



— BUREAU OF —
RECLAMATION

Friant Division Groundwater Pump- in Program, Contract Years 2020- 2022

**Finding of No Significant Impact
CGB-FONSI-2021-033**

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, 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.

BUREAU OF RECLAMATION
South-Central California Area Office, Fresno, California

CGB-FONSI-2021-033

Friant Division Groundwater Pump-in Program,
Contract Years 2020-2022

Prepared by: Rain L. Emerson
Environmental Compliance Branch Chief

Approved by: Michael P. Jackson, P.E.
Area Manager

Introduction

In accordance with the National Environmental Policy Act (NEPA) of 1969, as amended, the Bureau of Reclamation (Reclamation) prepared this Finding of No Significant Impact (FONSI) which is supported by Reclamation's attached Environmental Assessment (EA) CGB-EA-2021-033, *Friant Division Groundwater Pump-in Program, Contract Years 2020-2022*, hereby incorporated by reference.

Background

In 2014, due to drought conditions and an unprecedented zero percent allocation for the Friant Division contractors, Reclamation received requests to allow the cumulative annual introduction of up to 50,000 acre-feet of groundwater into the Friant-Kern Canal (FKC). Potential participants included any of the Friant Division or Cross Valley Central Valley Project (CVP) contractors located along the FKC. Reclamation analyzed a two-year FKC Groundwater Pump-in Program in EA-14-011 (Reclamation 2014a). Based on specific environmental commitments, including water quality requirements, Reclamation determined that the cumulative introduction, storage, and conveyance of up to 50,000 acre-feet per year of groundwater by the Friant Division and Cross Valley CVP contractors over a two-year period would not significantly affect the quality of the human environment and a FONSI was completed on May 2, 2014.

Subsequently, North Kern Water Storage District, a non-CVP contractor located adjacent to the FKC in Kern County, requested approval from Reclamation to participate in the FKC Groundwater Pump-in Program. Reclamation analyzed the addition of North Kern to the FKC Groundwater Pump-in Program in EA-14-051 (Reclamation 2014b) and a FONSI was completed on October 15, 2014.

Due to limited water supplies available to the Friant Division, the Friant Water Authority on behalf of contractors participating in the FKC Groundwater Pump-in Program, requested permission to temporarily convey groundwater from wells that exceed the 45 milligram per liter (mg/L) limit for nitrates established by the State of California. Reclamation analyzed the request in EA-14-043 (Reclamation 2014c). Based on specific conditions imposed by Reclamation on the exceedances (i.e. limit on nitrates and salinity in the FKC and frequent monitoring to prevent exceedance of the limits placed on the project), a FONSI was completed on December 17, 2014.

In 2015, due to ongoing dry conditions, the participating contractors requested to extend the FKC Groundwater Pump-in Program for an additional five years once the program expired in February 2016. The specific participants included: Delano-Earlimart Irrigation District, Lindsay-Strathmore Irrigation District, North Kern Water Storage District, Orange Cove Irrigation District, Saucelito Irrigation District, Southern San Joaquin Municipal Utility District, Tea Pot Dome Water District, and Terra Bella Irrigation District. Reclamation analyzed the continuation of the FKC Groundwater Pump-in Program for these participating districts over a five-year period in EA-15-046 and issued a FONSI on March 4, 2016 (Reclamation 2016a).

As the five-year period for the FKC Groundwater Pump-in Program has expired and due to current drought conditions, the participants have requested another extension of the FKC Groundwater Pump-in Program to include the same relaxation of electrical conductivity and nitrate concentrations done under the previous program.

Alternatives Considered

No Action Alternative

Under the No Action Alternative, Reclamation would not issue Warren Act agreements/contracts to the participating districts and groundwater would not be introduced into the FKC. Affected growers would have to find alternative supplies of water, provide for alternative conveyance path(s), or temporarily take land out of production if water supplies are insufficient to meet demands. Groundwater pumping within the respective districts would continue as managed by the districts and their respective Groundwater Sustainability Plans (GSPs).

Proposed Action

Under the Proposed Action, Reclamation would issue annual Warren Act agreements/contracts to the following participating districts: Delano-Earlimart Irrigation District, Lindsay-Strathmore Irrigation District, North Kern Water Storage District, Orange Cove Irrigation District, Porterville Irrigation District, Saucelito Irrigation District, Southern San Joaquin Municipal Utility District, and Terra Bella Irrigation District for the annual introduction of groundwater into the FKC over a two-year period.

The source of the non-Project water would be groundwater pumped from privately owned wells within each district. The groundwater would then be introduced into the FKC through existing infrastructure. No ground disturbance or modification of facilities will be needed to complete the Proposed Action.

The amount of groundwater that would be allowed to be introduced into the FKC would be limited to 12,000 acre-feet over the two-year period with no more than 6,500 acre-feet introduced in a given year. Friant Water Authority manages the FKC Groundwater Pump-in Program and would coordinate the distribution of the annual amounts amongst the participating districts with priority given to Friant Division contractors and any remaining availability then made available to North Kern Water Storage District.

Prior to the introduction of groundwater into the FKC, all wells must be tested to demonstrate compliance with the water quality standards described in Section 2.2 of CGB-EA-2021-033.

After introduction, the participating districts, with the exception of North Kern Water Storage District, would deliver the water, less conveyance losses if applicable, through turnouts on the FKC for agricultural use within their respective districts. Operational exchanges would also be permitted

in situations where a district's discharge point to the canal is downstream of the location where the water is needed.

North Kern Water Storage District's groundwater would be introduced and conveyed through the FKC to the Cross Valley Canal for delivery to the following Kern County water districts via the California Aqueduct as was done under the previous FKC Groundwater Pump-in Programs:

- Belridge Water Storage District
- Berrenda Mesa Water District
- Lost Hills Water District
- Wheeler Ridge-Maricopa Water Storage District

All delivery schedules for North Kern Water Storage District's groundwater would be coordinated with the Kern County Water Agency and the California Department of Water Resources (DWR) and approved by Reclamation prior to introduction into the FKC. All delivery scheduled for Friant Division and Cross Valley CVP contractors would be coordinated with Friant Water Authority and approved by Reclamation prior to introduction into the FKC.

Environmental Commitments

The participating districts shall implement the environmental protection measures listed in Section 2.2.1 of CGB-EA-2021-033 to avoid environmental consequences associated with the Proposed Action. Environmental consequences for resource areas assume the measures specified would be fully implemented.

Comments on the EA

Reclamation provided the public with an opportunity to comment on the Draft EA between May 27, 2021 and June 11, 2021. Two comment letters were received and are included in Appendix A of this Final EA. Substantive comments related to Reclamation's Proposed Action and analysis are addressed below.

Absence of Water Quality Data and Analysis

The commenters assert that limited or no water quality data is provided in the Draft EA and that annual water quality monitoring is lax.

As noted on page 10 of the Draft EA, "All of the wells that previously participated were tested prior to introduction and met Reclamation's water quality criteria except for certain Friant Division contractor wells that exceeded the relaxed standard for nitrates (Figure 2). None of the wells exceeded the relaxed standard for electrical conductivity (Figure 3)." As 2014 and 2015 were the only times water was introduced under this program, Reclamation focused its water quality analysis on those constituents that were exceeded (i.e. nitrates and electrical conductivity). Water quality data for these constituents were provided on pages 10-11 in the Draft EA.

In addition, as noted on page 5 of the Draft EA, “Water from each well must meet water quality standards included in Appendix A and noted above prior to approval for introduction. If testing from any individual well indicates that its water does not meet these standards, it would not be allowed to introduce groundwater into the FKC until water quality concerns are addressed.” At the time of releasing the Draft EA for public comment, updated water quality information was not available, as noted on page 12, Reclamation is requiring that each participant provide updated water quality data to confirm that water quality is similar or better than what was provided in 2014 and 2015. Reclamation will be reviewing the updated water quality data for each well proposed to participate in the program to ensure it meets the water quality thresholds identified in this EA. Wells that do not meet the required thresholds will not be allowed to participate; therefore, there would be no additional impacts beyond those already disclosed and sufficient information is provided for Reclamation to make a determination on whether a FONSI or EIS is appropriate pursuant to NEPA regulations (40 CFR§ 1501.6).

In addition, as noted on page 4 of the Draft EA, monitoring would be done on a **weekly** basis to monitor nitrates and electrical conductivity within the canal to ensure levels do not exceed criteria identified in Section 2.2.

Environmental Commitments and Mitigation

The commenters assert that Reclamation “assumes that any adverse Project impacts would be mitigated by Reclamation’s 2008 “Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals” (the “2008 Policy”)” and that “The 2008 Policy is based on Title 22 drinking water standards, which fail to include standards designed to protect irrigation uses.”

As noted on page 3 of the Draft EA, “Prior to the introduction of groundwater into the FKC, all wells must be tested to demonstrate compliance with the water quality standards included in Reclamation’s Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals (Appendix A), in addition to the standards listed in Table 2.” Table 2 water quality criteria are agricultural suitability standards that are designed to protect irrigation uses. Reclamation is not using the 2008 Policy to “mitigate” potential impacts but rather to minimize and avoid impacts with the inclusion of additional agricultural suitability requirements.

As noted in the comment letter, Friant Water Authority and Friant Contractors are developing a “mitigation program that will update – or perhaps fully replace – the 2008 Policy”. As this program has not been approved for implementation and is still under development, Reclamation has identified and specifically addressed water quality criteria required to be implemented over this two-year program as identified in Section 2.2 of the EA. Any introduction of non-Project water is required to meet Reclamation’s then-current water quality standards.

Improper Reliance on 2014 Pump-in Program

The commenters assert that there is no basis to assume impacts from the previous pump-in program would be the same as the current proposal and that the current proposal would authorize four times the amount of water introduced under the Proposed Action.

As summarized on page 1 of the Draft EA, Reclamation analyzed the initiation of the FKC groundwater pump-in program in EA-14-011 which included the cumulative annual introduction of up to 50,000 acre-feet of groundwater over a two-year period. Due to ongoing drought conditions and the request of the participants, Reclamation analyzed the continuation of this program over an additional five-years in EA-15-046. Since its initiation, the program assumed an up to 50,000 acre-foot annual introduction might occur; however, as noted on page 9 of the Draft EA, “Since initiation of the program, groundwater introduction to the FKC has only occurred during the 2014 and 2015 contract years (March 1, 2014 through February 28, 2016).” The amount of introduction during those periods were included in Table 4 of the Draft EA (now Table 3 in the Final EA). Although the cumulative introduction was only 11,799 acre-feet over those two years, the program would have allowed up to 50,000 acre-feet. However, based on feedback received on the Draft EA, Reclamation has reduced the overall program and annual amounts as described in Section 2.2 of the Final EA to be closer to what was done during the previous drought.

Subsidence

The commenters express concerns regarding subsidence impacts from the Proposed Action within the area of the FKC that is currently being addressed in the FKC Middle Reach Capacity Correction Project. In addition, the comment notes that the Proposed Action “creates a strong new incentive to pump groundwater from wells *in close proximity to a portion of the FKC that is extremely sensitive to subsidence*” and recommends that Reclamation limit wells within 1-mile of the FKC.

Reclamation acknowledges these concerns. Based on feedback received on the Draft EA, Reclamation has reduced the overall program from 50,000 acre-feet per year to a total of 12,000 acre-feet over the two-year period with no more than 6,500 acre-feet cumulatively pumped by the participants in a given year.

Key Documents Missing from Draft EA

The commenters assert that the following “key documents” are missing from the Draft EA: Warren Act contracts/agreements, agreement with DWR, and a quality assurance project plan and that without these documents “the public is left in the dark about what contractual terms and conditions are required for these groundwater discharges to the canals.”

Reclamation disagrees. The EA includes all of the requirements for groundwater to be introduced into the FKC under the Proposed Action as well as the water quality criteria and monitoring requirements (see Section 2.2 and Appendix A). The inclusion of these documents would not change the environmental requirements for the Proposed Action.

Impacts to Delta Estuary, American River, Yuba River, Sacramento River, and Shasta Dam Operations

The comment asserts that “impacts from discharging this groundwater and potentially substituting or exchanging it with water exported from the Delta Estuary or other exchanges that have the potential to impact the American River, Yuba River, Sacramento River and Shasta Dam operations.”

The Proposed Action analyzed in the EA does not involve operation of the CVP or State Water Project (SWP) but introduction and conveyance of groundwater during drought conditions. The majority of which stay within the participating districts along the FKC. Any water introduced into the California Aqueduct operationally exchanged for SWP water is water that is already allocated and located south of the Delta. No changes in Delta pumping would occur and there would be no impacts to the Delta Estuary, American River, Yuba River, Sacramento River, or Shasta Dam operations.

No Evidence of CEQA Analysis

The commenter states that they “see no evidence of a CEQA analysis of this action”. The document being commented on is an EA prepared in compliance with NEPA. As a Federal agency, Reclamation is not required to comply with the California Environmental Quality Act.

North Kern Water Storage District Delivery via California Aqueduct

The commenter notes that some of the potential recipients of North Kern Water Storage District’s introduced groundwater are upstream of the introduction point to the California Aqueduct and requests clarification on how they would receive this water (i.e. would it be reversed flowed or operational exchanges).

The project would not reverse flow water in the California Aqueduct. Any water introduced would be received by downstream water users and an operational exchange for that water would be implemented by DWR to provide water to the recipients located upstream. Additional information has been added to the EA to describe this.

Compliance with Clean Water Act and California Porter Cologne Act

The commenter states that no compliance with the Clean Water Act or California Porter Cologne Act has been provided for the project and without that there is “no assurance the beneficial uses will be protected”.

Reclamation disagrees. The FKC is not designated a water of the United States. Additionally, the FKC does not have a designated beneficial use listed under the Central Valley California Regional Water Quality Control Board’s Water Quality Control Plan for the Tulare Lake Basin, revised 2018. Thus, permitting is not required under the Clean Water Act or California Porter-Cologne Act. However, Reclamation has implemented in-canal water quality constraints consistent with Municipal and Industrial and Agricultural beneficial uses. Although the California Aqueduct does have designated beneficial uses as noted in the comment letter, as shown in the table below, groundwater that may be introduced into the California Aqueduct would not impact designated beneficial uses as the constituents of concern are substantially below the State Water Resources Control Board’s

maximum contaminant levels. See also response to comments below regarding water quality and the California Aqueduct.

Impact to Beneficial Use for California Aqueduct

The commenters assert that introduction of groundwater from North Kern Water Storage District to the California Aqueduct would impact beneficial uses and “could affect” water quality in the Kern National Wildlife Refuge. However, the comment letter does not provide information or data that supports this assertion, but rather notes that other groundwater pump-ins in 2014 and 2015 along the California Aqueduct monitored by DWR “at times contributed 100% of the flow in the Aqueduct at Check 21.”

The groundwater pump-ins noted in the comment letter are from the westside of the Central Valley and are unrelated to the Proposed Action. Under the Proposed Action, only up to 10,000 acre-feet of North Kern Water Storage District’s groundwater would potentially be introduced into the California Aqueduct annually over the two-year period substantially less than the flows in the Aqueduct. As shown in the table below, water quality from North Kern Water Storage District’s participating wells fall well below any thresholds of concern and would not impact beneficial uses of the California Aqueduct.

North Kern Water Storage District Water Quality Data for Participating Wells

Sample Date	Well #	Arsenic (µg/L)	Chloride	NO ₃ -N (mg/L)	Se (µg/L)	EC (µmhos/cm)	Mercury (µg/L)
8/10/2020	99-02-004	ND	39	ND	ND	450	ND
8/10/2020	99-02-006	3.6	29	ND	ND	270	ND
8/10/2020	99-00-022	3.6	9.5	0.34	ND	240	ND
8/10/2020	99-00-026	ND	13	0.45	ND	250	ND
8/10/2020	99-00-032	ND	11	0.48	ND	260	ND
8/10/2020	99-00-035	3.5	13	0.59	ND	270	ND
2/4/2021	88-25-016	ND	17	0.97	ND	260	ND
2/4/2021	88-17-024	ND	15	3.5	ND	310	ND
2/4/2021	88-17-023	ND	28	7.4	ND	510	ND
3/8/2021	88-29-009	ND	28	1.7	ND	300	ND
3/8/2021	88-29-006	2.3	29	1.5	ND	300	ND
3/8/2021	88-25-30	ND	17	1.1	ND	300	ND
3/8/2021	88-25-31	ND	19	0.76	ND	270	ND
Reclamation Thresholds		10	250/500/600	10	2	900/1600/2200	2

Notes: NO₃-N = nitrate nitrogen; Se = selenium; EC = electrical conductivity; ND = Non-Detect

Water Quality Standards for Selenium not Protective

The commenters state that Title 22 selenium criteria of 50 parts per billion (ppb, i.e. µg/L) is not protective of biological resources and sensitive species that could receive water from the Proposed Action from the California Aqueduct. The commenters recommend the use of 1 ppb.

Reclamation's criteria for selenium concentration in non-Project water introduced into federal facilities is $\leq 2.2 \mu\text{g/L}$ (i.e. 2 ppb) with no allowance for dilution in the canal. This criterion is based on the Central Valley Regional Water Quality Control Board's 1996 selenium objective of 2 ppb monthly average for Grasslands wetlands water supply channels. No new objectives or criteria for wetlands has been promulgated by the Water Board. Should revised criteria be put in place, Reclamation's water quality requirements will be revised accordingly. The $2 \mu\text{g/L}$ criteria have been added to Section 2.2.1 of the EA. However, as shown in the table above, selenium is non-detect for all wells that would potentially be adding groundwater to the California Aqueduct and would have no impacts on biological resources or sensitive species that would receive water introduced under the Proposed Action.

The commenters also assert that Reclamation made a no effect determination "without evidence" and did not consult with the U.S. Fish and Wildlife Agency or California Department of Fish and Wildlife. Reclamation addressed biological resources in Section 3.4 and Section 3.3 of EA-14-011 and EA-14-051, respectively, and determined based on specific environmental commitments, that there would be No Effect to listed species or designated critical habitat under the Endangered Species Act (16 U.S. C. §1531 et seq.) and No Take of birds protected under the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.). Both EAs were incorporated by reference into the Draft EA (see Section 1). As the Proposed Action and Action Area are the same as analyzed in the incorporated EAs, Reclamation previous determination still stands. As such, no consultation with the U.S. Fish and Wildlife Service or National Marine Fisheries Service is necessary. As a Federal Agency, Reclamation does not have a requirement to consult with the California Department of Fish and Wildlife. Further, as shown above, water quality from wells that would potentially introduce groundwater into the California Aqueduct would not impact protected species as the constituents are either non detect or well below any thresholds of concern.

Cumulative Impacts

The commenters state that "Cumulative impacts from these pump-ins into the FKC, conveyance to the California Aqueduct, and potential exchanges or reverse flow of the Aqueduct are not disclosed or analyzed".

Cumulative impacts is a term that has been struck in the NEPA regulation issued on July 16, 2020 with an effective date of September 14, 2020.

Pursuant to NEPA regulations (40 CFR §1508.1[g]), Reclamation provided a brief analysis of the effects of the Proposed Action compared to the No Action/Baseline including those that are "reasonably foreseeable and have a reasonably close causal relationship to the proposed action". See previous response to comments regarding potential impacts and analysis regarding the California Aqueduct.

Objection to Issuance of a Finding of No Significant Impact

The commenters "object to the adoption of a FONSI for this project" as "The project definition is not complete, mitigation measures are absent and data or evidence is not provided to make such a determination and finding."

Reclamation disagrees. Reclamation prepared the Draft EA consistent with NEPA regulations, guidance from the Council on Environmental Quality (CEQ), and the Department of the Interior's NEPA regulations. In accordance with NEPA, an EA is prepared to determine if there are significant impacts on the human environment from carrying out the Proposed Action.

Reclamation has followed applicable procedures in the preparation of the EA which includes the required components of an EA as described in CEQ's NEPA regulations (40 CFR §1501.5[c]): discussion of the purpose and need for the proposed action, alternatives as required by section 102(2)(E) of NEPA, environmental impacts of the proposed action, and a listing of agencies and persons consulted.

Reclamation finds that the impacts analysis included in the EA, including additional language added to the Final EA to clarify the analysis included in the Draft, is sufficient and does not preclude the public or decision makers from making an informed decision related to the Proposed Action.

Request to be Added to Notification List

The commenters requested to be added to Reclamation's notification list. To be added to Reclamation's notification list, please go to <https://www.usbr.gov/mp/nepa/> and click on the link at the bottom of the page labeled NEPA Distribution List Request.

Findings

In accordance with NEPA, Reclamation considered potential short-term and long-term effects of the Proposed Action, both beneficial and adverse. Following are the reasons why the impacts of the Proposed Action are not significant, with respect to the affected environment and degree of effects of the action (40 CFR 1501.3(b)).

1. The Proposed Action will not significantly affect public health or safety (40 CFR 1501.3(b)(2)(iii)).
2. The Proposed Action will not violate federal, state, tribal, or local law protecting the environment (40 CFR 1501.3(b)(2)(iv)).
3. The Proposed Action will not affect any Indian Trust Assets (512 DM 2, Policy Memorandum – July 2, 1993).
4. Implementing the Proposed Action will not disproportionately affect minorities or low-income populations and communities (EO 12898 – February 11, 1994).
5. The Proposed Action will not limit access to, and ceremonial use of, Indian sacred sites on Federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites (EO 13007 – May 24, 1996 and 512 DM 3 – June 5, 1998).