a groundwater level threshold for each pumping well and each suitable monitoring well is set at 10 feet above that trigger. If groundwater levels reach the threshold, monitoring frequency increases to every 3 days, and if the trigger is reached, pumping must stop and cannot resume until groundwater levels recover above the trigger. Sellers must include subsidence information, which is available from DWR's InSAR data, best available subsidence information from their local DWR-approved Groundwater Sustainability Plan (GSP), or other available data relative to subsidence. Sellers must demonstrate that substantial land subsidence is not occurring within the vicinity of the proposed transfer pumping well³, consistent with minimum thresholds in their DWR approved GSP(s) and subject to Reclamation verification. If subsidence is occurring, then the well cannot participate in groundwater substitution transfers, providing a safeguard to prevent potentially significant adverse effects of groundwater substitution transfers. These requirements, combined with mandatory cessation of pumping when triggers are reached and pre-transfer subsidence screening, ensure that groundwater levels remain above critical depths, thereby avoiding irreversible land subsidence and potentially significant effects. (Final EA Section 3.3)

Mitigation Measure GW-1 avoids significant effects on groundwater-dependent vegetation/GDEs by requiring targeted monitoring and intervention to prevent adverse impacts on shallow and deep-rooted plants that rely on groundwater. Before pumping begins, sellers must identify whether GDEs exist within a 0.5-mile radius of the participating transfer pumping well using best available data sources such as the Nature Conservancy's Natural Communities Commonly Associated with Groundwater (NCCAG) dataset or local GSPs. If GDEs are present, Mitigation Measure GW-1 mandates monitoring through either suitable shallow groundwater wells or visual assessments by qualified plant ecologists/arborists. Groundwater thresholds specific to the ecological function and rooting depth of the dominant vegetation are established for each monitoring well. If monitoring indicates groundwater levels have dropped below these thresholds or visual assessments show loss or substantial risk of vegetation loss, pumping must stop and cannot resume until groundwater levels recover above the root zone. Additionally, if vegetation loss occurs, sellers must implement restoration measures, including replanting at a 1:1 ratio and maintaining the new plantings for

³ A transfer pumping well is a production well used to pump groundwater as part of a groundwater substitution transfer under the Proposed Action.

3 years to ensure survival. These requirements, combined with proactive monitoring and mandatory cessation of pumping when thresholds are reached or visual assessments show loss or substantial risk of vegetation loss, ensure that significant impacts to GDEs are avoided. (Final EA Section 3.3)

Mitigation Measure GW-1 avoids significant effects associated with the migration of reduced-quality groundwater primarily by limiting the duration and depth of groundwater pumping and enforcing strict operational controls. The measure requires that groundwater substitution pumping occurs only during the irrigation season, which prevents prolonged drawdown periods that could otherwise create conditions for poor-quality groundwater to migrate into pumping zones. Additionally, Mitigation Measure GW-1 mandates continuous monitoring of groundwater levels and establishes protective triggers and thresholds. If groundwater levels approach these thresholds, flowmeter readings increase in frequency, and pumping must stop when the trigger is reached, ensuring that aquifer conditions remain stable. By maintaining groundwater levels above historic lows and restricting pumping to short-term seasonal transfers, Mitigation Measure GW-1 minimizes the hydraulic gradients that drive the movement of groundwater. Furthermore, the mitigation plan includes immediate intervention if any potential impact is detected, ensuring that any risk of reduced-quality groundwater migration is addressed promptly. These combined measures effectively avoid the potential for significant effects on groundwater quality.

Mitigation Measure GW-1 protects third parties from potential impacts by requiring proactive monitoring, operational limits, and compensatory actions to prevent adverse effects on neighboring groundwater users. Specifically, Mitigation Measure GW-1 mandates that sellers monitor groundwater levels at both pumping wells and nearby monitoring wells, ensuring levels remain above historical lows to avoid drawdowns that could affect other legal water users. If groundwater level thresholds are reached, monitoring frequency increases, and pumping must stop when triggers are met, preventing further declines that could increase pumping costs or reduce water availability for third parties. Additionally, Mitigation Measure GW-1 includes a mitigation plan that obligates sellers to reimburse non-transferring third parties for significant increases in groundwater pumping costs or infrastructure modifications caused by transfer-related pumping. The measure also requires coordination with potentially affected third parties and allows for additional monitoring if concerns arise. These combined actions ensure that potentially significant impacts on third parties are avoided and that compensation is provided if impacts occur. (Final EA Section 3.3)

Mitigation Measure AQ-1

Groundwater substitution pumping emissions could adversely affect air quality in the seller service area, however with the implementation of AQ-1, *de minimis* thresholds⁴ within non-attainment areas will not be exceeded under the Proposed Action.

Mitigation Measure AQ-1 requires certain selling agencies to reduce pumping at diesel and propane wells to ensure emissions do not exceed *de minimis* thresholds, ensuring compliance with the General Conformity Rule. (Final EA Section 3.5)

Authority and Mechanism to Ensure Implementation

The authority to implement Mitigation Measure AQ-1 is under the conditions for transfers provisions of the CVPIA, Section 3405 (a)(1). As such, Reclamation will require any selling agency with potentially significant emissions, as determined in the EA, to submit information prior to making water available for transfer through groundwater substitution actions, documenting the wells that would be utilized to support those groundwater substitution actions would not cause an exceedance of the air quality thresholds established under Section 176(c) of the Clean Air Act (42 U.S.C. 7506(c)). The selling agency must also maintain recordkeeping logs that document the specific engine to be used for making water available for transfer through groundwater substitution actions, the power rating (hp), and applicable emission factors. Calculations for daily emissions will be completed and compared to the thresholds applicable to each selling agency. In the annual report, the selling agencies will be required to submit documentation specifying that the wells would only be pumped in accordance with the transfer proposals. (Final EA Section 3.5).

Finding

The EA evaluated the reasonably foreseeable effects of the No Action Alternative and Proposed Action. In determining the degree of significance of the Proposed Action, as mitigated, the following were considered:

Short- and Long-Term Effects

Short-term, infrequent and relatively low intensity effects of groundwater substitution transfers may include temporary groundwater drawdown, localized cones of depression, and short-term flow reductions in small creeks. Reservoir release transfers may temporarily lower reservoir levels during July–November compared to the No Action

⁴ As defined at 40 CFR 93.153

Alternative; however, all reservoirs would continue to be operated according to their existing requirements and within their normal range of operations. Air quality impacts associated with transfer-related groundwater pumping may cause short-term effects during the transfer period. Mitigation Measures WS-1, GW-1, and AQ-1 are designed to prevent short-term adverse effects, which also prevents long-term adverse effects. (Final EA Section 3.1, Section 3.3, Section 3.5, Section 3.7).

Beneficial and Adverse Effects

Beneficial effects of the Proposed Action include water supply to the buyers primarily located South of the Delta. The transfer water would help provide supplemental water to buyers experiencing shortages and who require supplemental water supplies to meet anticipated existing demands. For transfers to agricultural users, water would only be delivered to lands that were previously irrigated. Water transfers to M&I users would also help relieve shortages. Any water transferred to buyers would need to be used for beneficial uses. (Final EA Section 3.1)

Adverse effects of the Proposed Action may include those related to water supply impacts to the CVP and SWP; groundwater-level declines such as adverse effects on other legal users of water, land subsidence, groundwater-dependent vegetation, and migration of reduced groundwater quality; increased air emissions from diesel and propane pumps during groundwater substitution transfer pumping. These potential adverse effects are avoided by implementation of Mitigation Measures WS-1, GW-1, and AQ-1. (Final EA Section 3.1, Section 3.3, Section 3.5).

Effects on Public Health and Safety

The Proposed Action does not involve hazardous materials, does not increase wildfire or other known health and safety risks, and as mitigated by Mitigation Measures AQ-1, WS-1, GW-1, complies with air and water quality standards, therefore any potential adverse effects on public health and safety would be minor (Final EA Section 3, Table 3-1, Section 3.1, Section 3.3, Section 3.5).

Economic Effects

The Proposed Action would provide supplemental water supply in the buyer service area, improving agricultural and M&I water reliability and avoiding or reducing potential economic losses associated with increased crop idling and farm-related employment (Final EA Section 3.1 and Section 3.9).

Effects on the Quality of Life of the American People

The Proposed Action would improve water reliability, enhance agricultural stability, food supply, and related economic factors (Final EA Section 3.1 and Section 3.9). Impacts on visual and recreational resources would be minimal and remain within historical ranges (Final EA Section 3.10 and Section 3.11).

Compliance with Federal Law

Reclamation reviewed the Proposed Action for compliance with laws pertinent to the decision. The following are relevant findings of the Proposed Action, with respect to the laws associated with the affected environment.

National Historical Preservation Act

Reclamation determined that this undertaking (Proposed Action) does not have the potential to cause effects to historic properties, should such properties be present, pursuant to the Title 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA) regulations codified at 36 CFR § 800.3(a)(1). Reclamation has no further obligations under NHPA Section 106, pursuant to 36 CFR § 800.3(a)(1). (Final EA, Section 3)

Endangered Species Act

Reclamation determined that the Proposed Action would have no effect on terrestrial species. Transfers will occur under operational constraints consistent with existing biological opinions on the long-term operation of the CVP and SWP (USFWS Service File No. 2022-0059509 and NMFS Service File No. WCRO-2024-02917).

Clean Air Act

By conditioning the Proposed Action to require implementation of Mitigation Measures AQ-1, Reclamation is ensuring the emissions resulting from implementation of the Proposed Action are compliant with the Clean Air Act. (Final EA Section 3.5)

Public Involvement

Reclamation carried out public involvement in compliance with NEPA during the EA preparation. A draft EA was released for public review, allowing agencies, stakeholders, and the public to comment on proposed transfers, impacts, and mitigation.

Reclamation coordinated with Federal, state, and local agencies, including DWR, State Water Resources Control Board (SWRCB), and California Department of Fish and Wildlife (CDFW), as well as potential buyers and sellers. Outreach efforts included distributing notices to interested parties and posting the documents on official websites. Reclamation reviewed all public comments and incorporated substantive input into the Final EA (Final EA Appendix L and M).

Decision

Based on the analysis of the Proposed Action in the 2026-2027 North to South Water Transfers EA (CGB-ED-2024-025), Reclamation has decided to implement the Proposed Action. The Proposed Action best meets the purpose and need because it addresses water shortage risk and allows operational flexibility, in that transfers can be implemented quickly, which are critical given California’s unpredictable hydrology and Reclamation’s responsibility to manage water resources in an environmentally and economically sound manner.

All practicable means to avoid or minimize environmental harm from the Proposed Action as described in the EA are adopted with this decision. This document certifies that Reclamation has considered all relevant information raised in the NEPA process and that the NEPA process has concluded. After the consideration of the information described above, and reviewing the analysis and applying the mitigation measures included in the EA, the responsible official has determined that the Proposed Action, as mitigated, will not have significant effects on the human environment, resulting in a mitigated finding of no significant impact.

Certified by: _____ Date: _____

Scott Springer
Acting Regional Resources Manager
Interior Region 10 • California-Great Basin, Bureau of Reclamation

References

National Marine Fisheries Service. Biological Opinion for Long-term Operation of the CVP and SWP. Service File No. WCRO-2024-02917.

U.S. Fish and Wildlife Service. Biological Opinion for Long-term Operation of the CVP and SWP. Service File No. 2022-0059509.

United States Geologic Survey (USGS). 2018. Aquifer Compaction due to Groundwater Pumping. Land Subsidence in California. October, Available at: <https://www.usgs.gov/centers/land-subsidence-in-california/science/aquifer-compaction-due-groundwater-pumping#overview>. [Accessed on April 8, 2025].