

## **Draft Environmental Assessment**

# **Delivery and Use of Unreleased San Joaquin River Restoration Flows (Water Contract Years 2016-2025)**





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## List of Abbreviations and Acronyms

Act	San Joaquin River Restoration Settlement Act
AF	Acre Feet
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
Delta	Sacramento–San Joaquin River Delta
EA	Environmental Assessment
ESA	Federal Endangered Species Act
Friant Contractors	Friant Division long-term contractors
FWCA	Fish and Wildlife Coordination Act
GSA	General Services Administration
Implementing Agencies	Reclamation, the U.S. Fish and Wildlife Service, National Marine Fisheries Service, California Department of Water Resources, and California Department of Fish and Wildlife
ITA	Indian Trust Assets
MBTA	Migratory Bird Treaty Act
MWD	Metropolitan Water District of Southern California
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NRDC	Natural Resources Defense Council
NRHP	National Register of Historic Places
PEIS/R	Program Environmental Impact Statement/Report
POU	place of use
Reclamation	U.S. Department of the Interior, Bureau of Reclamation
ROD	Record of Decision
Secretary	U.S. Secretary of Interior
Settlement	Stipulation of Settlement in <i>NRDC, et al., v. Kirk Rodgers, et al.</i>
SJRRP	San Joaquin River Restoration Program
Restoration Flows	San Joaquin River Restoration Flows
SWP	State Water Project

San Joaquin River Restoration Program

TAF	Thousand Acre Feet
URF	Unreleased Restoration Flow
USC	U.S. Code
USFWS	U.S. Fish and Wildlife Service
Water Board	State Water Resources Control Board

# 1 Definitions

2 **9d contracts:** Repayment contracts are authorized under Section 9d of the Reclamation  
3 Project Act of 1939 for irrigation water. Repayment contracts are used when specific cost  
4 obligations for water service can be readily assigned to beneficiaries such as when a  
5 specific facility is constructed for the sole benefit of a single contractor. Repayment  
6 contracts generally provide for 40 fixed annual payments to repay a fixed repayment  
7 amount. The 9d contracts are being used initially as the basis of authority for the sale of  
8 Unreleased Restoration Flows (URF) to Friant Contractors.

9 **Central Valley Project (CVP):** The United States, acting through the U.S. Department  
10 of the Interior, Bureau of Reclamation (Reclamation), has constructed and is operating  
11 the Central Valley Project for diversion, storage, carriage, distribution and beneficial use,  
12 for flood control, irrigation, municipal, domestic, industrial, fish and wildlife mitigation,  
13 protection and restoration, generation and distribution of electric energy, salinity control,  
14 navigation and other beneficial uses, of water of the Sacramento River, the American  
15 River, the Trinity River, and the San Joaquin River and their tributaries.

16 **Class 1 Water:** The supply of water stored in or flowing through Millerton Lake which,  
17 subject to the contingencies described in the water service or repayment contracts will be  
18 available for delivery from Millerton Lake and the Friant-Kern and Madera Canals as a  
19 dependable water supply during each Water Contract Year.

20 **Class 2 Water:** The supply of water which can be made available subject to the  
21 contingencies described in the water service or repayment contracts for delivery from  
22 Millerton Lake and the Friant-Kern and Madera Canals in addition to the supply of Class  
23 1 water. Because of its uncertainty as to availability and time of occurrence, such water  
24 will be undependable in character and will be furnished only if, as, and when it can be  
25 made available as determined by the Contracting Officer.

26 **CVP Water:** All water that is developed, diverted, stored, or delivered by the Secretary  
27 of the Interior in accordance with the statutes authorizing the CVP and in accordance  
28 with the terms and conditions of water rights acquired pursuant to California Law.

29 **Friant Division:** The main features of this division are: Friant Dam, Millerton Lake,  
30 Friant-Kern Canal, and Madera Canal, all constructed and owned by the Reclamation.

31 **Friant Division Long-Term Contractor Service Area:** The area to which a Friant  
32 Division Long-Term Contractors are permitted to provide CVP Water under the authority  
33 of their respective 9d contracts.

34 **Friant Division long-term contractors, or Friant Contractors:** All public agencies that  
35 have executed long-term water service or repayment contracts with the United States  
36 Department of the Interior, Reclamation for water service from the Friant Division of the  
37 CVP.

1 **Non-Friant contractors:** Water districts receiving water from Millerton Lake under  
2 temporary contracts with Reclamation. These districts are not Friant Division long-term  
3 contractors, but are within the Millerton place-of-use and may be CVP or SWP  
4 contractors.

5 **Restoration Flow allocation:** The full natural runoff on the San Joaquin River at Friant  
6 Dam over the course of a year sets the allocations and default releases for each  
7 Restoration Year (March through February), pursuant to Exhibit B of *NRDC, et al., v.*  
8 *Kirk Rodgers, et al.* (Settlement). The timing and schedule of San Joaquin River  
9 Restoration Flows (Restoration Flows) released from Friant Dam are determined based  
10 on recommendations made to Reclamation by the Restoration Administrator, and which  
11 must comply with the constraints identified in the Settlement.

12 **Unreleased Restoration Flows (URF):** URFs are generated at Friant Dam if conditions  
13 prevent the full release of the Restoration Flows allocation in a given year.

14 **Water Contract Year:** Water Contract Year is the period from and including March 1 of  
15 each calendar year through the last day of February of the following calendar year.



# 1.0 Introduction

This Environmental Assessment (EA) analyzes the affected environment and environmental effects of banking, storing, exchanging, transferring, or selling unreleasable San Joaquin River Restoration Flows (Restoration Flows) from Friant Dam with a range of parties, including Central Valley Project (CVP) Friant Division long-term contractors (Friant Contractors) and others.

The following sections describe the background of the San Joaquin River Restoration Program (SJRRP); the conditions and processes whereby Unreleased Restoration Flows (URFs) are available; the potential delivery or use for these flows both within and outside of the Friant Division; the relationship between this EA and other environmental documents or projects; and the U.S. Department of the Interior, Bureau of Reclamation's (Reclamation) authority to conduct the proposed action.

## 1.1 Background

In 1988, a coalition of environmental groups, led by the Natural Resources Defense Council (NRDC), filed a lawsuit challenging the renewal of long-term water service contracts between the United States and Friant Division. A Stipulation of Settlement was reached after more than 18 years of litigation in the matter of *NRDC, et al., v. Kirk Rodgers, et al.* (Settlement). On September 31, 2006, the Settling Parties, including NRDC, Friant Water Users Authority (now represented by the Friant Water Authority), and the U.S. Departments of the Interior and Commerce, agreed on the terms and conditions of the Settlement, which was subsequently approved by the U.S. Eastern District Court of California on October 23, 2006. The Settlement establishes two primary goals:

- **Restoration Goal** – To restore and maintain fish populations in “good condition” in the main stem of the San Joaquin River below Friant Dam to the confluence of the Merced River, including naturally reproducing and self-sustaining populations of salmon and other fish.
- **Water Management Goal** – To reduce or avoid adverse water supply impacts on all of the Friant Contractors that may result from the Restoration Flows provided for in the Settlement.

The planning and environmental review necessary to implement the Settlement is authorized under Section 3406(c)(1) of the Central Valley Project Improvement Act (Public Law 102-575) (CVPIA) and the San Joaquin River Restoration Settlement Act (Act), included in Public Law 111-11, the Omnibus Public Land Management Act of 2009. The Secretary of the Interior (Secretary) is authorized and directed to implement the terms and conditions of the Settlement through the Act. The SJRRP is implementing

the Settlement on behalf of Reclamation, the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), California Department of Water Resources, and California Department of Fish and Wildlife (Implementing Agencies). The Settlement also requires a Restoration Administrator, appointed by the Settling Parties, whose duties include making recommendations to Reclamation for the timing and schedule for releasing Restoration Flows. The SJRRP Program Environmental Impact Statement/Environmental Impact Report (PEIS/R) completed in 2012 analyzed the environmental impacts of program- and project-level actions to implement to Settlement, such as reoperation of Friant Dam, various management activities, and recapture of Restoration Flows downstream from the confluence of the San Joaquin and Merced rivers (Reclamation 2012a).

The following subsections provide additional background and describe specific concepts that are key for understanding the No Action Alternative, Proposed Action, and Alternative A subsequently described and analyzed in this EA.

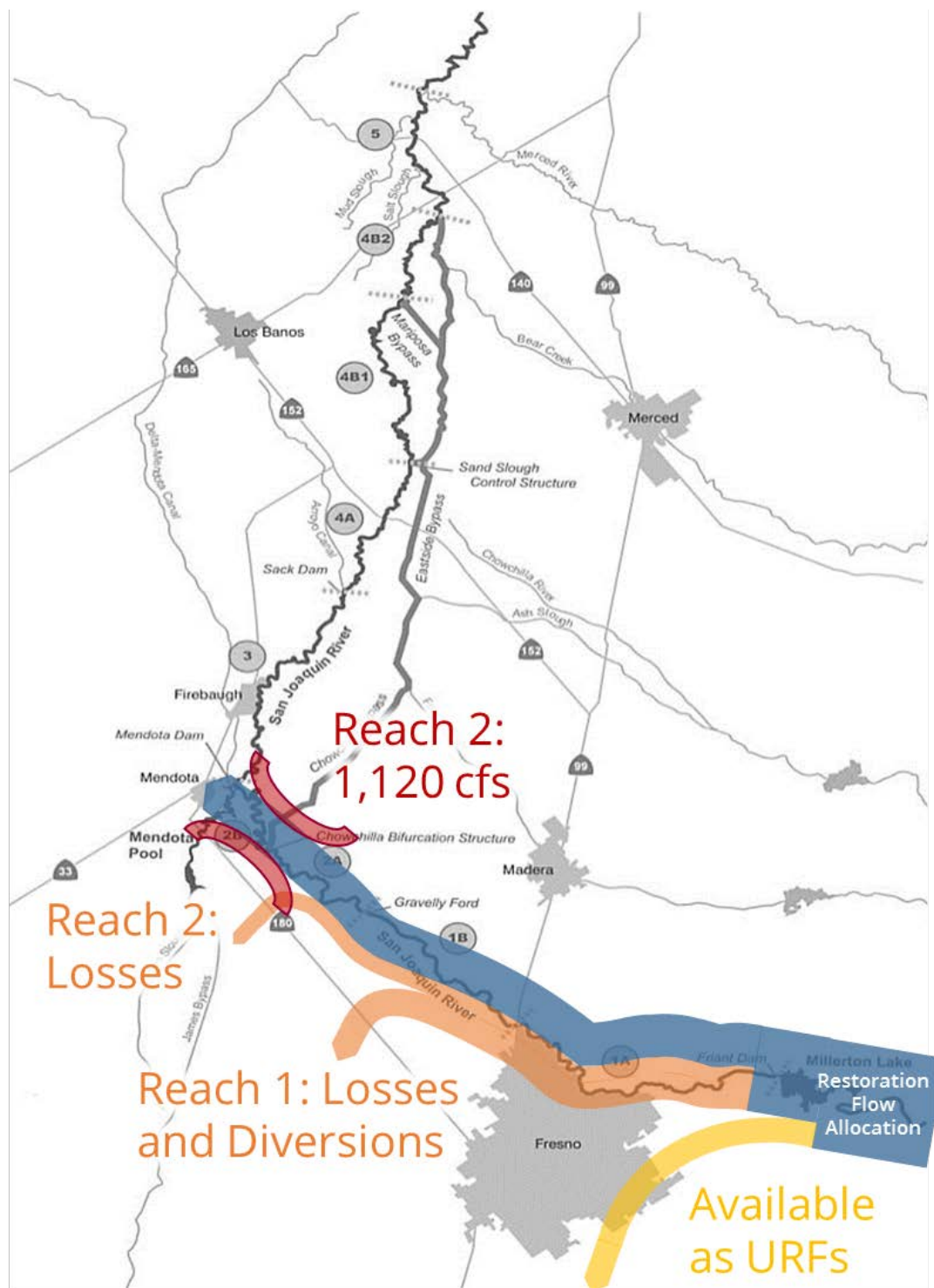
### **1.1.1 Unreleased Restoration Flows**

In any given year, the Restoration Flow allocation is the anticipated volume of water behind Friant Dam that is expected to be available for release into the San Joaquin River to meet the Restoration Goal. This allocation is determined based on the full natural runoff on the San Joaquin River at Friant Dam over the course of a year and also on the guidance provided in the Settlement's Paragraph 13 and Exhibit B and other SJRRP documents, such as the *SJRRP Restoration Flow Guidelines* (Reclamation 2013). However, the volume of flow that is actually released from Friant Dam may be less than the Restoration Flow allocation due to a number of other factors, including downstream demands, channel restrictions and constraints, flood control releases, facility maintenance or construction, and other conditions in the San Joaquin River. These conditions occurred when the SJRRP began the release of Restoration Flows on January 1, 2014, pursuant to Paragraph 13 of the Settlement. The Settlement specifies that under such conditions, where a portion of Restoration Flows is not able to be released in a given year, the flows become URFs and may be transferred (sold), banked, or exchanged within and outside the Friant Division in a manner that best achieves the Restoration Goal.

Figure 1-1 illustrates how constraints in Reach 2B due to concerns about seepage and stability of private levees may result in the generation of URFs. In this example, the portion of the Restoration Flow allocation that (1) cannot safely or responsibly pass through Reach 2, and (2) will not be lost to seepage or diverted in Reaches 1 and 2, cannot be released from Friant Dam. These Restoration Flows are considered URFs.

Notably, URFs are actually a temporary condition for the SJRRP; as channel capacity is improved over time, annual generation of URFs will be reduced. Since its inception, the SJRRP has been addressing the downstream constraints that limit the release of Restoration Flows. These efforts include projects to increase channel conveyance (e.g. channel widening, setback levees, new channel construction) such as through the Mendota Pool Bypass and Reach 2B Improvements Project, and seepage mitigation projects (e.g. interceptor lines, seepage easements). Beyond Reach 2B, in Reaches 3 through 5 there are additional channel capacity and seepage mitigation constraints that

- 1 may also restrict the passage of Restoration Flows and result in the generation of URFs.
- 2 After 2025, it is expected that Restoration Flows will only be limited by downstream
- 3 capacity due to brief and scheduled activities or unexpected events, such as in-stream
- 4 construction projects, sediment removal projects, levee maintenance, or emergencies.



1  
2  
3

**Figure 1-1. Constraints in Reach 2 Can Prevent the Full Release of Restoration Flows, Resulting in URFs at Friant Dam**

URFs may be delivered to Friant Contractors or non-Friant contractors, or made available for release to the San Joaquin River as a supplement to Restoration Flows. To provide certainty about the volume and availability of water for delivery and use, the volumes of water labeled as URFs at the time of the declaration that URFs are available become immediately available in Friant Dam. Paragraph 13(i) does not allow for URFs to interfere with Friant Contractor supplies and, therefore, URF supplies have a lower priority for storage than Friant Division long-term contractor storage supplies at the time that they become available. As a result, URF supplies are subject to spill at the time that they are declared available, and cannot be maintained across contract years in storage.

The priority for Reclamation to enter into practical and mutually acceptable agreements for the delivery of URFs is set forth in subparagraphs (1), (2), and (3) of Paragraph 13(i) of the Settlement:

- **Priority 1(A)** – Bank, store, or exchange URFs with Friant Contractors for future use to supplement future Restoration Flows.
- **Priority 1(B)** – Transfer or sell URFs to Friant Contractors and deposit such funds into the Restoration Fund.
- **Priority 2(A)** – Bank, store, or exchange URFs with non-Friant contractors for future use to supplement future Restoration Flows.
- **Priority 2(B)** – Transfer or sell URFs to non-Friant contractors and deposit such funds into the Restoration Fund.
- **Priority 3** – Release water from Friant Dam during times of the year other than those specified in the applicable hydrograph as recommended by the Restoration Administrator, subject to flood control, safety of dams and operations and maintenance requirements.<sup>1</sup>

After delivery, URFs are subject to the terms of the contracts for their delivery and may be further sold, transferred, exchanged and/or banked within existing water rights.

### 1.1.2 Transfers (Sales)

A transfer is a sale of contract supplies from one water user to another on a temporary basis. As stated above, Paragraph 13(i) allows Reclamation to “transfer or sell” URFs to Friant Contractors and to third parties. As the term “transfer” generally applies to water contractors rather than a water wholesaler like Reclamation, for the purposes of this EA the action of Reclamation delivering URFs in exchange for payment will be referred to as a “sale,” not a transfer.

<sup>1</sup>Priority 3 actions have environmental coverage under the SJRRP PEIS/R, as described in section 1.4, “Incorporation of Related Environmental Documents.”

**1.1.3 Exchanges/Banking**

Exchanges and banking are similar arrangements involving at least two parties, one of whom is providing or selling water with the expectation to receive water in return, often at a different date.

The most common exchange agreement provides a “bucket-for-bucket” exchange, but certain transactions may provide for an unbalanced exchange, for example: where one party accepts a large volume of water during wet conditions and returns a smaller volume during drier conditions. Terms of exchanges depend on the needs and capabilities of the participants. Water exchanges are also used to facilitate the movement of water to overcome physical obstacles, such as the lack of conveyance facilities, to avoid conveyance losses inherent in moving water long distances, as part of water banking transactions, or for other reasons (Reclamation 2015b).

Banking involves storing water in underground water banks subject to recovery at a later date. Banking operations are often dependent upon exchanges where in water banked underground is returned to the banking party at a later date from surface water supplies due to the banker (Reclamation 2015b). Reclamation’s Mid-Pacific Region recently completed water banking guidelines that describe the requirements for storing CVP water in a groundwater bank (Reclamation 2014). Examples of water banks are the Semitropic Groundwater Banking Program in Kern County, the Madera Range Groundwater Bank and the Arvin Edison Water Storage District’s Tejon Water Banking Facility.

**1.1.4 Water Rights and Place-of-Use**

All CVP contractors, including those within the Friant Division, receive water from Reclamation under contracts they hold to certain quantities of water annually. Reclamation, however, holds the actual rights to this water under permits from the State Water Resources Control Board (Water Board). The delivery and use of URFs is thus subject to the existing Millerton place of use (POU) (Figure 1-2) as specified in Reclamation’s water rights permits for the San Joaquin River (Permits 11885, 11886, 11887, and License 1986). This zone includes most, but not all, of the water districts within the San Joaquin Valley. Sale of URFs outside the Millerton POU could require Reclamation to submit petitions to the Water Board for a temporary change in point of diversion and/or place of use.





Note: High-resolution version of this map is available electronically at <http://www.restoresjr.net/restoration-goal/unreleased-restoration-flows/>.

**Figure 1-2. Millerton Place-of-Use Boundaries**

## 1.2 Purpose and Need

Due to channel capacity constraints, the release of Restoration Flows from Friant Dam is anticipated to be limited until 2025. Until the channel constraints in the San Joaquin River and other conditions are addressed to allow full release of Restoration Flows, URFs may be generated at Friant Dam on an annual basis. The purpose of the Proposed Action is to contribute to achieving the goals of the Settlement by implementing mechanisms for sale, exchange, or banking of URF water supplies in accordance with Paragraph 13(i).

## 1.3 Relation of Proposed Action to Settlement

Paragraph 13(i) of the Settlement establishes how to manage any URFs starting in 2014, including but not limited to options to enter into agreements with Friant Contractors or third parties to sell, exchange, or bank URFs. Paragraph 13(i) also specifies the release of water from Friant Dam during times of the year other than those specified in the applicable hydrograph, as determined by the *Restoration Flow Guidelines*. Any mutual acceptable agreements to facilitate the actions under Paragraph 13(i) would be implemented so as not to increase water supply reductions to Friant Contractors beyond what would have been caused by releases to the river in accordance with the hydrograph releases in Exhibit B of the Settlement. Paragraph 13(i) stipulates that URFs should be managed to the best achieve the Restoration Goal.

*13. In addition to the channel and structural improvements identified in Paragraph 11, releases of water from Friant Dam to the confluence of the Merced River shall be made to achieve the Restoration Goal as follows...*

*(i) The Secretary shall commence the Restoration Flows at the earliest possible date, consistent with the Restoration Goal, and the Restoration Administrator shall recommend to the Secretary the date for commencement of the Restoration Flows. In recommending the date for commencement of the Restoration Flows, the Restoration Administrator shall consider the state of completion of the measures and improvements identified in Paragraph 11(a); provided, however, that the full Restoration Flows shall commence on a date certain no later than January 1, 2014. If, for any reason, full Restoration Flows are not released in any year beginning January 1, 2014, the Secretary shall release as much of the Restoration Flows as possible, in consultation with the Restoration Administrator, in light of then existing channel capacity and without delaying completion of the Phase 1 improvements. In addition, the Secretary, in consultation with the Restoration Administrator, shall use the amount of the Restoration Flows not released in any such year by taking one or more of the following steps that best achieve the Restoration Goal, as determined by the Secretary, in such year or future years:*



*(1) First, if practical, enter into mutually acceptable agreements with Friant Division long-term contractors to (A) bank, store, or exchange such water for future use to supplement future Restoration Flows, or (B) transfer or sell such water and deposit the proceeds of such transfer or sale into the Restoration Fund created by this Settlement; or*

*(2) Enter into mutually acceptable agreements with third parties to (A) bank, store, or exchange such water for future use to supplement future Restoration Flows, or (B) transfer or sell such water and deposit the proceeds of such transfer or sale into the Restoration Fund created by this Settlement; or*

*(3) Release the water from Friant Dam during times of the year other than those specified in the applicable hydrograph as recommended by the Restoration Administrator, subject to flood control, safety of dams and operations and maintenance requirements.*

*The Secretary shall not undertake any action pursuant to Paragraphs 13(i)(1) through 13(i)(3) that increases the water delivery reductions to any Friant Division long-term contractor beyond what would have been caused by releases in accordance with the hydrographs (Exhibit B).*

## **1.4 Incorporation of Related Environmental Documents**

This EA incorporates the affected environment and environmental analysis performed in the SJRRP PEIS/R. The PEIS/R was finalized in July 2012 and the corresponding Record of Decision (ROD) was issued on September 28, 2012 (Reclamation 2012a and 2012b). The PEIS/R and ROD analyzed at a project-level the reoperation of Friant Dam to release Interim and Restoration Flows to the San Joaquin River, making water supplies available to Friant Contractors at a pre-established rate, and the recapture of Interim and Restoration Flows at existing facilities within the Restoration Area (defined as the San Joaquin River between Friant Dam and the Merced River) and in the Sacramento-San Joaquin River Delta (Delta).

The PEIS/R and ROD also include program-level actions, which are identified as actions that require the completion of additional analysis pursuant to the National Environmental Protection Act (NEPA) and/or California Environmental Quality Act (CEQA), as appropriate. Some of the program-level actions identified in the document include Settlement Paragraph 13(i) actions to develop agreements for URF sale, exchange, or banking. The PEIS/R acknowledges that such agreements may require additional analysis for NEPA and/or CEQA. The PEIS/R also analyzes, at a program level, the Paragraph 13(i) action to release water from Friant Dam during times of the year other than those

1 specified in the applicable hydrograph as recommended by the Restoration  
2 Administrator.

3 This EA is being prepared for actions anticipated from 2016 through 2025 and will not  
4 involve or assess the construction of new facilities or modification of existing facilities  
5 within or outside the CVP water service areas. Should the URF program extend beyond  
6 2025 or if substantive changes to the URF program are considered, then a new analysis  
7 under NEPA and/or CEQA is anticipated. This EA further incorporates by reference the  
8 following information from the PEIS/R:

- 9       • **Chapter 3.0 – Considerations for Describing the Affected Environment and**  
10       **Environmental Consequences** – This EA incorporates the analysis and  
11       assumptions presented in the chapter. Specifically, analysis of the Study Area for  
12       the PEIS/R as it relates to this action the explanation of significance criteria,  
13       impact comparisons, impact levels, and mitigation measures are incorporated into  
14       the contents of this EA.
- 15       • **Chapter 4.0 – Air Quality** – This EA incorporates the analysis performed to  
16       assess impacts related to air quality, which would include stationary sources in the  
17       CVP/State Water Project (SWP) water service areas. The assessment of impacts  
18       and ultimate determinations, all being less than significant for the operation of the  
19       SJRRP, are also incorporated.
- 20       • **Chapter 5.0 – Biological Resources – Fisheries** – This EA incorporates the  
21       analysis performed to support the assessments for the SJRRP. The incorporated  
22       material from the PEIS/R includes the quantitative and qualitative assessments of  
23       aquatic species impacts as a result of the implementation of the SJRRP,  
24       specifically related to physical processes such as water temperatures, water  
25       quality, flow patterns, fish habitat conditions, pollutant discharge and  
26       mobilization, turbidity, diversions and entrainment, predation, and food web  
27       support in the Delta. The assessment of impacts and determinations for the  
28       operation of the SJRRP are also incorporated.
- 29       • **Chapter 6.0 – Biological Resources – Vegetation and Wildlife** – This EA  
30       incorporates the analysis performed in the PEIS/R related to the assessment of  
31       sensitive species and habitats in or near the project area, including the CVP/SWP  
32       water service areas. The incorporated material includes the investigation of the  
33       impacts of the SJRRP on alteration of special-status plant species or habitats in  
34       the CVP/SWP water service areas. The PEIS/R found that effects on special-  
35       status species, sensitive natural communities, waters of the United States, and  
36       implementation of adopted conservation plans in the CVP/SWP water service  
37       areas would be less than significant.
- 38       • **Chapter 7.0 – Climate Change and Greenhouse Gas Emissions** – This EA  
39       incorporates by reference the analysis of climate change and greenhouse gas  
40       emissions related to Settlement implementation. NEPA and CEQA standards  
41       related to climate change analysis vary greatly and the PEIS/R analysis

1 incorporates the more stringent State of California measures to analyze and model  
 2 greenhouse gas emissions. The explanation of significance criteria, impact  
 3 comparisons, impact levels, and mitigation measures are incorporated into the  
 4 contents of this EA.

5 • **Chapter 9.0 – Environmental Justice** – This EA incorporates by reference the  
 6 discussion of the environmental setting associated with minority groups and  
 7 socioeconomic indicators of well-being (low-income groups) and analysis related  
 8 to environmental justice.

9 • **Chapter 12.0 – Hydrology – Groundwater** – This EA incorporates by reference  
 10 the discussion of groundwater conditions presented in the PEIS/R, and the  
 11 analysis of potential impacts to groundwater levels and quality in the CVP/SWP  
 12 water service areas related to the SJRRP. The chapter describes current and  
 13 historical conditions and explains the aquifer regions surrounding the San Joaquin  
 14 River, many of which suffer from groundwater overdraft, land subsidence, and  
 15 water quality concerns. Generally, both the groundwater levels and groundwater  
 16 quality impacts are anticipated to be potentially significant and unavoidable for  
 17 the SJRRP overall, in association with the reduction of water supply to the Friant  
 18 Contractors.

19 • **Chapter 13.0 – Hydrology – Surface Water Supplies and Facilities**  
 20 **Operations** – This EA incorporates by reference the discussion of operations and  
 21 facilities for water deliveries, storage, and other relevant information related to  
 22 the CVP and SWP presented in this chapter of the PEIS/R, and the analysis of  
 23 potential impacts to surface water supplies and facilities related to the Proposed  
 24 Action. All impacts for these factors associated with the implementation of the  
 25 SJRRP were determined to be less than significant.

26 • **Chapter 14.0 – Hydrology – Surface Water Quality** – This EA incorporates by  
 27 reference the discussion of the environmental setting and the analysis of potential  
 28 impacts related to surface water quality. Of particular relevance to this EA is the  
 29 analysis performed in this chapter related to impacts on water quality in the  
 30 CVP/SWP water service areas related to the Proposed Action. All impacts for  
 31 these factors associated with the implementation of the SJRRP were determined  
 32 to be less than significant or less than significant and beneficial.

33 • **Chapter 16.0 – Land Use Planning and Agricultural Resources** – This EA  
 34 incorporates by reference the discussion of the environmental setting and analysis  
 35 for Land Use Planning and Agricultural Resources.

36 • **Chapter 26.0 – Cumulative Impacts** – This EA incorporates by reference the  
 37 discussion of the effects of the SJRRP in relation to past, present, and reasonably  
 38 foreseeable future actions, specifically in the CVP/SWP water service area. This  
 39 includes discussions of planned actions associated with the collective CALFED  
 40 Water Resources Projects, other water resource projects, resource management  
 41 plans and programs, and the related impact analysis from the SJRRP on

1 cumulative air quality, fisheries, vegetation and wildlife, groundwater, surface  
2 water supplies and facilities operations, surface water quality, and land use  
3 planning. The PEIS/R found the potential for the SJRRP to make a considerable  
4 contribution to a significant cumulative impact for two resource topics that are  
5 relevant to the Proposed Action analyzed in this EA: (1) changes in groundwater  
6 levels and groundwater quality in CVP/SWP water service areas, and (2)  
7 substantial diminishment of agricultural land resource quality and importance  
8 because of altered water deliveries.  
9

## 2.0 Alternatives

This EA evaluates the No Action Alternative, the Proposed Action and Alternative A. The Proposed Action involves the distribution and use of URFs through sales, exchanges, and banking with Friant Contractors, and sales to other contractors within the Millerton POU (non-Friant contractors). Alternative A involves the distribution and use of URFs through sales, exchanges, and banking with Friant Contractors, and sales to non-Friant contractors within the Millerton POU and other contractors outside the Millerton POU. The Proposed Action and Alternative A are subject to the following parameters:

- No native or untilled land (fallow for three consecutive years or more) will be cultivated with the water involved in this action.
- The water will be used for reasonable and beneficial use.
- The delivery and use of URFs will be capped to existing Class 1 and Class 2 supplies and will not increase overall consumptive use.
- The delivery and use of URFs will not lead to any land conversion (e.g. conversion of agricultural use to urban use).
- The delivery and use of URFs will comply with all applicable Federal, State, Local or Tribal laws or requirements imposed for the protection of the environment and Indian Trust Assets (ITA).

### 2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not develop, negotiate, execute, and administer agreements with Friant Contractors, non-Friant contractors, or other parties to sell, exchange, or bank URFs during Water Contract Years 2016-2025.

### 2.2 Proposed Action

Under the Proposed Action, Reclamation would negotiate, execute, and administer agreements to sell water to individual Friant Contractors and non-Friant contractors. Initially, sales to Friant Contractors would occur under the “other water” provision of their existing 9d water repayment contracts. Sales to non-Friant contractors would occur under a similar provision of their 9e water service contracts. In both cases, the agreements would be limited to one-year sales. In the future, Reclamation may conduct sales through another mechanism than the 9d and 9e contracts if it is delegated the authority to use alternate means. These one-year agreements could be amended as needed and redrawn or developed the following year if all parties agreed.

Friant Contractors would receive delivery of URFs through the existing delivery and distribution systems through which they receive their contract supplies. Sales to non-Friant contractors would be facilitated through points of redirection that Reclamation maintains the right for along the San Joaquin River (e.g., Mendota Pool or Arroyo Canal), any direct connections that contractors may have along the Madera or Friant-Kern Canals, or via connections through Friant Contractors' water distribution systems, with their approval. The quantity of sales would be limited by URF availability and by an individual contractor's total CVP contract amount for Friant Contractors (Table 2-1). Per the Settlement, proceeds of such sales shall be deposited into the Restoration Fund to best achieve the Restoration Goal.

**Table 2-1. Annual CVP Contract Supplies for Friant Contractors**

<b>Friant Contractor</b>	<b>Class 1 Supply (AF/year)</b>	<b>Class 2 Supply (AF/year)</b>	<b>Total (AF/year)</b>
Arvin-Edison WSD	40,000	311,675	351,675
Chowchilla WD	55,000	160,000	215,000
Delano-Earlimart ID	108,800	74,500	183,300
Exeter ID	11,100	19,000	30,100
Fresno (city)	60,000	0	60,000
Fresno County	150	0	150
Fresno ID	0	75,000	75,000
Garfield WD	3,500	0	3,500
Gravelly Ford WD	0	14,000	14,000
Hills Valley WD	1,250	0	1,250
International WD	1,200	0	1,200
Ivanhoe ID	6,500	500	7,000
Kaweah Delta WCD	1,200	7,400	8,600
Kern-Tulare WD	0	5,000	5,000
Lewis Creek WD	1,200	0	1,200
Lindmore ID	33,000	22,000	55,000
Lindsay (city)	2,500	0	2,500
Lindsay-Strathmore ID	27,500	0	27,500
Lower Tule River ID	61,200	238,000	299,200
Madera County	200	0	200
Madera ID	85,000	186,000	271,000
Orange Cove (city)	1,400	0	1,400
Orange Cove ID	39,200	0	39,200
Pixley ID	0	0	0
Porterville ID	15,000	30,000	45,000
Saucelito ID	21,500	32,800	54,300
Shafter-Wasco ID	50,000	39,600	89,600
Southern San Joaquin	97,000	45,000	142,000
Stone Corral ID	10,000	0	10,000

**Table 2-1. Annual CVP Contract Supplies for Friant Contractors (contd.)**

<b>Friant Contractor</b>	<b>Class 1 Supply (AF/year)</b>	<b>Class 2 Supply (AF/year)</b>	<b>Total (AF/year)</b>
Tea Pot Dome WD	7,200	0	7,200
Terra Bella ID	29,000	0	29,000
Tri-Valley WD	400	0	400
Tulare County	0	0	0
Tulare ID	30,000	141,000	171,000
<b>TOTAL</b>	<b>800,000</b>	<b>1,401,475</b>	<b>2,201,475</b>

Key:

AF = acre-foot

CVP = Central Valley Project

ID = Irrigation District

WCD = Water Conservation District

WD = Water District

WSD = Water Storage District

Additionally, under the Proposed Action, Reclamation would negotiate, execute, and administer agreements with individual Friant Contractors to exchange or bank URFs for future return to the SJRRP and to support the Restoration Goal. These arrangements are intended to deliver URFs to a participating Friant Contractor one year, in exchange for a fraction of that contractor's water being made available at Friant Dam at a later date. The water made available at Friant Dam would supplement Restoration Flows released into the river, typically during drier conditions. Reclamation has determined that for exchanges to be valuable to the Restoration Program, water will have to be returned to Millerton Lake behind Friant Dam. Because of the physical difficulty that non-Friant contractors would have returning water to Millerton, exchanges directly with these third parties are deemed infeasible for Reclamation to pursue. Initially, exchange/banking agreements would be established as contracts under the Reclamation Project Act of 1939 as authorized by the CVPIA, and would be limited to 10,000 acre-feet and up to five-year terms per contractor. In the future, Reclamation may conduct exchanges/banking through another contracting instrument if it is delegated the authority to use alternate means. Should options be made available where third parties could exchange water and return a portion of water to Millerton Lake, Reclamation would consider exchanges directly with third parties.

The specific sales or exchange/banking agreements, including timing and places of use, will be finalized when URFs are declared available, and will be determined by hydrology and the available Restoration Flow allocation, the Restoration Flow schedule, and other factors depending on the negotiations with the participants. The program will likely evolve based on experiences of Reclamation and Friant and non-Friant contractors during initial years of sales and exchanges, and additional environmental coverage would be obtained if needed to support changes in the program.

For both contractors and for Reclamation, the mechanisms and conditions for receiving and using URF water will be similar to those applied to other water supplies. Under the Settlement, a portion of the Friant Division's contract supplies were dedicated to the Restoration Goal. Restoration Flows, and thus URFs, exist as a reduction to the amounts

that would have otherwise been delivered to Friant Contractors absent the Settlement. Before the Settlement, under most hydrologic conditions Friant Contractors would have likely received volumes of water now considered Restoration Flows as part of their Class 2 deliveries; in wet hydrologic conditions, non-Friant contractors may have received volumes of water now considered Restoration Flows as un-storable, surplus water supplies that were made available under Section 215 of the Reclamation Act. Similarly, in drier hydrologic conditions some of these Restoration Flows would have been delivered as Class 1 contract supplies. Thus, through the proposed action Reclamation would be managing the unreleasable portion of Restoration Flows – and contractors receiving them – consistent with prior experiences and practice; the major changes are in terminology and in revenue generation and use.

The procedures adopted by Reclamation for the management of URFs are described in the Restoration Flow Guidelines. As per the Settlement, the first priority for receipt of URFs would be satisfied within the Friant Division, if practical. Thus, Friant Contractors would be given the first opportunity to acquire URFs before Reclamation considers sales to non-Friant contractors. The availability of URFs would be determined by March 1 based on the Restoration Flow allocation and the Restoration Administrator’s recommended hydrographs. Reclamation, in consultation with the Restoration Administrator, would determine what fraction of URFs would be designated for exchange and what fraction for sales. On March 1, URFs would be made available to Friant Contractors, and then expanded to be available for non-Friant contractors as necessary. Subsequent determinations of URF quantities may be made multiple times between March 1 and May 15. Only rarely would URFs be made available after May 15. URFs would be promptly scheduled for delivery once they are sold or exchanged. URFs would not be carried over into the next Water Contract Year.

The availability of URFs depends on multiple factors, including Restoration Year Type, the Restoration Administrator’s recommended hydrograph, and downstream channel constraints. Table 2-2 shows the potential range of URFs that may be generated depending on the year type.

**Table 2-2. Range of URF Availability by Restoration Year Type**

<b>Water Year Type</b>	<b>Estimated URFs (TAF) @ 300 cfs capacity<sup>1</sup></b>	<b>Estimated URFs (TAF) @ 700 cfs capacity<sup>2</sup></b>	<b>Estimated URFs (TAF) @ 1500 cfs capacity<sup>3</sup></b>
Wet	240-399	120-252	0-165
Normal-Wet	120-240	10-155	0-86
Normal-Dry	60-140	0-74	0-20
Dry	0-40	0-28	0
Critical-High	0-10	0	0
Critical-Low	0	0	0

Notes – Table values are based on both the SJRRP 2015 Revised Framework for Implementation Appendix G and calculations performed by the SJRRP.

Key:  
cfs = cubic feet per second

<sup>1</sup> This channel capacity is expected to be the constraint for part or all of 2016

<sup>2</sup> This channel capacity is expected to be the constraint 2017-2020

<sup>3</sup> This channel capacity is expected to be the constraint 2021-2024

TAF = thousand acre-feet

URF = Unreleased Restoration Flow



1 The rate of decline in generation of URFs over time is principally dependent on the  
2 progress of planned and ongoing channel capacity improvement projects undertaken by  
3 the SJRRP to allow for the full release of Restoration Flows. After 2025, it is expected  
4 that URFs will only be generated when there are temporary or presently unexpected  
5 interruptions to Restoration Flows, such as in-stream construction projects, sediment  
6 removal projects, levee maintenance, and other events that would require river flows to  
7 be curtailed for the purpose of safety.

### 8 **2.2.1 Alternative A**

9 Under Alternative A, Reclamation would implement the Proposed Action but also  
10 negotiate, execute, and administer URF sale agreements and deliver URFs to water users  
11 outside of the Millerton POU. As part of this action, Reclamation would apply for and  
12 obtain from the Water Board a revision to its permit (Permits 11885, 11886, 11887, and  
13 License 1986) to temporarily change the point of diversion and/or place of use to allow  
14 delivery of water from Friant Dam to users outside the Millerton POU.

15 This action could include sales that allow for the delivery of URF water supplies to water  
16 users both in and outside the San Joaquin Valley. Due to geographic proximity and  
17 disposition of existing conveyance facilities and other infrastructure, the most likely  
18 recipient for URFs outside the Millerton POU would be the Metropolitan Water District  
19 of Southern California (MWD), although sales for this alternative would be available to  
20 other contractors and districts that would be facilitated by MWD. In some cases,  
21 depending on proximity to the facilities of the Friant Division and CVP, the recipient of  
22 URFs may or may not take delivery of the water directly. For example: District A is a  
23 SWP contractor with service area boundaries adjacent to District Z, a Friant Contractor.  
24 District A and District Z regularly engage in temporary exchanges and sales of their  
25 supplies, and have existing agreements, interconnections, or shared conveyance facilities  
26 to allow this. Reclamation approves allowing District Z to deliver water to District A  
27 through those shared facilities, although it may be subject to the existing agreements  
28 between District A and District Z.

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## 3.0 Affected Environment and Environmental Consequences

This EA does not analyze resources for which it would be reasonable to assume that no impacts would occur from implementation of the Proposed Action or Alternative A. Both the Proposed Action and Alternative A are very similar to the No Action Alternative in their affected environment and environmental consequences. As such, after comparing the Proposed Action to the No Action Alternative, it was found that there would be no impacts as a result of implementation of the Proposed Action or Alternative A beyond those analyzed and disclosed in the PEIS/R. Similar to the Proposed Action, it was found that implementation of Alternative A would have not impacts beyond those analyzed and disclosed in the PEIS/R, except potentially to Environmental Justice, Land Use and Agricultural resources, and Hydrology – Groundwater, as discussed below. The following section first describes No-Action then the Proposed Action and Alternative A, as compared to the No-Action.

### 3.1 No Action

Under the No Action Alternative, Reclamation would not develop agreements with Friant Contractors, non-Friant contractors, or other parties to sell, exchange, or bank URFs during Water Contract Years 2016-2025. Consistent with the third priority action in Paragraph 13(i) of the Settlement, Reclamation would be compelled to manage URFs by releasing them from Friant Dam into the San Joaquin River on a modified schedule, during times of the year other than specified in the hydrograph as recommended by the Restoration Administrator. However, release of URFs will be constrained by a number of other factors, including downstream demands, channel restrictions and constraints, facility maintenance or construction, and other conditions in the San Joaquin River. As Paragraph 13(i) precludes the interference of URFs with Friant Contractors' water supplies and thus does not allow for URFs to be maintained in storage across contract years, URFs would remain behind Friant Dam only for the duration of the current Water Contract Year. Volumes of URFs not released into the river under the modified schedule or released during flood operations would be incorporated into the subsequent Water Contract Year's supply for the Friant Contractors. URFs are subject to loss during flood operations because, as stipulated in Paragraph 13(i) of the Settlement, they cannot diminish the Friant Contractors water supplies held behind Friant Dam beyond what would have been experienced with full Restoration Flows.

It is speculative to quantify how water supply deliveries would be changed as a result of the URFs not being delivered and thus being incorporated into the subsequent year's Friant contract supplies, as the Friant Contractors have many options on managing their contract supplies and storage of water in Friant Dam. It is also speculative to quantify when and how URFs would be released from Friant Dam into the San Joaquin River under a modified release schedule.

## 3.2 Proposed Action

As stated above, the environmental consequences of the Proposed Action would be very similar to the No Action Alternative.

Capacity restrictions in the San Joaquin River are anticipated to generate URFs at Friant Dam through 2025 only. During this time, under the Proposed Action and the No Action Alternative, the quantity of water that would be generated as URFs would be delivered or released to the San Joaquin River or made available to water users with the same infrastructure used to deliver supplies from Friant Dam to individual Friant Contractors and non-Friant contractors.

During years with flood control operations, the volumes that either spill from Friant Dam or are delivered to Friant and/or non-Friant contractors would be similar for both the No Action Alternative and the Proposed Action; the difference would be in how deliveries are characterized and accounted for from a financial perspective, as funds from sales and exchanges/banking activities would be used to contribute to the Restoration Goal.

During years without flood releases, some volumes generated as URFs would be delivered to Friant Contractors under both the No Action Alternative and the Proposed Action; however, the volumes and timing of the delivery of these supplies differs between the two. For the reasons described earlier, URFs cannot be maintained in storage behind Friant Dam across multiple Water Contract Years and thus, under the No Action Alternative, URFs would be released during flood operations or released into the San Joaquin River under a modified schedule, per Paragraph 13(i). URFs not ultimately released to the river would likely be incorporated into the subsequent Water Contract Year's supply for the Friant Contractors.

The Proposed Action would not include any construction activities and would use existing infrastructure for the delivery of URFs.

The following section discusses how all resource categories are not impacted and are therefore not further analyzed in this EA.

- **Air Quality** – The Proposed Action would not include any construction activities and would use existing infrastructure for the delivery of URFs and therefore would not result in a substantial increase in long-term regional or local emissions. Furthermore, the quantity of water delivered for the Proposed Action would be approximately the same as the quantity of water that would be delivered under the No Action. In addition, no additional pumping is expected to occur. Therefore, emissions from pumping are not anticipated to be different between the Proposed Action and the No Action Alternative. Emissions from the Proposed Action would not be anticipated to violate air quality standards, contribute substantially to an existing or projected air quality violation, or conflict with or obstruct implementation of Air Resources Board and San Joaquin Valley Air Pollution Control District air planning efforts.

- 1       • **Biological Resources** – As no land use changes or additional disturbance would

2       occur as a result of the Proposed Action, no habitat changes would occur that

3       could potentially affect species, including those covered under the Endangered

4       Species Act (ESA) and Migratory Bird Treaty Act (MBTA). Because there would

5       be no land disturbance or land use changes associated with the Proposed Action,

6       and any potential water sales would occur within the bounds of existing 2008

7       USFWS and 2009 NMFS Biological Opinions associated with the coordinated

8       long-term operation of the CVP and SWP and environmental analyses, there

9       would be no effect to vegetation and wildlife including ESA listed species, critical

10      habitats, or species protected by the MBTA. The Proposed Action long-term

11      impacts to water supply or water quality would be the same as the No Action

12      Alternative; therefore it can be assumed that anadromous and Delta fish species,

13      and their designated critical habitat, would not be affected by the action

14      alternatives. While there are sensitive biological communities as identified by the

15      California Natural Diversity Database (CNDDB) and threatened or endangered

16      species identified under ESA potentially occurring in the project area, it is

17      anticipated that there would be no impacts to these species for the Proposed

18      Action as compared with the No Action Alternative.
- 19      • **Climate Change and Greenhouse Gas** – The Proposed Action is a 10-year

20      action and is similar to the No Action Alternative in terms of the quantity of water

21      that would be delivered. Therefore, the Proposed Action would not result in a

22      difference in long-term regional or local emissions. Also, as compared with the

23      No Action Alternative, the Proposed Action would not add to the global inventory

24      of gases that would contribute to global climate change and would not result in

25      increases in greenhouse gas emissions. Additionally, the Proposed Action would

26      not be affected by long-term effects of climate change. The Proposed Action is

27      adaptive to climate change by design, as the availability of Restoration Flows is

28      based on hydrology and the most current runoff probabilities, which are

29      responsive to a changing climate.
- 30      • **Cultural Resources** – The Proposed Action would be an undertaking as defined

31      in Section 301(7) of the National Historic Preservation Act (NHPA) and subject

32      to Section 106 review. The Proposed Action does not include construction and

33      would not modify existing facilities, and would not have the potential to cause

34      effect to historic properties if they are present. The Proposed Action would not

35      include any construction activities and would use existing infrastructure for the

36      delivery of URFs. Therefore, the Proposed Action has no potential to cause

37      effects on historic properties pursuant to 36 Code of Federal Regulations (CFR)

38      Part 800.3(a)(1).
- 39      • **Environmental Justice** – As compared to the No Action Alternative, the

40      Proposed Action would not have a disproportionate impact on minority or low-

41      income populations. The delivery and sales of water in the No Action Alternative

42      and the Proposed Action would be to the same parties, therefore there would be

43      no disproportionate impact to minority or low income populations.

- 1       • **Indian Trust Assets** – While there are known ITAs within the affected  
2       environment, the Proposed Action would have no impact to ITAs.
- 3       • **Land Use and Agricultural Resources** – The Proposed Action would not result  
4       in any land conversion, and no land fallowing or habitat restoration would be  
5       deferred as the actions would deliver the same volume of water as the No Action  
6       Alternative. As described above, no new lands would be brought into agricultural  
7       production as a result of the Proposed Action. Existing land use is not expected to  
8       change as a result of the implementation of the Proposed Action.
- 9       • **Water Resources** – The Proposed Action would result in the same volume of  
10      water delivered under existing water rights and permits as the No Action. Under  
11      the Proposed Action, the quantity of sales would be limited by URF availability  
12      and by a recipient's total CVP contract amount (Table 2-1). These actions are  
13      already covered under existing licenses and permits and would therefore not have  
14      an impact to water resources.

### 15   **3.3 Alternative A**

16   Alternative A is the same as the Proposed Action, except Reclamation would also  
17   develop URF sale agreements with other users outside of the Millerton POU. As stated  
18   above, this action could include sales or exchanges that allow for the delivery of URF  
19   water supplies to water users both in and outside the Millerton POU. In some cases,  
20   depending on proximity to the facilities of the Friant Division and CVP, the recipient of  
21   URFs may or may not take delivery of the water directly. It is speculative to assume  
22   precisely how water users both in and outside of the Millerton POU would use the water,  
23   as the exact transactions that lead to the delivery and use of URFs would depend on both  
24   financial and water supply conditions throughout the Central Valley. However, these  
25   supplies would be used in a manner consistent with how Friant and Non-Friant  
26   contractors use their existing contract water supplies from Friant Dam, and in a manner  
27   consistent with how these supplies would have been used before the SJRRP and  
28   implementation of the Settlement began.

29   Sale of URFs outside the Millerton POU could require Reclamation to submit petitions to  
30   the Water Board for a temporary change in point of diversion and/or place of use.

31   The environmental consequences for Alternative A would primarily be the same as the  
32   Proposed Action described for the majority of the resource categories described above.  
33   However, it is foreseen that there could be potential impacts to both Environmental  
34   Justice, Land Use and Agricultural Resources, and Hydrology - Groundwater. These  
35   potential impacts are described below.

### 3.3.1 Resources of Potential Concern

#### ***Environmental Justice***

The Millerton POU contains minority and low-income populations. Alternative A may lessen the amount of water delivered within the Millerton POU, as compared with the No Action Alternative. Potential reductions in water deliveries could cause fallowing of agricultural land which could affect specific geographic distributions of low-income populations or minority groups due to the proportion of low-income agricultural workers who work on these agricultural lands. This, in turn, could result in negative environmental, social, and economic effects in the local environment area, thereby disproportionately affecting these populations. As compared to the No Action Alternative, Alternative A could have a disproportionate impact on minority or low-income populations within the Millerton POU.

#### ***Land Use and Agricultural Resources***

The Millerton POU contains a vast array of land uses, from open space, to urban to agriculture. Alternative A may lessen the amount of water delivered within the Millerton POU, as compared with the No Action Alternative. Agricultural resources could be negatively impacted, as less water could be delivered within the Millerton POU for agricultural needs. This could result in agricultural land fallowing. Therefore, as compared with the No Action Alternative, Alternative A could have a negative impact on agricultural resources.

#### ***Hydrology – Groundwater***

The Millerton POU is within both the San Joaquin River and Tulare Lake Hydrologic Regions. Both regions are heavily reliant on groundwater and have exhibited groundwater elevation declines. Alternative A may lessen the amount of water delivered within the Millerton POU, as compared with the No Action Alternative. This could result in additional groundwater pumping in the region. Therefore, as compared with the No-Action, Alternative A could have a negative impact on groundwater resources.

The evaluation of the environmental consequences of Alternative A demonstrated that Alternative A, while quite similar to the Proposed Alternative, could result in effects to Environmental Justice, Land Use and Agricultural resources, and Hydrology – Groundwater.

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## **4.0 Consultation and Coordination**

### **4.1 National Environmental Policy Act**

This draft EA has been prepared pursuant to NEPA, which was signed into law in 1969 (42 U.S. Code [USC] Section 4321 et seq.). In addition, it was prepared in accordance with Council on Environmental Quality (CEQ) regulations for implementing NEPA, 40 CFR Parts 1500- 1508, and General Services Administration (GSA) Order ADM 1095.1F. This draft EA assesses if the Proposed Action would cause any significant environmental effects. This draft EA is being circulated for 30 days for public review and comment.

### **4.2 Fish and Wildlife Coordination Act of 1934 (16 USC § 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 Proposed Action does not involve Federal water development projects; therefore, the FWCA does not apply.

### **4.3 Endangered Species Act of 1973 (16 USC § 1531 et seq.)**

Section 7 of the ESA requires Federal agencies, in consultation with the Secretary of the Interior, 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 not have any effect on listed species beyond those analyzed in the previously described applicable biological opinions. The Proposed Action would not change the land use patterns of the cultivated or fallowed fields that do have some value to listed species. In addition, the short duration of the water availability, the requirement that no native lands be converted without consultation with the USFWS, and the stringent requirements for sales under applicable laws would prevent any impact to any federally listed species or any critical habitat.

### **4.4 National Historic Preservation Act (16 USC § 470 et seq.)**

The NHPA of 1966, as amended (16 USC 470 et seq.), requires that federal agencies give the Advisory Council on Historic Preservation an opportunity to comment on the effects of an undertaking on historic properties, properties that are eligible for inclusion in the

1 National Register of Historic Places (NRHP). The 36 CFR Part 800 regulations  
2 implement Section 106 of the NHPA.

3 Section 106 of the NHPA requires federal agencies to consider the effects of federal  
4 undertakings on historic properties, properties determined eligible for inclusion in the  
5 NRHP. Compliance with Section 106 follows a series of steps that are designed to  
6 identify interested parties, determine the APE, conduct cultural resource inventories,  
7 determine if historic properties are present within the APE, and assess effects on any  
8 identified historic properties. The activities associated with the Proposed Action would  
9 include no new ground disturbance, no change in land use, and the use of existing  
10 conveyance features to move and store water. Reclamation has determined that there  
11 would be no potential to affect historic properties by the Proposed Action pursuant to 36  
12 CFR 800.3(a)(1).

#### 13 **4.5 Migratory Bird Treaty Act of 1918 (16 USC § 703 et seq.)**

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

25 The Proposed Action would not change the land use patterns of the cultivated or fallowed  
26 fields that have value to birds protected by the MBTA; therefore, the Proposed Action  
27 would have no effect on birds protected by the MBTA.

#### 28 **4.6 Executive Order 113007 and American Indian Religious** 29 **Freedom Act of 1978 – Indian Trust Assets and Sacred** 30 **Sites on Federal Lands**

31 Executive Order 113007 and the American Indian Religious Freedom Act of 1978 are  
32 designed to protect ITAs, accommodate access and ceremonial use of Native American  
33 sacred sites by Native American religious practitioners, avoid adversely affecting the  
34 physical integrity of such sacred sites, and protect and preserve the observance of  
35 traditional Native American religions. The Proposed Action would not violate these  
36 protections.

## **4.7 Executive Order 12898 – Environmental Justice in Minority and Low-Income Populations**

Executive Order 12898 requires Federal agencies to identify and address disproportionately high and adverse human health and environmental effects of Federal programs, policies, and activities on minority and low-income populations. The Proposed Action has been assessed for potential environmental, social, and economic impacts on minority and low-income populations. Minority and low-income populations would not be disproportionately exposed to adverse effects relative to the benefits of the Proposed Action.

## **4.8 Central Valley Project Improvement Act**

Reclamation's evolving mission was written into law on October 30, 1992, in the form of Public Law 102-575, the Reclamation Projects Authorization and Adjustment Act of 1992. Included in the law was Title 34, the CVPIA. The CVPIA amended previous authorizations of the CVP to include fish and wildlife protection, restoration, and mitigation as project purposes having equal priority with irrigation and domestic water supply uses, and fish and wildlife enhancement as having equal priority with power generation. The Proposed Action would be consistent with CVPIA.

## **4.9 Central Valley Project Long-Term Water Service Contracts**

In accordance with CVPIA Section 3404c, Reclamation is renegotiating long-term water service contracts. As many as 113 CVP water service contracts locations within the Central Valley of California may be renewed during this process. The Proposed Action would be consistent with CVP long-term water service contracts.

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## 1    **5.0 List of Preparers and Reviewers**

### 2    **5.1 U.S. Department of the Interior, Bureau of Reclamation**

- 3    Erika Kegel, Project Manager, San Joaquin River Restoration Program
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- 5    Chad Moore, Flow & Science Coordinator, San Joaquin River Restoration Program
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### 7    **5.2 MWH**

- 8    Meredith Parkin, J.D., Principal Environmental Scientist
- 9    John Roldan, P.E., Principal Water Resources Planner
- 10    Jeffrey Payne, P.E, Principal Water Resources Planner
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- 13

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## 6.0 References

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