

RECLAMATION

Managing Water in the West

FINAL FINDING OF NO SIGNIFICANT IMPACT

3 Month Extension of the 2010 Warren Act Contract and License for Delta Lands Reclamation District No. 770

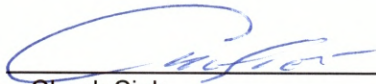
FONSI-11-025

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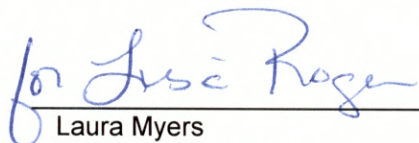
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Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) 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 the approval of a 3-month extension (June 1, 2011 through August 31, 2011) to the 2010 Warren Act contract and license with Delta Lands Reclamation District No. 770 (RD770). This Finding of No Significant Impact is supported by Reclamation's Supplemental Environmental Assessment (SEA) Number SEA-11-025, *3 Month Extension of the 2010 Warren Act Contract and License for Delta Lands Reclamation District 770*, and is hereby incorporated by reference.

The long-term Warren Act contract and license, and associated environmental documentation, is expected to be completed near the expiration of the existing short-term 2010 Warren Act contract and license. A 3-month extension of the existing short-term Warren Act contract and license is needed in case damaging floodwater threatens RD770 while the long-term actions are completed. A separate environmental document will be prepared and completed for the long-term Warren Act contract and license.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft SEA between April 29, 2011 and May 13, 2011. No comments were received on the Draft SEA.

Background

Beginning in 1978, Reclamation has periodically entered into Warren Act contracts (both long-term and temporary) with RD770 to allow for the introduction and disposition of Non-Central Valley Project (Non-CVP) floodwaters from the Kings, St. John's (a channel of the Kaweah) and Tule Rivers through the Friant-Kern Canal (FKC) in order to help alleviate damage to farm land, property, and crops within RD770's boundaries. In addition, licenses have been issued in the past to allow access and installation of portable pumping equipment on Reclamation lands to pump the Non-CVP floodwater from the rivers into the FKC.

Reclamation's approval of the 3-month extension of the 2010 Warren Act contract and license will allow RD770 to introduce damaging floodwater from the Kings, St. John's and Tule Rivers into the FKC at milepost (MP) 29.10 for the Kings River, MP 69.45 for the St. John's River, and MP 95.67 for the Tule River between June 1, 2011 and August 31, 2011. The proposed 3-month license will permit the existing infrastructure to remain in place as well as allow RD770 to install pumps at the three MPs. After conveyance in the FKC, the Non-CVP floodwater may be diverted, on behalf of RD770, by Friant Division contractors up to the amount they can put to beneficial use and/or discharged into the Kern River. Coordination with the Kern River watermaster will occur to ensure the acceptance of this water into the Kern River prior to the introduction of the Non-CVP floodwater to the FKC. Subsequent actions beyond the discharges to the Kern River or the diversions by Friant contractors are not within Reclamation's approval authority and therefore not within the scope of the SEA.

Damaging floodwater is defined for purposes of this FONSI as the flow from the Kings, St. John's, and/or Tule Rivers that is in excess of the irrigation and spreading demand in the basins and will, in the absence of the project, cause flooding and potential damage in the Tulare Lakebed.

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 factors:

FINDINGS

Water Resources

Introduction of this Non-CVP floodwater into the FKC will not alter water rights held by the United States to pump water from the San Joaquin River nor will it alter the water rights of water right holders on the Kings, St. John's, or Tule rivers as water diverted will only be done during flood flows and under the permission of the respective Watermasters.

In the past, RD770 introductions of Non-CVP floodwater into the FKC indicated water quality impacts due to slight increases in concentrations of turbidity, total dissolved solids, alkalinity, bicarbonate conductivity and coliform as described in EA-09-177. The Warren Act contract obligates RD770 to comply with Reclamation's water quality monitoring requirements and standards. Water quality monitoring will be done by RD770, Friant Water Authority (FWA), Friant Division municipal and industrial (M&I) water uses, and Reclamation. If Reclamation determines that the water quality in the canal is negatively affected by the pump-ins sufficiently to cause harm to the CVP or Friant Division contractors, the Warren Act contract will be terminated. Additionally, should silt accumulate in the FKC or channels as a result of the introduction of Non-CVP floodwater, RD770 will remove the silt accumulation as directed by Reclamation and the FWA, or reimburse Reclamation and the FWA for costs associated with its removal. RD770 will also be required to take steps to screen debris from the Non-CVP floodwater prior to pumping.

Due to the established monitoring and reporting requirements included as part of the Proposed Action, the diversion of Non-CVP floodwater from the Kings, St. John's and Tule rivers will have no significant effect on water quality within these drainages. Water quality within the rivers downstream of the pump sites is unlikely to change, but if introductions decrease flows and soil erosion, a minor improvement in downstream water quality may result.

The Proposed Action will not substantially alter existing drainage patterns or the beneficial aspects periodic flood flows have on channel morphology as described in EA-09-177. In addition, the Proposed Action will not impact water quality in the Kings, St. John's and Tule rivers as water quality is not affected by diversion of a portion of the river's flow. Further, the Proposed Action will not interfere with existing deliveries of water for environmental purposes in the Tulare Lakebed. RD770 will continue to coordinate and provide water to wetland areas in the vicinity of the Tulare Lakebed as in the past, including providing water to restored wetlands.

The amount of pumped flood flows is dependent upon rain events, snowmelt and available capacity in the FKC. Groundwater recharge facilities in locations with desirable conditions and

facilities could receive floodwater and alleviate some of the groundwater overdraft conditions. Quite often the Kern River is in flood conditions at the same time as the pump-ins are occurring which fills the available spreading and recharge facilities in the Kern Fan area. Discharges into the Kern River at the terminus of the FKC are coordinated with the City of Bakersfield. This Non-CVP floodwater will provide a slight and short-term benefit by recharging the groundwater as it flows down the Kern River. In addition, Friant Division contractors may have occasional access to additional water supplies to put to beneficial use. Since this water will be available during wetter periods the water will most likely be used for recharge. This recharge may help to ameliorate the continuing overdraft in the San Joaquin Valley and provide some additional conjunctive use water supply benefits.

Overall, the Proposed Action will improve flood management, groundwater supplies and will not impact CVP operations, facilities, water right holder's surface water supplies or water rights, water quality, or wetlands.

Noise

The diesel and electric powered pumps used to pump Non-CVP floodwater into the FKC will generate infrequent, periodic noise. RD770 is required by Reclamation's license to comply with the Fresno and Tulare County Noise Ordinance regulations. Additionally, RD770 will comply with all federal and state noise standards and ordinances. RD770 has, and will continue to work with the few residents near the pumping plants, to reduce the noise levels when the pumps are in operation. RD770 has implemented noise reduction strategies based on the recommendations of a noise consultant and contacts persons residing near the pumping facilities prior to pumping, to address issues. Based on historic frequency, such Non-CVP floodwater introductions will occur, on average, every three to four years. RD770 will provide Reclamation and the FWA with the project specific data as required to determine compliance with the criteria contained within the applicable Fresno and Tulare County Noise Ordinance regulations. The license also requires RD770 to respond to any complaints from adjoining landowners regarding noise and take appropriate actions or cease pumping operations. Therefore, there will be no significant impacts to noise levels as a result of the Proposed Action.

Land Use

The Proposed Action will not conflict with existing zoning for agricultural use or promote the conversion of farmland to non-agricultural use. The existing trend of land use conversion within the San Joaquin Valley from farmland to urban land uses will continue as it has in the past. Conveyance of the Non-CVP floodwater will be infrequent, intermittent, unpredictable and small, relative to existing water needs and operations. Further, the prevention of inundation of farmlands will not change rates of land conversion but will allow existing farmland to remain productive in years when flooding will have impacted productivity. Conveyance of this Non-CVP floodwater is contingent upon available capacity in the FKC and conditions in the Kern River. As a consequence, the Proposed Action is unlikely to lead to any long-term land use decisions. Any available water will be used to maintain existing land uses and will not contribute to impacts to land uses or planning. Consequently, there will be no significant impacts to land use as a result of the Proposed Action.

Biological Resources

The infrastructure required for RD770 to pump Non-CVP floodwater from the Kings, St. John's and Tule River systems is complete and operational, requiring no further construction that might affect biological resources. No ground disturbing activities will be associated with the operation and maintenance of the three pumping facilities. The license precludes the use of pesticides on the FKC right-of-way without prior written permission of Reclamation. Pumps will be installed at MP 95.67 on the Tule River and at MP 69.45 on the St. John's River, where elderberry plants are either not present, or are no closer than 130 feet distant, respectively. Consequently, disturbance will be avoided at these two stations. A third set of pumps will be installed at MP 29.10 on the Kings River which is 60 feet away from one elderberry bush. Access to this pump station will be done via an existing roadway; therefore, any disturbance to the bush will be insignificant. Additionally, removal of all pumps will occur outside the Valley Elderberry longhorn beetles (VELB) period of activity (after June). Through the use of these measures, effects to VELB are considered insignificant and not likely to adversely affect this species.

The Proposed Action does not interfere with existing deliveries of water for environmental purposes in the Tulare Lakebed. The Proposed Action will only pump water from the Kings River when 3,200 cubic-feet per second of water is being pumped south to Tulare Lakebed and flood flows north to the San Joaquin River have been maximized. No direct connections occur between existing wetlands and the St. John's and Tule rivers downstream from the FKC.

The *Delta Lands Reclamation District No. 770 Warren Act Contract Biological Evaluation* dated April 17, 2006 and the analysis of direct, indirect and induced and interrelated effects indicate that the intensity of the effects from the Proposed Action will be low. In addition, Friant contractors are required to comply with the Biological Opinions issued during the long-term contract renewal process which require water delivered into their districts to be used in ways that do not harm endangered or threatened species. Adherence to these Biological Opinions will ensure that the delivery of this Non-CVP floodwater does not adversely impact species. Also, in compliance with Executive Order 13112 on Invasive Species, Reclamation will continue to implement feasible and prudent measures to minimize risk of harm from the spread of invasive species.

While the Proposed Action may affect threatened and endangered species it is not likely to adversely affect listed species or designated critical habitat. Reclamation initiated consultation with the U.S. Fish and Wildlife Service on April 20, 2011 for concurrence on this determination. On May 31, 2011, the USFWS concurred with Reclamation's determination that the Proposed Action is not likely to adversely affect the Fresno kangaroo rat, vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander, valley elderberry longhorn beetle, San Joaquin Valley orcutt grass, Hoover's spurge, or any designated critical habitat for these species.

Cultural Resources

The Proposed Action is the type of activity that will have no impact to cultural resources as there will be no modification of water conveyance facilities and no activities that will result in ground disturbance. Because there is no potential to affect historic properties, no cultural resources will be impacted as a result of implementing proposed action.

Indian Trust Assets

Since the Proposed Action will not cause any land disturbing activities or change historical water use patterns, the Proposed Action will not interfere with Indian water rights and will not affect Indian Trust Assets (ITA).

Environmental Justice

The Proposed Action will provide an option for some amount of flood protection within the Tulare Lakebed and reduce potential adverse impacts to minority or low-income farm laborers. Therefore, the Proposed Action has a slight beneficial impact to environmental justice.

Socioeconomic Resources

All required pumping and conveyance facilities have been constructed and will not be modified under the Proposed Action. All introduced Non-CVP floodwater will be disposed of within existing facilities and requires no new construction. The population and land conversion trends are expected to continue with or without implementing the Proposed Action. Pumped Non-CVP floodwater may be discharged into the Kern River. This water could recharge the groundwater locally and be extracted during dry periods to meet a small fraction of future demands. Uses of this Non-CVP floodwater could include irrigation, groundwater banking, wetland enhancement and restoration, or M&I uses. However, Reclamation does not have approval authority for subsequent diversions or uses of this Non-CVP floodwater once discharged from the FKC. Pumping the flood flows will provide an economic benefit to landowners in the Tulare Lake Basin. Reductions in costs for repairing public facilities, public services and emergency resources will also occur on a small local scale. Therefore, there will be no significant impacts to socioeconomic resources.

Air Quality

The portable diesel pumps are registered at the local and/or state level, have emission standards established within the registration requirement and the emissions are accounted for in the current emission inventory. The federal Title V Program does not apply to these pumps because the diesel engines are classified as non-road portable and will only operate for up to four to five months during years when Non-CVP floodwater is pumped. The license issued by Reclamation stipulates that RD770 shall comply with all applicable air pollution laws and regulations of the United States, the State of California and local authorities. Electric and diesel-powered pumps will be used to pump water from the Kings, St. John's and Tule Rivers. Estimated emissions are well below the *de minimis* standards of the San Joaquin Valley Air Pollution Control District; therefore, a conformity analysis is not required and there will be no significant impacts to air quality.

Global Climate Change

The introduction of Non-CVP floodwater into the FKC will require the use of diesel and electric pumps. These pumps will produce Carbon dioxide (CO₂) emissions which will contribute to Greenhouse Gas (GHG) emissions within the San Joaquin Valley. However, pump-in events will be infrequent and for short periods of time. Estimated CO₂ emissions from the 21 pumps run constantly over a five month period are well below the Environmental Protection Agency's threshold for annually reporting GHG emissions (25,000 metric tons/year), which is a surrogate

for a threshold of significance. Accordingly, the Proposed Action will result in below *de minimis* impacts to global climate change.

Cumulative Impacts

The conveyance of this Non-CVP floodwater is contingent upon hydrological conditions and capacity in the FKC and acceptable conditions in the Kern River. Pump-ins of this Non-CVP floodwater will not impact existing water rights nor will it create new water rights on any of the rivers. Water quality impacts will be monitored as required in the contract and license. The slight increases in turbidity, Total Dissolved Solids, alkalinity, bicarbonate conductivity and coliform during pump-in events may initially impact water quality in the FKC and Kern River; however, these events are short-term, intermittent, and infrequent. Should Reclamation determine that the Non-CVP floodwater does not meet their standards, pump-ins will be terminated. Discharges to the Kern River could result in limited groundwater recharge on a local and short-term basis. This water could be extracted during dry seasons to meet current demands. The conjunctive use of surface and groundwater supplies to meet existing demands within fluctuating hydrological conditions has occurred historically. The Proposed Action may offset the water lost by the Friant Division due to river restoration intermittently and only for those that have the facilities and capacity to make use of the opportunity. Consequently, the Proposed Action, when added to other related actions, does not result in long-term cumulative effects to water supplies, water rights, or water quality.

The Proposed Action will provide flood protection for the Tulare Lake Basin in addition to that provided by the enlargement of Terminus Dam. The enlargement and raising of Terminus Dam and the Proposed Action will have a somewhat greater flood protection result than either project alone. Depending on the hydrology this coordinated effect will have a greater or lesser flood protection result. At times of peak flood flows, the cumulative flood protection is still a small percentage of the stream flows; however, during small flood events, the coordinated projects will result in no flooding. The enlargement of Terminus Dam and Proposed Action do not contribute to increases in water supplies, changes in land use or increases in the need for floodplain insurance.

No construction will be required by the action, nor will the number of pump stations or engines increase. The existing portable diesel pumps are already accounted for in the current emission inventory. Therefore, the Proposed Action will not cumulatively affect air quality.

GHG emissions are considered cumulative impacts; however, the estimated CO₂ emissions for the Proposed Action is roughly 916.6 metric tons per year, which is well below the 25,000 metric tons per year threshold for reporting GHG emissions. As a result, the Proposed Action is not expected to contribute to cumulative adverse impacts to global climate change.

Since there are no impacts to noise, land use, cultural resources, ITA, and Environmental Justice from the Proposed Action when examined with other past, present, and future project impacts there will be no contribution to cumulative impacts on these resources areas. Slight beneficial impacts to socioeconomics from the increase in flood protection are within historical variations and will not contribute to cumulative impacts. Overall there will be no significant cumulative impacts caused by the Proposed Action.

RECLAMATION

Managing Water in the West

Final Supplemental Environmental Assessment

3 Month Extension of the 2010 Warren Act Contract and License for Delta Lands Reclamation District No. 770 (Supplementing EA-09-177)

SEA-11-025



**U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region
South Central California Area Office
Fresno, California**

June 2011

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to 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.

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List of Acronyms and Abbreviations

BO	Biological Opinion
Corps	U.S. Army Corps of Engineers
CO ₂	Carbon dioxide
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
EA	Environmental Assessment
EO	Executive Order
FKC	Friant-Kern Canal
FONSI	Finding of No Significant Impact
FWA	Friant Water Authority
FWCA	Fish and Wildlife Coordination Act
GHG	Greenhouse gases
M&I	Municipal and Industrial
MP	Milepost
RD770	Delta Lands Reclamation District No, 770
Reclamation	Bureau of Reclamation
ROW	Right-of-way
SEA	Supplemental EA
SJVAPCD	San Joaquin Valley Air Pollution Control District
USFWS	U.S. Fish and Wildlife Service
VELB	Valley elderberry longhorn beetle

Section 1 Purpose and Need for Action

1.1 Background

The Bureau of Reclamation (Reclamation) and Delta Lands Reclamation District Number 770 (RD770) are pursuing negotiations for a 25-year Warren Act contract for conveyance of Non-Central Valley Project (CVP) floodwater within the Friant-Kern Canal (FKC) and a license for RD770 pump stations located within Reclamation rights-of-way (ROW).

Since the finalization and approval of the 25-year Warren Act contract and license was not expected to be completed and executed until after June 1, 2011 a 12-month license (Appendix C) and a temporary Warren Act contract (Appendix A) were prepared in case damaging floodwater threatened RD770 during development of the long-term actions. Consequently, an Environmental Assessment, (EA), *EA-09-177 2010 Warren Act Contract and License for Delta Lands Reclamation District 770*, was prepared by Reclamation which analyzed the execution of a 12-month license and temporary Warren Act contract for the time period June 1, 2010 through May 31, 2011. A Finding of No Significant Impact (FONSI) was signed on July 30, 2010 and both EA and FONSI are hereby incorporated by reference (Reclamation 2010).

The long-term Warren Act contract and license, and associated environmental documentation, is expected to be completed near the expiration of the existing short-term contract and license. A 3-month extension of the existing short-term Warren Act contract and license is needed in case damaging floodwater threatens RD770 while the long-term actions are completed.

1.2 Purpose and Need

The purpose of the Proposed Action is to extend the existing Warren Act contract (Appendix A) and license (Appendix C) in order to allow pumping of Non-CVP floodwater into the FKC pending the execution of the long-term Warren Act contract and license. The underlying need is to reduce or avoid flood-related damage to prime farmland, buildings, roads, bridges, and other improvements in the Tulare Lakebed and other downstream lands.

1.3 Scope

This Supplemental EA (SEA) evaluates the 3-month extension of the existing 12-month license and temporary Warren Act contract analyzed in FONSI/EA-09-177 which has been incorporated by reference.

1.4 Reclamation's Legal and Statutory Authorities and Jurisdiction Relevant to the Proposed Federal Action

Several Federal laws, permits, licenses and policy requirements have directed, limited or guided the National Environmental Policy Act analysis and decision-making process of this SEA and

include the following as amended, updated, and/or superseded (all of which are incorporated by reference):

1.4.1 Warren Act

The Warren Act (Act as of February 21, 1911; CH. 141, [36 STAT.925]) authorizes Reclamation to enter into contracts to impound, store, and/or convey non-project water when excess capacity is available in federal facilities.

1.4.2 Reclamation States Emergency Drought Relief Act

Section 102 of the Reclamation States Emergency Drought Relief Act of 1991 provides for use of Federal facilities and contracts for temporary water supplies, storage and conveyance of non-project water inside and outside project service areas for municipal and industrial (M&I), fish and wildlife, and agricultural uses. Section 305, enacted March 5, 1992 (106 Stat. 59), also authorizes Reclamation to utilize excess capacity to convey non-project water.

1.4.3 Central Valley Project Improvement Act

The Central Valley Project Improvement Act of 1992 (CVPIA), Title 34 (of Public Law 102-575), Section 3408, Additional Authorities (c) authorizes the Secretary of the Interior to enter into contracts pursuant to Reclamation law and this title with any Federal agency, California water user or water agency, State agency, or private nonprofit organization for the exchange, impoundment, storage, carriage, and delivery of CVP and Non-CVP floodwater for domestic, municipal, industrial, fish and wildlife, and any other beneficial purpose, except that nothing in this subsection shall be deemed to supersede the provisions of section 103 of Public Law 99-546 (100 Stat. 3051).

1.4.4 Executive Order 11988 – Floodplain Management

Executive Order (EO) 11988 requires Federal agencies to provide leadership and take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, and health and welfare among other activities.

1.4.5 Water Quality Standards

Reclamation requires that the operation and maintenance of CVP facilities shall be performed in such a manner as is practical to maintain the quality of raw water at the highest level that is reasonably attainable. Water quality and monitoring requirements are established annually by Reclamation and are instituted to protect water quality in federal facilities by ensuring that imported Non-CVP floodwater does not impair existing uses or negatively impact existing water quality conditions (Appendix B). These standards are updated periodically. The water quality standards are the maximum concentration of certain contaminants that may occur in each source of Non-CVP floodwater. The water quality standards for Non-CVP floodwater to be stored and conveyed in federal facilities are currently those set out in Title 22 of the California Code of Regulations.

1.5 Potential Issues

As FONSI/EA-09-177 analyzed all resource areas that would be affected by the execution of a short-term Warren Act contract and 12-month license, this SEA will focus on impacts to those

resource areas that may have affects different from those already evaluated. The following resources were eliminated from detailed environmental analysis due to the reasons listed below:

- Noise
 - Comprehensive evaluation of noise impacts was eliminated from detailed environmental analysis as there are no changes in noise impacts from those analyzed in FONSI/EA-09-177.
- Land Use
 - Comprehensive evaluation of land use was eliminated from detailed environmental analysis as there are no changes to land use from those analyzed in FONSI/EA-09-177.
- Cultural Resources
 - Comprehensive evaluation of cultural resources issues were eliminated from detailed environmental analysis because no construction, no new land use, or new ground disturbing activities would occur as a result of the Proposed Action. Therefore, the Proposed Action has no potential to affect historic properties.
- Indian Trust Assets
 - Comprehensive evaluation of Indian Trust Assets (ITA) was eliminated from detailed environmental analysis as there are none in the Proposed Action area. The nearest ITA is the Santa Rosa Rancheria, which is approximately 13 miles north of the Proposed Action area.
- Environmental Justice
 - Comprehensive evaluation of impacts to minority or low-income populations was eliminated from detailed environmental analysis as there are no changes in impacts from those analyzed in FONSI/EA-09-177.
- Socioeconomics
 - Comprehensive evaluation of socioeconomics was eliminated from detailed environmental analysis as there are no changes in impacts from those analyzed in FONSI/EA-09-177.

This SEA will analyze the affected environment of the Proposed Action in order to determine the potential impacts to the following resources:

- Water Resources
- Biological Resources
- Air Quality
- Global Climate

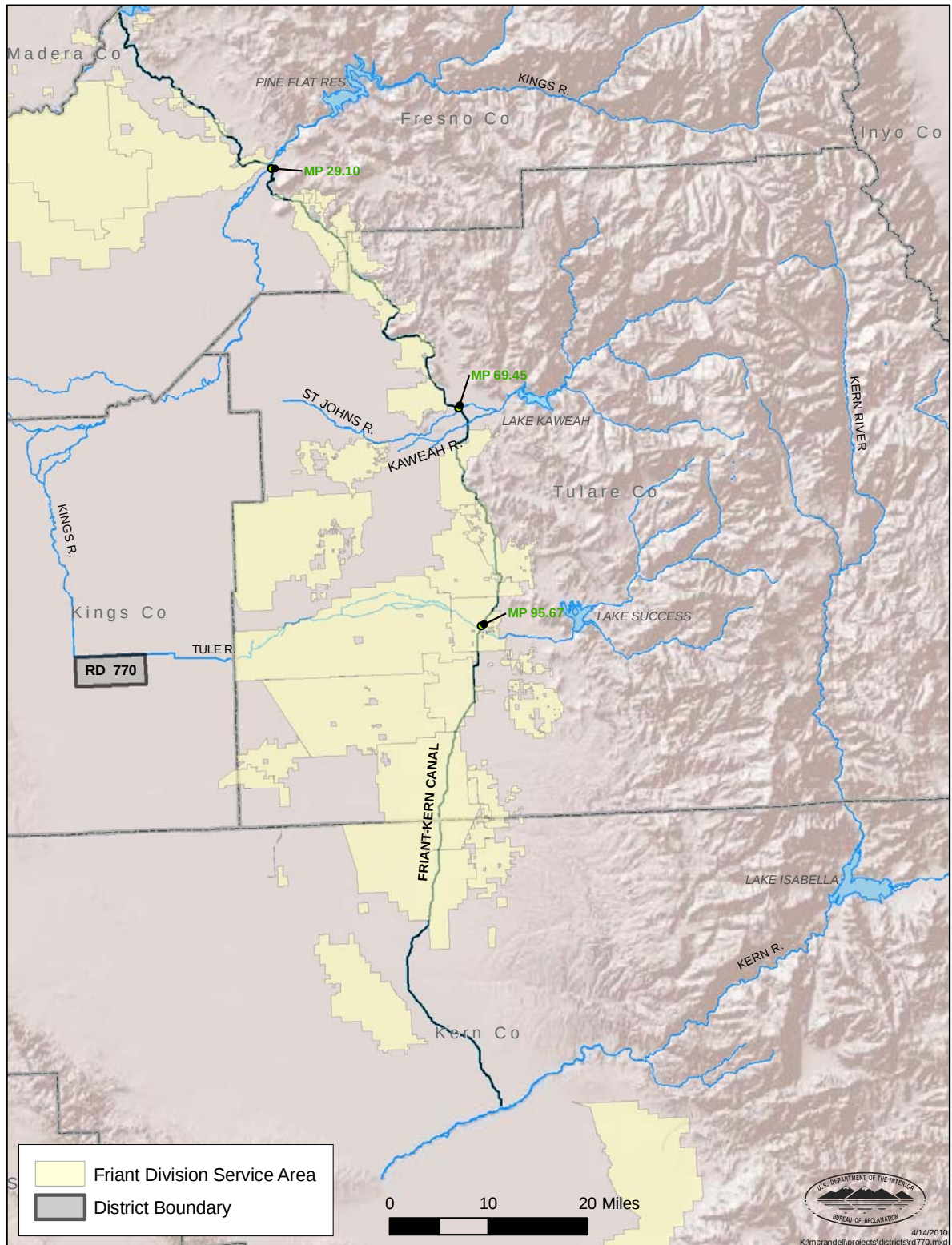


Figure 1-1 Proposed Action Location

Section 2 Alternatives Including the Proposed Action

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not extend the existing Warren Act contract and license by 3 months. Non-CVP floodwater would not be able to be pumped into the FKC after May 31, 2011 until the long-term Warren Act contract and license is executed. Floodwater during this time period could continue downstream into the former Tulare Lake bed in the Tulare Lake Basin and pool on otherwise productive farmland as well as flood infrastructure in the area.

2.2 Proposed Action

Reclamation proposes to extend the existing Warren Act contract and license analyzed in FONSI/EA-09-177 for 3 months (June 1, 2011 through August 31, 2011). All conditions and environmental commitments are the same as those in EA-09-177 which has been incorporated by reference and is not repeated here. See Appendix A and C for copies of the executed 2010 Warren Act contract and license and Appendix B for FKC water quality requirements. The Proposed Action would not result in new construction or modification of existing facilities.

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Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

3.1 Water Resources

3.1.1 Affected Environment

The affected environment for the introduction of Non-CVP floodwater from the Kings, St. Johns, and Tule rivers to the FKC and diversion by Friant Division contractor or discharge to the Kern River is the same as previously identified in FONSI/EA-09-177 and is not repeated here.

3.1.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not issue a 3-month extension to the existing Warren Act contract and license. Pumping facilities would not operate and Non-CVP floodwater from the Kings, St. John's and Tule rivers could flow into the Tulare Lake Basin, jeopardizing human safety and property. The exposure of people and structures to significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee conflicts with the County of Tulare General Plan 2025 flood protection goal and with EO 11988.

Proposed Action

Introduction of this Non-CVP floodwater into the FKC would not alter water rights held by the United States to pump water from the San Joaquin River nor would it alter the water rights of water right holders on the Kings, St. John's (Kaweah), or Tule rivers as water diverted would only be done during flood flows and under the permission of the respective Watermasters.

In the past, RD770 introductions of Non-CVP floodwater into the FKC indicated water quality impacts due to slight increases in concentrations of turbidity, total dissolved solids, alkalinity, bicarbonate conductivity and coliform as described in EA-09-177. The Warren Act contract (Appendix A) obligates RD770 to comply with Reclamation's water quality monitoring requirements and standards (Appendix B). Water quality monitoring would be done by RD770, Friant Water Authority (FWA), Friant Division M&I water uses, and Reclamation. If Reclamation determines that the water quality in the canal is negatively affected by the pump-ins sufficiently to cause harm to the CVP or Friant Division contractors, the Warren Act contract would be terminated. Additionally, should silt accumulate in the FKC or channels as a result of the introduction of Non-CVP floodwater, RD770 would remove the silt accumulation as directed by Reclamation and the FWA, or reimburse Reclamation and the FWA for costs associated with its removal. RD770 would also be required to take steps to screen debris from the Non-CVP floodwater prior to pumping.

Due to the established monitoring and reporting requirements included as part of the Proposed Action, the diversion of Non-CVP floodwater from the Kings, St. John's and Tule rivers would have no adverse effect on water quality within these drainages. Water quality within the rivers downstream of the pump sites is unlikely to change, but if introductions decrease flows and soil erosion, a minor improvement in downstream water quality may result.

The Proposed Action would not substantially alter existing drainage patterns or the beneficial aspects periodic flood flows have on channel morphology as described in EA-09-177. In addition, the Proposed Action would not impact water quality in the Kings, St. John's and Tule rivers as water quality is not affected by diversion of a portion of the river's flow. Further, the Proposed Action would not interfere with existing deliveries of water for environmental purposes in the Tulare Lakebed. RD770 would continue to coordinate and provide water to wetland areas in the vicinity of the Tulare Lakebed as in the past, including providing water to restored wetlands.

The amount of pumped flood flows is dependent upon rain events, snowmelt and available capacity in the FKC. Groundwater recharge facilities in locations with desirable conditions and facilities could receive floodwater and alleviate some of the groundwater overdraft conditions. Quite often the Kern River is in flood conditions at the same time as the pump-ins are occurring which fills the available spreading and recharge facilities in the Kern Fan area. Discharges into the Kern River at the terminus of the FKC are coordinated with the City of Bakersfield. This Non-CVP floodwater would provide a slight and short-term benefit by recharging the groundwater as it flows down the Kern River. In addition, Friant Division contractors may have occasional access to additional water supplies to put to beneficial use. Since this water would be available during wetter periods the water would most likely be used for recharge. This recharge may help to ameliorate the continuing overdraft in the San Joaquin Valley and provide some additional conjunctive use water supply benefits.

Overall, the Proposed Action would improve flood management, groundwater supplies and would not impact CVP operations, facilities, water right holder's surface water supplies or water rights, water quality, or wetlands.

Cumulative Impacts

The conveyance of this Non-CVP floodwater is contingent upon hydrological conditions and capacity in the FKC and acceptable conditions in the Kern River. Pump-ins of this Non-CVP floodwater would not impact existing water rights nor would it create new water rights on any of the rivers. Water quality impacts would be monitored as required by the Warren Act contract and license. The slight increases in turbidity, total dissolved solids, alkalinity, bicarbonate conductivity and coliform during pump-in events may initially impact water quality in the FKC and Kern River; however, these events are short-term, intermittent, and infrequent. Should Reclamation determine that the Non-CVP floodwater does not meet their standards as outlined in Appendix B, pump-ins would be terminated.

Discharges to the Kern River could result in limited groundwater recharge on a local and short-term basis. This water could be extracted during dry seasons to meet current demands. The conjunctive use of surface and groundwater supplies to meet existing demands within fluctuating

hydrological conditions has occurred historically. The Proposed Action may offset the water lost by the Friant Division due to river restoration intermittently and only for those that have the facilities and capacity to make use of the opportunity. Consequently, the Proposed Action, when added to other related actions, does not result in long-term cumulative effects to water supplies, water rights, or water quality.

The Proposed Action would provide flood protection for the Tulare Lake Basin in addition to that provided by the enlargement of Terminus Dam. The enlargement and raising of Terminus Dam and the Proposed Action would have a somewhat greater flood protection result than either project alone. Depending on the hydrology this coordinated effect will have a greater or lesser flood protection result. At times of peak flood flows, the cumulative flood protection is still a small percentage of the stream flows; however, during small flood events, the coordinated projects would result in no flooding. The enlargement of Terminus Dam and Proposed Action do not contribute to increases in water supplies, changes in land use or increases in the need for floodplain insurance.

The Proposed Action would not result in a cumulative decrease in the generation of electrical power as the water to be pumped would be pumped after it has been released from dams and power producing facilities.

3.2 Biological Resources

3.2.1 Affected Environment

The affected environment is the same as previously identified in FONSI/EA-09-177 and is not repeated here.

3.2.2 Environmental Consequences

No Action

Upland and terrestrial riparian habitats for special-status species occur in isolated patches along the Kings, St. John's (Kaweah) and Tule river basins and could be adversely impacted by inundation caused by flooding. The flow regimes within the affected drainages would be tempered by the action alternative, but still remain at flood levels. Historically, diversions from the affected drainages have been infrequent and proportionately small for those made from the Kings River. Diversions from the St. John's and Tule Rivers have averaged about 20 percent of flows as described in EA-09-177, but they too have been infrequent.

Proposed Action

In light of the uncertainty associated with flood events, the nature of past floods was used for the purpose of this analysis to predict and assess the potential effects.

Pump-in Operations The infrastructure required for RD770 to pump Non-CVP floodwater from the Kings, St. John's and Tule River systems is complete and operational, requiring no further construction that might affect biological resources. No ground disturbing activities would be associated with the operation and maintenance of the three pumping facilities. The License precludes the use of pesticides on the FKC ROW without prior written permission of

Reclamation. Pumps would be installed at milepost (MP) 95.67 on the Tule River and at MP 69.45 on the St. John's River, where elderberry plants are either not present, or are no closer than 130 feet distant, respectively. Consequently, disturbance to elderberry plants would be avoided at these two stations. A third set of pumps would be installed at MP 29.10 on the Kings River which is 60 feet away from one elderberry bush. Access to this pump station would be done via an existing roadway; therefore, any disturbance to the bush would be insignificant. Additionally, removal of all pumps would occur outside the Valley Elderberry longhorn beetles (VELB) period of activity (after June). Through the use of these measures, effects to VELB are considered insignificant and not likely to adversely affect this species.

The California Natural Diversity Data Base (CNDDDB) query revealed records for California tiger salamander in the vicinity of the Kings and St. John's River pumping facilities; for VELB and Greene's orcutt grass in the vicinity of the St. Johns River pumping facilities; records for the San Joaquin kit fox in the vicinity of the St. John's and Tule River pumping facilities; records for the vernal pool fairy shrimp and the San Joaquin adobe sunburst in the vicinity of the Kings, St. John's, and Tule River pumping facilities; records for the Tipton kangaroo rat in the vicinity of the St. John's and Tule River pumping facilities; and records for the California jewelflower in the vicinity of the Tule River pumping facilities (Table 3-8 and 3-9 in EA-09-177). The operation and maintenance of the three pumping facilities would not involve ground disturbance or disturbance to vegetation, including the host plant of VELB, and therefore, no direct adverse effects to special-status species are expected from pump-in activities. Activities for operation and maintenance would require use of existing roadways only. These roadways are commonly traveled by FWA vehicles and the additional vehicle traffic would be minimal.

Critical Habitat The critical habitat for the California condor is outside the region directly affected by floodwater in the Tulare Lake Basin. Thus, pumping water from the rivers would have no adverse effect on critical habitat for the California condor. Diversions from the Kings River are an exceedingly small fraction of the flows (historically 0.58 percent or less) and these would either minimally decrease flood volumes or would not affect flows in Fresno Slough. The Proposed Action would, therefore, have no adverse effect on the critical habitat for the Fresno kangaroo rat or would have a minor positive effect through added flood protection. Critical habitat for the vernal pool fairy shrimp and the vernal pool tadpole shrimp within the Cross Creek Unit are connected to flows in the St. John's River; however, the majority of the critical habitat is upstream of the confluence of Cottonwood Creek and the St. John's River. Critical habitat upstream of this confluence would not be directly affected by changes in flood flows within the St. John's River. Critical habitat for Hoover's spurge and San Joaquin Orcutt grass occurs upstream of the confluence of Cottonwood Creek and the St. John's River, and would not be directly impacted by Non-CVP floodwater introduced into the FKC. Any backwater flooding would be minimal and not be expected to meaningfully affect the extent or duration of inundation. Critical habitat for vernal pool fairy shrimp within the Pixley Unit occurs in two subunits: one southeast of Corcoran within the floodplain of the Tule River and another subunit that includes portions of the Pixley National Wildlife Refuge. The northern subunit could experience a minor level of flood protection. Portions of the critical habitat for the California tiger salamander within the final Cross Creek Unit are connected to flows in the St. John's River. Critical habitat in the basin upstream of the confluence with the St. John's River would not be directly affected by changes in flood flows within the St. John's River. Some upland habitat

within a portion of Cross Creek Unit 5A may receive reduced flood flows, although Cross Creek typically carries high flows before pumping occurs and continues to transport high flows when the pumps are operating. California tiger salamanders breeding within vernal pools within the floodplain might benefit from a reduction in the volume of floodwater flowing across the floodplain of Cross Creek.

Changes to Flows Introductions from the Kings, St. John's and Tule rivers under previous contracts were intermittent and infrequent. Introductions from the Kings River always were small (0.58 percent or less) while those from the St. John's and Tule Rivers ranged to around 30 percent of flows (Table 3-1 in EA-09-177). Future introductions to the FKC under the Proposed Action are expected to be similar or even smaller for all watersheds but the Tule River. For the Tule River, with reduced capacity in Lake Isabella from drawdown due to seismic concerns, there is less storage so the flood events would be expected to be greater than when the reservoir was operating within its design capacity. These introductions would not result in reduced river flows that contain less oxygen, higher temperatures or other changes that could detrimentally impact fish or other aquatic life. The average flow downstream of the pump stations on the Kings, St. John's and Tule rivers have always remained well above the average flow in years when pumping occurred (Table 3-1 in EA-09-177). Under past actions on the Kings River, for instance, the maximum percent of flow diverted was 0.58 percent when the flow was 148 percent of average. The maximum percent of flow diverted over an annual basis was higher in the Kaweah and Tule Rivers, 30 and 34 percent, respectively; however, average annual flows below pump-in points within both rivers was much greater than 150 percent (Table 3-1 in EA-09-177). The effects of diversions on a monthly basis when all years are included show that 20 percent of flows may be reduced, but if data are considered only in years when diversions are made, the proportion of monthly flow reductions would be greater.

The U.S. Army Corps of Engineers (Corps) manages water releases from the dams to maintain flows within the channel, thereby protecting adjacent uplands, if possible. Breached levees, rather than high flow volumes, are likely to be the cause of flooding in uplands along these rivers.

The Proposed Action does not interfere with existing deliveries of water for environmental purposes in the Tulare Lakebed. The Proposed Action would only pump water from the Kings River when 3,200 cubic-feet per second of water is being pumped south to Tulare Lakebed and flood flows north to the San Joaquin River have been maximized. No direct connections occur between existing wetlands and the St. John's and Tule rivers downstream from the FKC.

Non-CVP floodwater would be discharged into the Kern River at the terminus of the FKC. The reach of the Kern River between the FKC and the Aqueduct-Kern River Intertie differs from the Kings, St. John's and Tule rivers in that the Kern River may be the recipient, rather than the donor, of pumped Non-CVP floodwater. The Kern River, for short periods of time on an infrequent and intermittent basis, may experience increased flows as a result of the Proposed Action. The disposition of Non-CVP floodwater that would be discharged at the terminus of the FKC into the Kern River would be coordinated with the City of Bakersfield. The volume of introduced Non-CVP floodwater would be small in relation to the large recharge capacity in the region, and the deliveries represent a minor component of the operations. Discharges into the

Kern River have averaged 14 percent of the Kern River flows at the time (Table 3-6 in EA-09-177). Ensuring that the Kern River can adequately accommodate discharges from the FKC. The Proposed Action would not cause or attenuate flooding along the Kern River. Therefore, no adverse effects are anticipated.

The *Delta Lands Reclamation District No. 770 Warren Act Contract Biological Evaluation* dated April 17, 2006 and the analysis of direct, indirect and induced and interrelated effects indicate that the intensity of the effects from the Proposed Action would be low (HT Harvey & Associates 2006). While the Proposed Action may affect threatened and endangered species it is not likely to adversely affect listed species or designated critical habitat.

Invasive Species Control Reclamation recognizes the importance of limiting the spread of nuisance or invasive plant and animal species and shares the responsibility for controlling invasive species (EO 13112) that infest water systems, including reservoirs, rivers, distribution canals, etc. Reclamation's understanding is that hydrilla (*Hydrilla verticillata*) and dodder (*Cuscuta* spp.) are of greatest concern along the FKC because of hydrilla's potential to block canals, drains, and water control structures and dodder's potential to infest many crops, ornamentals, native plants, and weeds. Hydrilla and dodder entering the FKC would have to originate upstream of the canal in the watersheds of the rivers to be diverted for the Proposed Action to potentially contribute to the spread of these species. The California Department of Food and Agriculture's Hydrilla Eradication Program treated the Costa Ponds near Springville in 2001, but hydrilla has not been reported as a problem in the Tule River. Dodder is widespread in the San Joaquin Valley and a range of methods (seeds dispersed by people through the movement of soil, equipment, or in mud attached to shoes and tires) can spread seeds. Infestations contributing seed sources along the Kings, Kaweah or Tule River systems have not been documented. Reclamation requires that the submerged intakes of the District's pumps be screened, limiting debris and other objects from being drawn into the pumps. Should Non-CVP floodwater pumped under the proposed Contract be identified as a significant source of invasive species in the future, Reclamation has the authority to terminate or limit the introduction of such Non-CVP floodwater into the FKC. In compliance with EO 13112 on Invasive Species, Reclamation would continue to implement feasible and prudent measures to minimize risk of harm from the spread of invasive species.

Delivery to Friant Contractors Friant contractors are required to comply with the Biological Opinions (BOs) issued during the long-term contract renewal process which require water delivered into their districts to be used in ways that do not harm endangered or threatened species. Adherence to these BOs would ensure that the delivery of this Non-CVP floodwater does not adversely impact species.

Cumulative Impacts

The Corps has enlarged Terminus Dam located on the Kaweah River to provide increased flood protection to the City of Visalia and downstream agricultural lands, and increased water supply storage for irrigation. The Terminus Dam project reduces periodic flood flows from reaching the Tulare Lakebed (Corps 1996). The Corps determined that small flood events (less than 3.2-year events) would no longer flood the lakebed and larger events would be decreased in magnitude. The effects of these reductions were quantified by the Corps and the U.S. Fish and Wildlife Service (USFWS), and it was determined that primary project impacts resulted from reductions

in the frequency, acreage and duration of the relatively frequent, smaller events occurring in the lakebed. Impacts stemming from enlarging Terminus Dam have been fully mitigated. In years when damaging flows threaten the Tulare Lakebed, more than a thousand acres of flooded mitigation habitat would be provided for water birds.

Non-CVP floodwater introductions by RD770 would not contribute substantial cumulative impacts to water birds within the Tulare Lakebed. Introductions by RD770 have occurred since 1978 and represent the existing conditions within the Tulare Lakebed during infrequent major flood events. Flood flows into the Tulare Lakebed would still occur from the Tule and Kings rivers with an anticipated magnitude similar to past events when floodwater was pumped. The Proposed Action does not interfere with existing deliveries of water for environmental purposes in the Tulare Lakebed, including wetlands. Future Non-CVP floodwater introductions from the St. John's River by RD770 would continue to be conducted in coordination with the Corps, the FWA, and the local water users represented by the Kings River Water Association, the Kaweah and St. John's Rivers Association, and the Tule River Association.

As previously stated, Reclamation and the USFWS have jointly developed an Endangered Species Act compliance strategy intended to minimize further losses within the CVP service areas and to offset impacts from ongoing CVP operations. Reclamation and the USFWS continue to implement the commitments and conservation measures in the BOs issued for CVP operations and contract renewals. The January 19, 2001 BO on the continued operation of the CVP addressed CVP operational threats to special-status species. USFWS stated in that BO that Reclamation's Endangered Species Act compliance strategy is intended to minimize further losses within the CVP service areas and to offset effects from ongoing CVP operations. The contribution of the Proposed Action to these operations is anticipated to be negligible or non-existent, and future conditions for listed or proposed species would not be expected to differ significantly, with or without the Proposed Action.

The Non-CVP floodwater introduced under the Proposed Action would remain intermittent, unpredictable and small in comparison to the operation of the FKC. In accordance with the License, the Non-CVP floodwater impounded, stored or carried would not be used otherwise than as prescribed by law. The Floodwater Report would be used to track this water and to minimize the possibility of contributing to potential cumulative habitat modifications due to agricultural production and urban expansion.

Numerous activities continue to eliminate habitat for listed and proposed threatened and endangered species in the southern San Joaquin Valley. Habitat loss and degradation affecting both animals and plants continues as a result of urbanization, oil and gas development, road and utility ROW management, flood control projects, grazing by livestock and agricultural practices. Listed and proposed animal species are also affected by poisoning, shooting, increased predation associated with human development and reduction of food sources. All of these non-federal activities are expected to continue to adversely affect listed and proposed species in the southern San Joaquin Valley.

Actions taken by Reclamation, however, in concert with protections afforded by regional conservation plans such as the Metropolitan Bakersfield Habitat Conservation Plan and the Kern

Water Bank Habitat Conservation Plan/Natural Community Conservation Plan, help to ameliorate such adverse effects and play a key role in achieving the goal of maintaining special-status species and their native habitats.

3.3 Air Quality

3.3.1 Affected Environment

The affected environment is the same as previously identified in FONSI/EA-09-177 and is not repeated here.

3.3.2 Environmental Consequences

No Action

Pumping facilities would not operate and air quality would not be affected.

Proposed Action

The 18 diesel pumps that RD770 might operate represent less than one percent of the 4,500 irrigation pumps used in the San Joaquin Valley (Maxwell 2003). The portable diesel pumps are registered at the local and/or state level, have emission standards established within the registration requirement and the emissions are accounted for in the current emission inventory. The federal Title V Program does not apply to these pumps because the diesel engines are classified as non-road portable and would only operate for up to 3 months. Friant Division contractor turnouts are gravity-fed and would not result in additional pumping.

Estimated emissions for the 12-month license were well below the *de minimis* standards of the San Joaquin Valley Air Pollution Control District (SJVAPCD). Emissions for the 3 month period would also be well below these standards (Table 3-1); therefore, a conformity analysis is not required and there would be no adverse impacts to air quality.

Table 3-1 Calculated Pump Emissions

Pollutant	Federal Status	<i>de minimis</i> (Tons/year)	Calculated project emissions (Tons/year)
Volatile organic compounds (as an ozone precursor)	Nonattainment serious 8- hour ozone	50	0.52
Nitrogen oxides (as an ozone precursor)	Nonattainment serious 8- hour standard	50	4.75
Particulate matter between 2.5 and 10 microns in diameter (PM ₁₀)	Attainment	100	Not calculated
Carbon monoxide	Attainment	100	Not calculated

Source: SJVAPCD 2011; 40 CFR 93.153

Cumulative Impacts

No construction would be required by the action, nor would the number of pump stations or engines increase. The existing portable diesel pumps are already accounted for in the current emission inventory. Therefore, the Proposed Action would not cumulatively affect air quality.

3.4 Global Climate Change

3.4.1 Affected Environment

The affected environment is the same as previously identified in FONSI/EA-09-177 and is not repeated here.

3.4.2 Environmental Consequences

No Action

Pumping facilities would not operate and there would be no contributions to global climate change due to greenhouse gas (GHG) emissions.

Proposed Action

The introduction of Non-CVP floodwater into the FKC would require the use of diesel and electric pumps. These pumps would produce carbon dioxide (CO₂) emissions which would contribute to GHG emissions within the San Joaquin Valley. However, pump-in events would be for only a 3 month window. Estimated CO₂ emissions from the 21 pumps run constantly over a five month period can be found in Table 3-2.

Table 3-2 Calculated CO₂ Emissions

Pumping Station	Number of Pumps	Annual Kilowatt Hours	CO ₂ emissions (metric tons)
Kings River	6	3,600	609
St. John's River	8	3,600	305
Tule River	7	3,600	2.6
Total	21	10,800	916.6

Calculated CO₂ emissions are well below the Environmental Protection Agency's threshold for annually reporting GHG emissions (25,000 metric tons/year), which is a surrogate for a threshold of significance (EPA 2009). Accordingly, the Proposed Action would result in below *de minimis* impacts to global climate change.

Cumulative Impacts

GHG emissions are considered to have cumulative impacts; however, the estimated CO₂ emissions for the Proposed Action are less than 916.6 metric tons per year, which is well below the 25,000 metric tons per year threshold for reporting GHG emissions. As a result, the Proposed Action is not expected to contribute to cumulative adverse impacts to global climate change.

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Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft SEA between April 29, 2011 and May 13, 2011. No comments were received.

4.2 Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The amendments enacted in 1946 require consultation with the Service and State fish and wildlife agencies “whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license”. Consultation is to be undertaken for the purpose of “preventing the loss of and damage to wildlife resources”.

The Proposed Action does not involve any new impoundment, channel deepening, or other control or modification of a stream or body of water as described in the statute, but the movement of Non-CVP floodwater through CVP facilities. Reclamation has been in consultation with the Service and has incorporated measures to reduce potential impacts to wildlife resources.

4.3 Endangered Species Act (16 U.S.C. § 1531 et seq.)

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

The Proposed Action would support existing uses and conditions. No native lands would be converted or cultivated with CVP water. The water would not be used for land conversion. The proposed project does not interfere with existing deliveries of water for environmental purposes in the Tulare Lakebed. Effects to listed species and critical habitat are not expected, or would be insignificant, or possibly slightly beneficial, and therefore, the Proposed Action may affect but is not likely to adversely affect federally listed threatened or endangered species or their designated habitats. Reclamation initiated consultation with the USFWS on April 20, 2011 for concurrence on this determination. On May 31, 2011, the USFWS concurred with Reclamation’s determination that the Proposed Action is not likely to adversely affect the Fresno kangaroo rat, vernal pool fairy shrimp, vernal pool tadpole shrimp, California tiger salamander, valley

elderberry longhorn beetle, San Joaquin valley orcutt grass, Hoover's spurge, or any designated critical habitat for these species (see Appendix E).

4.4 National Historic Preservation Act (16 U.S.C. § 470 et seq.)

Section 106 of the National Historic Preservation Act requires federal agencies to evaluate the effects of federal undertakings on historical, archaeological and cultural resources. Due to the nature of the Proposed Action, there would be no effect on any historical, archaeological, or cultural resources and no further compliance actions are required.

4.5 Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.)

The Migratory Bird Treaty Act implements various treaties and conventions between the United States and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

The Proposed Action would have no effect on birds protected by the Migratory Bird Treaty Act.

4.6 Executive Order 11988 – Floodplain Management and Executive Order 11990-Protection of Wetlands

EO 11988 requires Federal agencies to provide leadership and take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, and health and welfare among other activities. To accomplish these goals agencies are instructed to prepare floodplain assessments for actions located within or affecting flood plains, and similarly, EO 11990 places similar requirements for actions in wetlands. Although the project does reduce potential flood flows which meets the goals of the EO, the project does not affect the flood plain itself and therefore the project does not require Reclamation to take the actions required in EO 11988. The project does not affect wetlands and therefore the project would not affect either EO.

Section 5 List of Preparers and Reviewers

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Michael Inthavong, Natural Resources Specialist, SCAAO - reviewed
Chuck Siek, Supervisory Natural Resources Specialist, SCCAO - reviewer

Section 6 References

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