

# RECLAMATION

## *Managing Water in the West*

### Finding of No Significant Impact

## Friant-Kern Canal Groundwater Pump-In Program Warren Act Agreements

FONSI-14-011

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Date: 5-2-14

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See Attachment  
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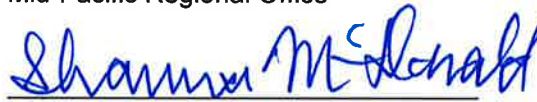
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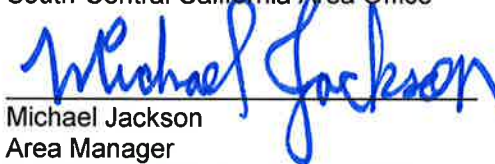
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# Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that an environmental impact statement is not required for issuance of Friant-Kern Canal Groundwater Pump-In Warren Act agreements. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) 14-011, *Friant-Kern Canal Groundwater Pump-In Program Warren Act Agreements*, which is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between April 10, 2014 and April 17, 2014. Comments received and Reclamation's responses to the comments are included in Appendix A of EA 14-011.

## Background

In recent years California has experienced droughts that have reduced water supplies to many water districts. As a result, Friant Division Central Valley Project (CVP) water service contractors have received unprecedented initial 0% water supply allocations in 2014. The historically low allocation is due to a combination of hydrologic, environmental, and regulatory conditions. The zero allocation follows previous dry years in 2012 and 2013, in which Friant Division CVP contractors received 57 and 62 percent of their full Class 1 contract supply, respectively.

Friant Division and other CVP contractors along the Friant-Kern Canal (FKC) thus need additional water supplies in order to mitigate for the shortages to their water users. The contractors have requested Warren Act agreements to convey pumped groundwater into the FKC for conveyance of such groundwater to their agricultural users. In addition to the Warren Act agreements, certain contractors could also have need of exchange agreements, for situations where water is needed upstream of the location where it can be discharged to the canal. This kind of arrangement was used in 1999 under similarly dry conditions in the Friant Division, and a corresponding program is currently in place for users of the Delta-Mendota Canal (Reclamation 1999, Reclamation 2013). In addition to the exchange and/or Warren Act agreement, certain Friant Division CVP contractors have also requested land use authorizations to use Reclamation right of way for temporary pumping facilities.

The Warren Act of February 21, 1911, CH. 141, (36 STAT. 925; 43 U.S.C. § 523) authorizes Reclamation to enter into agreements to store or convey Non-Project Water when excess capacity is available in federal facilities. Section 14 of the Reclamation Project Act of 1939 (53 Stat. 1197; 43 U.S.C. § 389) allows the United States to enter into contracts for the exchange or replacement of water for the benefit of the United States and the project. Title 34, Section 3408(c) of P.L. 102-575, Central Valley Project Improvement Act allows for the exchange, impoundment, storage, carriage, and delivery of CVP and Non-CVP water for domestic, municipal, industrial, fish and wildlife, and any other beneficial purpose.

## Proposed Action

Reclamation proposes to enter into Warren Act agreements with the CVP contractors located in the Friant Division and physically adjacent to the FKC. A list of the participating contractors may be found in Section 3.2 (also see Figure 2-1 of EA 14-011). The agreements would allow for the cumulative introduction of up to 50,000 acre-feet (AF) of non-CVP water. The agreements would be effective for a period of one year, with an option for a second one-year term.

The source of the non-CVP water introduced into the FKC would be groundwater pumped from privately owned wells within each district. The water would be introduced either directly or via the district's existing distribution systems. The quantity of groundwater pumped into the FKC would be measured by flow-meters read and calibrated by Friant Water Authority (FWA) field staff. Each participating district would be permitted to pump groundwater into the FKC, although total quantities introduced under the Proposed Action would not exceed a combined volume of 50,000 AF. After introduction, the district(s) would then convey a like amount of water through turnouts on the FKC within their district or to other districts within the Friant CVP Division for agricultural use. Exchanges would also be permitted in situations where a contractor's discharge point to the canal is downstream of the location where the water is needed. Prior to introduction of water, all wells would be tested to demonstrate compliance with Reclamation's then-current water quality standards.

Also as part of the Proposed Action, Reclamation would issue land use authorizations for use of Reclamation right of way at discharge points at the locations listed in Table 2-1 of EA 14-011. No new permanent modifications to the FKC would be authorized. However, some existing discharge facilities whose licenses have expired would have their license renewed for a period of 25 years. Also some locations are proposed to have new temporary discharge points. These could involve facilities placed over the canal bank (drivable pipe or hose) or suspended from bridges, or new temporary pipe installation. The new temporary pipes would be no larger than 1 foot in diameter, and would be installed only within the canal berm, existing roadways, and disturbed agricultural fields within the plow zone. These new pipes would be removed upon expiration of the Warren Act agreement.

Additional land use authorizations or discharge points within the geographical coverage of this environmental analysis may also be included as long as they meet the then-current water quality requirements for the FKC and do not affect protected species. Note that addition of wells would not increase the total volume of non-CVP water that could be conveyed under this program above 50,000 AF. Prior to introduction, additional wells must meet the requirements described above and shall be added, by an amendment, to the applicable agreements.

## Environmental Commitments

The participating CVP contractors shall implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

**Table 1 Environmental Protection Measures and Commitments**

<b>Resource</b>	<b>Protection Measure</b>
Air Quality	All pumps to be used shall meet the applicable emission standards set by the San Joaquin Valley Air Pollution Control District.
Groundwater	Districts in Fresno and Kern Counties shall comply with applicable ordinances regarding transfer of pumped groundwater outside of the county and/or aquifer zone. Kings and Tulare Counties do not have such ordinances.
Water Quality	Water from each well must meet water quality standards prior to approval for conveyance. If testing from any individual well indicates that its water does not meet then-current standards, it would not be allowed to discharge into the FKC until water quality concerns are addressed.
Land Use/Biology	The non-CVP water involved in these actions must not be used to cultivate native or untilled land (fallow for three consecutive years or more).
Land Use	The Proposed Action does not allow permanent modification of existing facilities.
Biological Resources	A preconstruction survey for Federally protected species will be required prior to any ground disturbance.
Cultural Resources	Warren Act agreements for the new temporary pipes which require ground disturbance would not be issued until Cultural Resources consultation is completed.

## Findings

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings.

### Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that the Proposed Action did not have the potential to cause direct, indirect, or cumulative adverse effects to: Indian Sacred Sites, Indian Trust Assets, air quality, or global climate.

### Water Resources

The Proposed Action would allow groundwater to be conveyed and stored in CVP facilities when excess capacity is available. This would allow the water to be delivered to CVP contractors' service areas for agricultural use. There would be no permanent modification of the FKC, and the capacity of the facility would remain the same.

Water from each well must meet water quality standards prior to approval for conveyance. If testing from any individual well indicates that its water does not meet then-current standards, it would not be allowed to discharge into the FKC until water quality concerns are addressed. This testing program is anticipated to adequately protect the quality of water in the canal and limit degradation of other users' supplies.

The total quantity of groundwater that would be pumped into the FKC under the Proposed Action would be limited to 50,000 AF/year over a two year period. The quantity of groundwater pumped into the FKC by a district would be delivered by way of the canal (less conveyance losses), and used for irrigation purposes. Though some of the water used for irrigation would be lost to evapotranspiration, some would also percolate back into the aquifer.

The groundwater to be pumped under the Proposed Action would come from wells at varying depths, at a wide range of locations along the FKC. The wells involved are anticipated to draw at most several hundred AF/year of water individually, which is minor in the context of local and regional supplies. However, cumulative regional groundwater overdraft is an ongoing concern. Supplies in the area are managed through conjunctive use, and aquifers are recharged with surface water in wet years to offset drawdown of groundwater supplies during dryer periods.

Similarly, none of the wells are expected to individually pump enough water to create subsidence problems, but regional trends are towards gradually lowering ground surface levels as a result of subsidence. Since the Proposed Action is temporary and involves relatively small volumes of water drawn from many locations over a wide geographic area, it is not expected that it would result in subsidence beyond historical fluctuations.

Water users within Fresno and Kern counties would be required to comply with applicable groundwater ordinances in order to limit impacts to local groundwater supplies. Kings and Tulare Counties have not elected to implement groundwater ordinances. At this time Reclamation does not believe it would be appropriate to impose restrictions on use or transport of groundwater beyond those already established by local jurisdictions.

### **Land Use**

The Proposed Action would support current land uses by making additional supplies of water available to agricultural users to support existing crops. It would help sustain permanent crops that are currently at risk of dying due to lack of water. The water would not be used to support new development or convert fallow land for agriculture.

### **Biological Resources**

Under the Proposed Action, Federally listed or proposed or candidate species, and critical habitat would not be affected, nor would any migratory birds. Many of the species and their critical habitat do not occur in the Proposed Action Area. The FKC is not used by any Federally listed or proposed aquatic species. For those that do occur in the Proposed Action Area, the restriction to only allow ground disturbance within-already disturbed areas would reduce the chance of encountering a Federally listed or proposed species, of affecting a primary constituent element of critical habitat, or of impacting a migratory bird. In order to avoid effects, prior to any ground disturbance a preconstruction survey will be conducted and the results provided to Reclamation. If the results of the survey indicated that there would be no impact to protected biological resources, the work could then proceed. Otherwise, separate environmental analysis would be needed and the ground disturbance would not occur as part of the proposed action. With the above limitations and based upon the nature of this action Reclamation has determined there would be No Effect to listed species or designated critical habitat under the Endangered Species Act (16 U.S.C. §1531 et. seq.). There would also be no take of migratory birds.

### **Cultural Resources**

The Proposed Action would result in new temporary discharge points into the FKC that could involve facilities placed over the canal bank (drivable pipe or hose) or suspended from bridges, or new temporary pipe installation. The new temporary pipes would be no larger than 1 foot in diameter and would be installed only within the canal berm, existing roadways, and disturbed agricultural fields within the plow zone. These new pipes would be removed upon expiration of

the Warren Act agreements. Water discharge, conveyance, exchanges, and distribution are all consistent with the intended purpose and function of the FKC and would have no effect on the historic significance of the FKC. Placing pipes over or within previously disturbed contexts of existing roadways and plow zones of agricultural fields would have no effect to significant cultural resources.

Reclamation determined that the cumulative effects of installing multiple discharges, even though temporary, have the potential to affect the FKC, a historic property. Reclamation initially met with SHPO on February 12, 2014, to discuss potential actions that Reclamation may need to take in response to Governor Brown's Drought State of Emergency for the State of California, on January 17, 2014. Reclamation consulted with SHPO on a finding of no adverse effect to the FKC for the installation of these multiple, temporary discharges, pursuant to 36 CFR § 800.5(b). Warren Act agreements for the new temporary pipes would not be issued until this consultation is completed.

### **Socioeconomic Resources**

The Proposed Action would provide a source of water to support agriculture, which is the Central Valley's primary source of economic activity. This would provide direct benefits to growers from crop sales, as well as indirect benefits to area businesses which provide agricultural supplies and services.

### **Environmental Justice**

The Proposed Action would support agriculture by making additional supplies of water available to support existing crops. Since farm laborers often come from minority and low-income communities, supporting farm employment is a benefit to those disadvantaged groups.

### **Cumulative Impacts**

The FKC is used to convey water for a variety of users from a variety of sources. The quality of water being introduced is tested regularly in order to limit the potential for degradation of mixed water supplies. This testing program is anticipated to adequately protect the quality of water in the FKC from the cumulative effects of this and other water conveyance actions.

Although capacity in the FKC is limited, FWA and Reclamation actively operate the canal in order to balance competing demands. Non-CVP water such as the groundwater which would be conveyed under the Proposed Action has a lower priority than CVP water for conveyance in the FKC. Therefore the Proposed Action is not anticipated to cause conflicts or other cumulative impacts to FKC operations.

Groundwater overdraft is an ongoing challenge in the San Joaquin Valley. Pumping increases in dry years, and drops off in years when surface water supplies are plentiful. A variety of agencies throughout the region and state are working on balancing competing water needs in order to provide the greatest benefit possible with the limited resources available. The needs of the State will likely be met over time through a combination of demand management, increases in storage capacity and new supply development. Ground subsidence is related, and efforts to reduce subsidence will depend on success in meeting California's surface water needs while keeping groundwater pumping within a sustainable range.

The cumulative temporary discharges of the Proposed Action would have no adverse effect to the FKC as none of the characteristics that make the FKC eligible for listing on the National Register would be altered. The discharge pipes/hoses are temporary and would be removed upon expiration of the Warren Act agreements. Reclamation is consulting, pursuant to Section 106 of the National Historic Preservation Act, with the California State Historic Preservation Officer on the finding of no adverse effects for the cumulative effects of increased, temporary discharge facilities into the FKC. Warren Act agreements for the new temporary pipes would not be issued until this consultation is completed.

The Proposed Action would provide a source of water to support agriculture in a time of shortage. Because of agriculture's importance to the area's economy, any impacts, either positive or negative, tend to have a disproportionate and cumulative effect on employment and wages. Several similar water-moving actions have been authorized or are currently under review. Cumulatively they are expected to provide a benefit to the area's economic well-being.