

RECLAMATION

Managing Water in the West

Final Environmental Assessment

Recirculation of Recaptured Water Year 2011 San Joaquin River Restoration Program Interim Flows



**U.S. Department of the Interior
Bureau of Reclamation
Mid Pacific Region
Sacramento, California**

May 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

AEWSD	Arvin-Edison Water Storage District
AF	acre-feet
APE	Area of Potential Effects
BO	Biological Opinion
CAA	Clean Air Act
CFR	Code of Federal Regulations
cfs	cubic-feet per second
CVC	Cross Valley Canal
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
DMC	Delta-Mendota Canal
DWR	Department of Water Resources
EA	environmental assessment
EA/IS	Environmental Assessment/Initial Study
EFH	Essential Fish Habitat
ESA	Endangered Species Act
FID	Fresno Irrigation District
FKC	Friant-Kern Canal
FONSI	Finding of No Significant Impact
FWCA	Fish and Wildlife Coordination Act
FWUA	Friant Water Users Authority
GHG	green house gases
ITA	Indian Trust Assets
LTRID	Lower Tule River Irrigation District
MBTA	Migratory Bird Treaty Act
National Register	Nation Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NRDC	National Resources Defense Council
NWR	National Wildlife Refuge
OCID	Orange Cove Irrigation District
Reclamation	Bureau of Reclamation
Settlement	Stipulation of Settlement in <i>NRDC, et al., v. Kirk Rodgers, et al.</i>
SJRRP	San Joaquin River Restoration Program
SJVAB	San Joaquin Valley Air Board
SJVAPCD	San Joaquin Valley Air Pollution Control District

SLR	San Luis Reservoir
SWP	State Water Project
SWRCB	State Water Resources Control Board
TLBWSD	Tulare Lake Basin Water Storage District
TID	Tulare Irrigation District
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
WY	Water Year

Definitions

Central Valley Project (CVP): U.S. Bureau of Reclamation federal water project in California that was originated in 1933 to provide irrigation and municipal water by regulating and storing water in reservoirs and delivering it via a series of canals and pumping facilities throughout the Central Valley. The CVP also provides energy generation and flood control.

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

Class 2 Water: The supply of water which can be made available subject to the contingencies described in the water services contract for delivery from Millerton Lake and the Friant-Kern and Madera Canals in addition to the supply of Class 1 water. Because of its uncertainty as to availability and time of occurrence, such water will be undependable in character and will be furnished only if, as, and when it can be made available.

Friant Division: The combined CVP facilities of Friant Dam, Millerton Lake, Friant-Kern Canal, and Madera Canal that are used to store, delivery, transport, and deliver Project Water to the Friant Division Service Areas.

Friant Division Service Area: The area within which CVP water may be served to Friant Division water users as defined by project authorizations and the State Water Resources Control Board.

Long-Term Contractors: All parties who have water service or repayment contracts for a specified quantity of Class 1 and/or Class 2 water from the Friant Division of the CVP with the United States pursuant to Federal Reclamation law.

Project Water: All water that is developed, diverted, stored, or delivered for the benefit of the Friant Division Service Area available from Millerton Lake in accordance with the statutes authorizing the Friant Division, and in accordance with the terms and conditions of water rights permits acquired pursuant to California Law.

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Section 1 Introduction

Pursuant to the National Environmental Policy Act, the Department of the Interior, Bureau of Reclamation (Reclamation) is preparing this Final Environmental Assessment for the Recirculation of Recaptured Water Year 2011 (Final WY 2011 Recirculation EA or Final EA) San Joaquin River Restoration Program (SJRRP) Interim Flows (Proposed Action). This Final EA is being prepared to analyze the impacts to the human environment from recirculating recaptured WY 2011 Interim Flows. Because Interim Flows and their associated actions are directly related to the Proposed Action, this Final EA incorporates by reference the entire environmental impact assessment performed in the *Water Year 2011 Interim Flows Project Draft Supplemental Environmental Assessment* (WY 2011 Draft Interim Flows SEA), *Water Year 2011 Interim Flows Project Final Supplemental Assessment* (WY 2011 Final Interim Flows SEA), and Finding of No Significant Impact (FONSI).

1.1 Overview of the Final WY 2011 Recirculation EA

The National Environmental Policy Act (NEPA) requires that an EA include the need for the proposed action, the proposed action and alternatives, the probable environmental impacts of the proposed action, and the agencies and persons consulted during the preparation of the EA. Reclamation policy states that the public draft EA and FONSI is placed on the Reclamation NEPA database and a press release is sent to notify the public of the comment period for the document. The Final WY 2011 Recirculation EA includes all comments received on the Draft Environmental Assessment for Recirculation of Recaptured Water Year 2011 San Joaquin River Restoration Program Interim Flows (Draft WY 2011 Recirculation EA) and the responses to those comments. The Final WY 2011 Recirculation EA also includes clarifications to text in the Draft WY 2011 Recirculation EA based on comments received during the comment period in the form of an errata. The Final WY 2011 Recirculation EA serves as the factual support document for the conclusions in the corresponding FONSI.

This Final EA is composed of two documents: the Draft WY 2011 Recirculation EA and this Final WY 2011 Recirculation EA. The Draft WY 2011 Recirculation EA was available for public review on March 9, 2011 and a notice was sent to potentially interested parties for a 16-day public review period that closed on March 25, 2011. This Final WY 2011 Recirculation EA contains a list of commentors on the Draft WY 2011 Recirculation EA and their comment letters. Both volumes of the Draft and Final WY 2011 Recirculation EAs must be read together. This Final WY 2011 Recirculation EA does not repeat the information in the Draft WY 2011 Recirculation EA.

Section 1503.4, Response to Comments, of the Council on Environmental Quality's (CEQ) Regulations on Implementing NEPA, states that if changes in response to comments are minor and are confined to making factual corrections or an explanation of why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position, then the agencies may write them on errata sheets and attach them to the statement instead of rewriting the draft statement. Further, any revisions made to the text do not change the overall environmental impacts released in the document. In such cases only the comments, the responses, and the changes and not the final statement need to be circulated. As

no substantive comments were received related to modification of alternatives or impacts, development and evaluation of alternatives not previously given serious consideration by the agency, or suggestions on improvements or modifications to existing analysis in the document (NEPA CEQ Regulation 1503(a)), the responses to comments are provided as errata and the Draft WY 2011 Recirculation EA is incorporated by reference into this Final WY 2011 Recirculation EA.

Additionally, Section 1502.9 (b), Draft, Final, and Supplemental Statements of the CEQ NEPA Regulations states “Final environmental impact statements shall respond to comments as required in Part 1503 of this chapter. The agency shall discuss at appropriate points in the final statement any responsible opposing view which was not adequately discussed in the draft statement and shall indicate the agency’s response to the issues raised.” Section 1502.9 (c) goes on to state “Agencies: 1) Shall prepare supplements to either the draft or final environmental impact statement is: (i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.” A supplemental document or recirculation of the Draft WY 2011 Recirculation EA has not occurred because no comments posed or options presented in this Final WY 2011 Recirculation EA have been shown to have a bearing or change on the environmental impact findings of the Proposed Action.

Section 2 Comments

This section contains copies of comment letters received from agencies and organizations. Table 2-1 indicates the commenting entity and abbreviation used to identify commentors. Individual comments within a comment letter are delineated by the abbreviation and sequential number (e.g., SLDMWA-1). Responses to comments are provided in Chapter 3 – Responses to Comments and are numbered corresponding to the numbers assigned in the letter. Modifications to the Draft WY 2011 Recirculation EA made in response to comments are included in Chapter 4 of this Final WY 2011 Recirculation EA (the Errata Section of the document).

Table 2:
Summary of Comment Letters Received and
Abbreviations Used to Identify and Respond to Comments

Abbreviation	Agency	Affiliation
SLDWMA*	San Luis & Delta-Mendota Water Authority	Local Agency
SJRECWA	San Joaquin River Exchange Contractors Water Authority and San Joaquin River Resource Management Coalition	Local Agency & Organization
AEWSD*	Arvin Edison Water Storage District	Local Agency
PA	Pacific Advocates	Organization
<i>* Information and attachments included with these comments are included as Attachments A and B to this document.</i>		

2.1 Comments from San Luis & Delta Mendota Water Authority



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ANTHONY J. CORTEZ
BRADLEY B. JOHNSON

R. JAMES DIEPENBROCK
(1929 - 2002)

March 25, 2011

Via Electronic Mail and U.S. Mail
mbanonis@usbr.gov

Ms. Michelle Banonis
Bureau of Reclamation
2800 Cottage Way, MP-170
Sacramento, CA 95825

Re: *San Luis & Delta-Mendota Water Authority's Comments on Draft
EA/FONSI for Recirculation of Recaptured Water Year 2011 San Joaquin
River Restoration Program Interim Flows*

Dear Ms. Banonis:

I write on behalf of the San Luis & Delta-Mendota Water (Authority). The Authority has been very supportive of the San Joaquin River Restoration Program; provided it is implemented consistent with the law. Consistent with that approach, the Authority presents the following comments on the draft environmental assessment for the recirculation of recaptured Water Year 2011, San Joaquin River Restoration Program, Interim Flows (Draft EA) and draft finding of no significant impact (Draft FONSI), because the Draft EA and Draft FONSI do not meet the minimum legal requirements imposed by the National Environmental Policy Act. Specifically, the Draft EA improperly segments the federal action, and, when the whole of the action is considered, the Draft EA does not reflect an accurate or complete description of the action. As a result, the Draft EA and Draft FONSI do not adequately present or consider the overall effect of the proposed action. The Authority hopes that Reclamation will cure those defects and recirculate the Draft EA and Draft FONSI for additional public comment.

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SLDWMA-1

Reclamation Has Improperly Segmented The Interim Flow and Recapture/Recirculation Components Of The San Joaquin River Restoration Program

The proposed action, as that term is defined by the NEPA, is implementation of the San Joaquin River Restoration Program (SJRRP) during Water Year 2011. The SJRRP includes two components, Reclamation (1) releasing water from Friant Dam to meet the "interim flow" schedule, and (2) Reclamation recirculating and recapturing those flows for the benefit of the Friant Division long-term contractors. Unfortunately, analyses in the Draft EA and Draft FONSI are arbitrarily limited to the second element. The Draft EA and Draft FONSI only consider the environmental effects of making the recirculated and recaptured water available to the Friant Division long-term contractors. Such a narrow scope is contrary to law.

Agencies may not segment a major federal action into smaller components to avoid either the application of NEPA, or the preparation of a more detailed assessment of the environmental effects of the overall federal action. (*Coal. on Sensible Transp., Inc. v. Dole*, 826 F.2d 60, 68 (D.C. Cir. 1987)(citing *Taxpayers Watchdog, Inc. v. Stanley*, 819 F.2d 294, 298 (D.C. Cir. 1987).) "Segmentation is to be avoided in order to insure that interrelated projects, the overall effect of which is environmentally significant, not be fractionalized into smaller, less significant actions." (*Town of Huntington v. Marsh*, 859 F.2d 1134, 1142 (2nd Cir. 1988).)

Indeed, to minimize the threat of segmentation, the Council of Environmental Quality's NEPA Regulations contain detailed requirements pertaining to the scope of actions that must be considered. An environmental document must consider "connected actions," "cumulative actions," and "similar actions." (40 C.F.R., § 1508.25.) Actions are "connected" and must be considered in a single environmental document if they: (1) automatically trigger other actions which may require environmental impact statements; (2) cannot or will not proceed unless other actions are taken previously or simultaneously; or (3) are interdependent parts of a larger action and depend on the larger action for their justification. (40 C.F.R., § 1508.25 (a)(1)(i)-(iii).) The Ninth Circuit Court of Appeals applies an "independent utility" test to determine whether multiple actions are so connected as to mandate consideration in a single environmental document. (*Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 969 (9th Cir. 2006).) The crux of the test is whether "each of two projects would have taken place with or

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SLDWMA-1 continued

without the other and thus had 'independent utility.'" (*Ibid.* (citing *Wetlands Action Network v. U.S. Army Corps of Eng'rs*, 222 F.3d 1105, at 1118 (9th Cir. 2000)). See also *Baykeeper v. United States Army Corps of Eng'rs*, 2006 U.S. Dist. LEXIS 67483 (E.D. Ca. 2006); *Stewart Park & Reserve Coalition, Inc. v. Slater*, 352 F.3d 545 at 559 (2nd Cir. 2003)(under independent utility test, "[a] project has been improperly segmented...if the segmented project has no independent utility, no life of its own, or is simply illogical when viewed in isolation").)

In this case, there can be no reasonable dispute that in 2011 provision of interim flows and the recapture and recirculation of those flows are connected. There is no water to recapture and recirculated without the interim flows. (Draft EA, p. 8 (explaining the Draft EA considers "water stored in [San Luis Reservoir] or Millerton Lake as a result of WY 2011 Interim Flows"(emphasis added)).) Those two elements result from a single settlement agreement and a single act of Congress – the San Joaquin River Restoration Settlement Act. (See Draft EA, p. 1.) Consistent with that, Reclamation, through a single process, petitioned the State Water Resources Control Board to modified Reclamation's water rights to allow it to implement both components of the proposed action. (See State Water Board Order WR 2010-0029-DWR, Order 2011-0001-EXEC.)¹ And, if that were not enough to demonstrate the interrelated nature of the interim flow and the recirculation and recapture of that water, Reclamation concedes the point. In the Draft EA, Reclamation writes: "Interim Flows and their associated actions are directly related to the availability of water for recirculation back to the Friant Division long term contractors." (Draft EA, p. 2.) For all of these reasons, Reclamation has unlawfully segmented two elements of the same action. Accordingly, the Draft EA and Draft FONSI do not meet minimum standards set by NEPA.

Reclamation may argue that it cures the segmentation defect by incorporating by reference the Water Year 2011 Interim Flows Project Draft Supplemental Environmental Assessment, Water Year 2011 Interim Flows Project Final Supplemental Environmental Assessment, and related Finding of No Significant Impact. (Draft EA, p. 2.) That attempt, however, would fail. Reclamation does not use the analyses from those prior documents in the Draft EA. Instead, it asks the public to deduce which segments of those prior documents are relevant to and how the analyses add up in the Draft EA and Draft FONSI. Such an approach violates both the spirit and letter of NEPA. (See *City of Carmel-By-The Sea v. United States DOT*, 1998 U.S. Dist. LEXIS 21441 (ND. Cal 1998).)

¹ Attached hereto are copies of Order WR 2010-0029-DWR and Order 2011-0001-EXEC, which are hereby incorporated herein by this reference.

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SLDWMA-2

When The Whole Of The Action Is Considered, The Draft EA And Draft FONSI Fail To Provide An Accurate Description Of The Propose Action

Reclamation has not yet developed important elements of the SJRRP. Most important, Reclamation has not completed its plan for recirculation, recapture, reuse, exchange or transfer of flows provided under the SJRRP. Without that plan, Reclamation cannot adequately describe the proposed action and has not done so in the Draft EA. As a result, Reclamation does not and accurately discuss or analyze impacts of the propose action. It does not and cannot determine if its Draft EA presents a reasonable range of alternatives. And, it does not and cannot adequately support conclusions and findings made in the Draft EA and Draft FONSI,

Under NEPA, an agency must provide an accurate description of the proposed action. An accurate description is necessary to ensure the proposed action's environmental impacts are accurately disclosed and analyzed, and to define the range of alternatives to the proposed action. (See 40 C.F.R., §§ 1502.13 (requiring EIS to contain a statement of purpose and need for the proposed action); 1502.14 (requiring an EIS to "rigorously explore and evaluate" alternatives to the proposed action and the environmental consequences of the action); 1502.16 (requiring the EIS to disclose the proposal's environmental consequences).) As interpreted by the United States Court of Appeals, Ninth Circuit, NEPA requires a full evaluation of site-specific impacts "when a critical decision has been made to act...i.e., when the agency proposes to make an irreversible and irretrievable commitment of the availability of resources to [a] project at a particular site." (*Friends of Yosemite Valley v. Norton*, 348 F.3d 789 at 801-802 (9th Cir. 2003).) The determination of whether a 'critical decision' has been made begins with an accurate description of the [agency's] proposed action." (*Aberdeen & R. R. Co. v. Students Challenging Regulatory Agency Procedures et al.*, 422 U.S. 289, 322 (1975).)

Reclamation is preparing a plan for recirculation, recapture, reuse, exchange or transfer of interim flows. That plan will define, among other things, the criteria to determine the volume of interim flow available for recapture, the pumping facilities where the water will be recaptured, and the priority of use for those facilities. It will also determine priority of use for facilities in which Reclamation might store the recaptured interim flows. At this time, however, Reclamation has not completed that plan. Reclamation therefore has no basis to draw conclusions and make findings presented in the Draft EA and Draft FONSI, including the conclusion that the propose action "would not increase or decrease existing [Central Valley Project] or [State Water Project]

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SLDWMA-2 continued

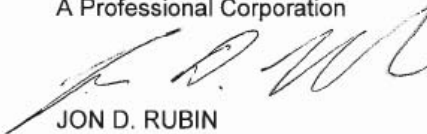
allocations," and the conclusion that "[w]ater moved through this process would not require additional diversions and would not impact the overall existing operation of the water districts or their facilities." (Draft EA, p. 41.)

In sum, before Reclamation can implement the proposed action, it must be able to completely and accurately describe the proposed action. Important elements of the proposed action have not been developed. Thus, Reclamation cannot define all aspects of the proposed action. Without a clear and accurate description of the proposed action, Reclamation has not and cannot identify the environmental impacts of the proposed project, identify a reasonable range of alternatives, or make necessary conclusions and findings.

The Authority looks forward to reviewing a revised and recirculated Draft EA and Draft FONSI.

Very truly yours,

DIEPENBROCK HARRISON
A Professional Corporation



JON D. RUBIN
Attorneys for the San Luis & Delta-Mendota Water
Authority

JDR:jis

2.2 Comments from San Joaquin River Exchange Contractors Water Authority and San Joaquin River Resource Management Coalition

Banonis, Michelle

From: Skarloken, Donna L. [DLSkarloken@duanemorris.com] on behalf of Berliner, Thomas M. [TMBerliner@duanemorris.com]
Sent: Friday, March 25, 2011 4:16 PM
To: Banonis, Michelle
Cc: 'schedester@sjrecwa.net'; 'cotnlady@inreach.com'; 'jrubin@diepenbrock.com'; Berliner, Thomas M.; Ansley, Jolie-Anne S.
Subject: Comments of the San Joaquin River Exchange Contractors Water Authority
Attachments: Letter to Michelle Banonis 03/25/2011 - Comments of the San Joaquin River Exchange Contractors Water Authority.PDF

Dear Ms. Banonis:

Attached are the comments to the draft EA for the recirculation of interim flows for WY2011. We wish to call your attention to the excerpt from our comment letter. We request that this be given your immediate attention.

5. Failure to Provide All Documents Relied Upon

SJRECWA-1

The bibliography for the draft EA cites documents not publically available. Counsel for the Exchange Contractors and RMC made a request to Reclamation for two documents that are references to the draft EA. Counsel was informed that these documents were internal agency documents and would not be made available to the public. The documents requested are listed on pages 56 of the draft EA and are:

1. Reclamation (U.S. Bureau of Reclamation) June 4, 2010. Letter to Friant Division Board of Directors titled *Request for Written Scenarios for the Recirculation of Friant Recaptured Water Stored in San Luis Reservoir (Recirculation) – San Joaquin River Restoration Program – Central Valley Project – Friant Division*
2. Reclamation (U.S. Bureau of Reclamation) June 17, 2010. Letter to Friant Division Board of Directors titled *Results of Scenario Review for the Recirculation of Friant Recaptured Water Stored in San Luis Reservoir (Recirculation) – San Joaquin River Restoration Program – Central Valley Project – Friant Division*

It is improper for Reclamation to reference documents in an EA and not make them publically available when so requested. 40 CFR 1502.21 provides:

Agencies shall incorporate material into an environmental impact statement by reference when the effect will be to cut down on bulk without impeding agency and public review of the action. The incorporated material shall be cited in the statement and its content briefly described. No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference.

In light of Reclamation's erroneous refusal to provide referenced material, we hereby request the subject documents and further request that if they prove to be material to our comments that we be provided an opportunity to amend our comments accordingly. The other alternative for Reclamation is

to renote the draft EA and provide a comment period that includes the availability of all referenced documents. This latter measure would be in strict compliance with the regulation cited above.

Very truly yours,

Thomas M. Berliner
Duane Morris LLP

For more information about Duane Morris, please visit <http://www.DuaneMorris.com>

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March 25, 2011

VIA E-MAIL – MBANONIS@USBR.GOV

Michelle Banonis
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Re: **Comments of the San Joaquin River Exchange Contractors Water Authority and the San Joaquin River Resource Management Coalition to the Draft Environmental Assessment, Recirculation of Recaptured Water Year 2011 San Joaquin River Restoration Program Interim Flows and the Draft Finding of No Significant Impact.**

Dear Ms. Banonis:

Thank you for providing the opportunity to the San Joaquin River Exchange Contractors Water Authority ("Exchange Contractors")¹ and the San Joaquin River Resource Management Coalition ("RMC") to respond to the Bureau of Reclamation's ("Reclamation") Draft Environmental Assessment, Recirculation of Recaptured Water Year 2011 San Joaquin River Restoration Program Interim Flows ("Draft EA") and the Draft Finding of No Significant Impact ("Draft FONSI").

The San Joaquin River Restoration Program ("SJRRP") implements the stipulated settlement in *NRDC v. Rodgers*,² and the related program authorized by Congress through the San Joaquin River Restoration Settlement Act, PL 111-11 ("SJRRS Act" or "Act"). The Settlement established two interrelated goals for the SJRRP:

¹ The San Joaquin River Exchange Contractors Water Authority is a public entity comprised of four separate California water agencies: Central California Irrigation District; San Luis Canal Company; Firebaugh Canal Water District; and the Columbia Canal Company.

² Stipulation of Settlement dated September 13, 2006 in *NRDC v. Rodgers*, Case No. CIV. S-88-1658-LKK/GGH ("Settlement")

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- Restoration Goal: “to restore and maintain fish populations in “good conditions” 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 to all of the Friant Division long-term contractors that may result from the Interim Flows provided for in this Settlement.”³

The Restoration Goal and the Water Management Goal must be implemented in such a manner that there are no significant impacts on third parties, including, inter alia, the Exchange Contractors and the RMC. (SJRRS Act Sections 10004, 10009 and 10011)

As part of implementing the Settlement and achieving the Water Management Goal, paragraph 16(a) of the Settlement requires the development and implementation of a plan for recirculation, recapture, reuse exchange or transfer of Interim Flows and Restoration Flows in order to reduce or avoid impacts to water deliveries to all of the Friant Division long-term contractors caused by the Interim Flows and Restoration Flows necessary to the Restoration Goal.⁴ The SJRRS Act directs the Secretary to implement the terms of Settlement paragraph 16, subject to, among other things, applicable provisions of California Water law.⁵ The Draft EA and the Draft FONSI here are not sufficient for or equivalent to the plan directed by paragraph

³ Settlement, ¶ 2.

⁴ Settlement, ¶ 16. In order to achieve the Water Management Goal, immediately upon the Effective Date of this Settlement, the Secretary, in consultation with the Plaintiffs and Friant Parties, shall commence activities pursuant to applicable law and provisions of this Settlement to develop and implement the following:

(a) A plan for recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows for the purpose of reducing or avoiding impacts to water deliveries to all of the Friant Division long-term contractors caused by the Interim Flows and Restoration Flows. The plan shall include provisions for funding necessary measures to implement the plan. The plan shall:

(1) ensure that any recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows shall have no adverse impact on the Restoration Goal, downstream water quality or fisheries;

(2) be developed and implemented in accordance with all applicable laws, regulations and standards. The Parties agree that this Paragraph 16 shall not be relied upon in connection with any request or proceeding relating to any increase in Delta pumping rates or capacity beyond current criteria existing as of the Effective Date of this Settlement;

(3) be developed and implemented in a manner that does not adversely impact the Secretary's ability to meet contractual obligations existing as of the Effective Date of this Settlement; and

(4) the plan shall not be inconsistent with agreements between the United States Bureau of Reclamation and the California Department of Water Resources existing on the Effective Date of this Settlement, with regard to operation of the CVP and State Water Project.

⁵ PL 111-11, § 10004(a)(4)

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16(a) of the Settlement. Rather, these documents are solely for recirculation of recaptured water year 2011 (WY2011) Interim Flows.

I. OVERALL COMMENTS

1. Improper Segmentation of Restoration Goal from Water Management Goal. SJRECWA-2

By issuing a Draft EA (and FONSI) solely for the recirculation of recaptured WY2011 Interim Flows, Reclamation is improperly segmenting parts of the SJRRP from a complete environmental analysis of the project as a whole in violation of NEPA and the SJRRS Act. The Restoration Goal and Water Management Goal are inextricably linked⁶ and the SJRRS Act requires the Secretary to analyze all impacts that may result from its actions under the Act.⁷ NEPA similarly requires that connected, cumulative or similar actions, must be assessed together in a single environmental document.⁸ For example, actions that are interdependent parts of a

⁶ PL 111-11, § 10004(a)(4) recognizes that the Water Management Goal is an integral part of the Settlement and is co-joined with the Restoration Goal as objectives of actions taken to restore the San Joaquin River.

§ 10004(a)(4): "The Secretary of the Interior is hereby authorized and directed to implement the terms and conditions of the Settlement in cooperation with the State of California, including the following measures as these measures are prescribed in the Settlement: (4) Implement the terms and conditions of paragraph 16 of the Settlement related to the recirculation, recapture, reuse, exchange, or transfer of water released for Restoration Flows or Interim Flows, for the purpose of accomplishing the Water Management Goal of the Settlement...)

⁷ PL 111-11, § 10006(a)(1), which requires the Secretary to comply with "all applicable Federal and State laws, rules, and regulations, including the National Environmental Policy Act" (NEPA). Section 10006(a)(2) directs the Secretary "to initiate and expeditiously complete applicable environmental reviews and consultations as may be necessary to effectuate the purposes of the Settlement." See also Settlement, ¶ 28 stating the same requirements and PL 111-11 § 10004(d) requiring the Secretary to identify and mitigate impacts prior to the implementation of decisions or agreements needed to implement the Settlement.

⁸ 40 C.F.R. § 1508.25(a) Scope consists of the range of actions, alternatives, and impacts to be considered in an environmental impact statement. The scope of an individual statement may depend on its relationships to other statements (Sec. Sec. 1502.20 and 1508.28). To determine the scope of environmental impact statements, agencies shall consider 3 types of actions, 3 types of alternatives, and 3 types of impacts. They include:

(a) Actions (other than unconnected single actions) which may be:

- (1) Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:
 - (i) Automatically trigger other actions which may require environmental impact statements.
 - (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.
 - (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.
- (2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.
- (3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. An agency may wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement

SJRECWA-2(continued)

larger action and depend on the larger action for their justification are “connected actions.”⁹ CEQ regulations further provide that agencies are to prepare EISs on “broad Federal actions” such as the adoption of new agency programs, so that they are “timed to coincide with meaningful points in agency planning and decision making.”¹⁰ Agencies are encouraged to tier such program environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review.¹¹

SJRECWA-3

Reclamation has long intended to issue a Program Environmental Impact Statement/Environmental Impact Report (“PEIS”) for the entire SJRRP prior to project specific environmental reviews. To date it has not done so, though it has conceded that such a review is necessary.¹² The law does not permit a lead agency to avoid NEPA compliance simply due to delays on its part.¹³ Rather, NEPA requires that the actions be delayed until the appropriate environmental documentation has been completed regardless of the reasons for such delay.¹⁴ Here, Reclamation cannot avoid its obligation to conduct a comprehensive review of the SJRRP through a PEIS by conducting limited annual reviews of program segments.¹⁵ The recirculation of recaptured Interim Flows is a “connected” action to the SJRRP under NEPA that has no independent utility outside of the context of the SJRRP.¹⁶

⁹ *Id.*

¹⁰ 40 C.F.R. § 1502.4(b); As appropriate, agencies are to consider employing scoping, tiering and other methods to relate broad and narrow actions and to avoid duplication and delay. 40 C.F.R. § 1502.4(d)

¹¹ 40 C.F.R. § 1502.20

¹² Section 3.10 of the EA states the PEIS will be issued in the first quarter of 2011. This appears to be a carryover from the last EA. According to Reclamation personnel, a draft is currently scheduled to be released in April 2011. The Final EA should be updated accordingly.

¹³ See *Forest Serv. Emples. For Envtl. Ethics v. United States Forest Serv.*, 397 F.Supp.2d 1241, 1253-54 (D. Mont. 2005) (explaining that federal agencies cannot circumvent NEPA by delaying the commitment of resources until it is too late)

¹⁴ See *Natural Resources Defense Council, Inc v. Morton*, 337 F.Supp. 170, 172 (D.C. Cir. 1972) (holding that concerns about project delays should not be permitted to eviscerate the fundamental requirements of NEPA)

¹⁵ See *Cal. Ex rel. Lockyer v. United States Dep’t of Agric.*, 459 F.Supp.2d 874, 908 (N.D. Cal. 2006) (finding that limited NEPA reviews are not a substitute for a programmatic analysis of environmental effects); see also *Thomas v. Peterson*, 753 F.2d 754, 758 (9th Cir. 1985) (stating that not to require related actions to be considered in a single EIS “would permit dividing a project into multiple ‘actions,’ each of which individually has an insignificant impact, but which collectively have a substantial impact.”)

¹⁶ Segmentation of environmental review is improper when the segmented project has “no independent justification, no life of its own, or is simply illogical when viewed in isolation.” *One Thousand Friends of Iowa v. Mineta*, 364 F.3d 890, 894 (8th Cir. 2004). Under the independent utility test, the crux is whether “each of two projects would

SJRECWA-3(continued)

Once the PEIS for the SJRRP is complete, it would be proper to “tier” off and address various segments of the SJRRP. Here, however, the Draft EA simply states in Section 3.10 (Cumulative Impacts) that the Program EIS/EIR, which has not yet been issued, will discuss “[a]reas of potential concern, such as water supply impacts, recapture mechanisms, and cumulative impacts.” Such segmenting of individual programs violates NEPA and deprives the public and stakeholders of the opportunity to meaningfully comment on the SJRRP, in particular on its cumulative impacts.

SJRECWA-4

2. Improper Segmentation of Recapture of Flows from Recirculation of Flows.

Further, environmental review of the recirculation of recaptured Interim Flows separate from the environmental review of the recapture of Interim Flows as well as the overall program of release of Interim Flows is also improper segmentation of environmental review in violation of NEPA.¹⁷ An agency may not divide a project into lesser segments in order to truncate its environmental review.¹⁸ Recirculation of recaptured Interim Flows would not occur in the absence of the Interim Flow program and are together interdependent parts of a larger action and depend on that larger action for their justification making them connected actions under 40 C.F.R. § 1508.25 that should be analyzed together. There is no independent utility of the recirculation of recaptured Interim Flows, a point Reclamation concedes in Section 1.2 of the Draft EA stating that “Interim Flows and their associated actions are *directly related* to the availability of water for recirculation back to the Friant Division long-term contractors.”¹⁹ Here, addressing the impacts of the recirculation portion in a separate environmental review from the

have taken place with or without the other and thus has independent utility.” *Great Basin Mine Watch v. Hankins*, 456 F.3d 955, 969 (9th Cir. 2006). “When one of the projects might reasonably have been completed without the existence of the other, the two projects have independent utility and are not ‘connected’ for NEPA purposes.” *Id.*

¹⁷ *Thomas*, 753 F.2d at 758. In *Thomas*, a group of plaintiffs sought to prohibit the U.S. Forest Service from constructing a road designed to facilitate timber extraction. *Id.* at 755. The Forest Service developed an EA for the road that discussed only the environmental impacts of the road itself, but did not consider the impacts of the timber sales that the road was designed to facilitate. *Id.* at 757. Subsequently, the Forest Service issued EAs for three separate timber sales. *Id.* Each EA covered only the effects of a single timber sale – none discussed cumulative impacts of the sales or of the sales and the road. *Id.* The Ninth Circuit held that the road construction and the timber sales were connected actions that should have been considered together in a single EIS. *Id.* at 759. The court stated that agencies may not improperly “segment” projects in order to avoid preparing an EIS and instead must consider related actions in a single EIS. *Id.* at 758-59.

See also Alpine Lakes Protection Society v. Schlappfer, 518 F.2d 1089, 1090 (9th Cir. 1975) (noting that “characterizing any piecemeal development of a project as ‘insignificant’ merits close scrutiny to prevent the policies of NEPA from being nibbled away by increments.”)

¹⁸ *Id.*

¹⁹ *See Great Basin Mine Watch*, 456 F.3d at 969.

recapture of the Interim Flows **and** the release of the Interim Flows fails to provide a comprehensive review of the entirety of the proposed action.

SJRECWA-4 (continued)

3. Improper Segmentation of a Multi-year Program into a Single Year Program.

SJRECWA-5

Similarly, Reclamation improperly segments the environmental review of the recirculation of recaptured Interim Flows (as it does the release and recapture of the Interim Flows) into multiple individual years instead of an environmental review of the entire “plan” for recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows required by paragraph 16 of the Settlement and section 10004(1)(4) of the Act, which envisioned a continuing program. The recirculation involves essentially the same source of water (Interim Flows), to be recaptured at the same points of diversion, and recirculation by the same suite of mechanisms (transfers, exchanges etc...) to the same parties (Friant Division and Westside CVP contractors²⁰). As discussed above, such segmentation or piecemealing is prohibited by NEPA and fails to provide a comprehensive review of an entire action, in particular cumulative impacts.²¹

4. Improper Designation of Single Year Water Transfer and Recirculation Versus Multi-Year Transfer.

SJRECWA-6

Inasmuch as the recirculation of recaptured Interim Flows (and eventually Restoration Flows) is a multiple year program, the continued reliance on the exemption for temporary transfers provided by Water Code section 1725 et seq. is inappropriate. The issue of single versus multi-year transfers was addressed by the State Water Resources Control board (“SWRCB”) in *In the Matter of Permits 15026, 15027, and 15030 on Applications 5632, 15204, and 15574 of Yuba County Water Agency*.²² In that case, the SWRCB determined that multiple single year transfers are permitted under Water Code § 1725 only if there are significant differences regarding place of use and purpose of use and if the transfers of water are effective for no more than one year. Otherwise, multiple single year transfers will be treated as a long-term transfer under Water Code section 1735 et seq. Reclamation has acknowledged that it will seek to undertake yet another one year transfer similar to this year’s program.²³ Reclamation is subject to state water law and therefore these water transfers must comply with the California Water Code.

²⁰ As part of last year’s program Reclamation/Friant transferred water to the San Luis Water District.

²¹ See *Thomas v. Peterson*, 753 F.2d at 758.

²² 1989 Cal. ENV LEXIS 41 (Cal. ENV. 1989)

²³ Personal communication with Reclamation staff.

SJRECWA-7

5. Failure to Provide All Documents Relied Upon

The bibliography for the draft EA cites documents not publically available. Counsel for the Exchange Contractors and RMC made a request to Reclamation for two documents that are references to the draft EA. Counsel was informed that these documents were internal agency documents and would not be made available to the public. The documents requested are listed on pages 56 of the draft EA and are:

1. Reclamation (U.S. Bureau of Reclamation) June 4, 2010. Letter to Friant Division Board of Directors titled *Request for Written Scenarios for the Recirculation of Friant Recaptured Water Stored in San Luis Reservoir (Recirculation) – San Joaquin River Restoration Program – Central Valley Project – Friant Division*
2. Reclamation (U.S. Bureau of Reclamation) June 17, 2010. Letter to Friant Division Board of Directors titled *Results of Scenario Review for the Recirculation of Friant Recaptured Water Stored in San Luis Reservoir (Recirculation) – San Joaquin River Restoration Program – Central Valley Project – Friant Division*

It is improper for Reclamation to reference documents in an EA and not make them publically available when so requested. 40 CFR 1502.21 provides:

Agencies shall incorporate material into an environmental impact statement by reference when the effect will be to cut down on bulk without impeding agency and public review of the action. The incorporated material shall be cited in the statement and its content briefly described. No material may be incorporated by reference unless it is reasonably available for inspection by potentially interested persons within the time allowed for comment. Material based on proprietary data which is itself not available for review and comment shall not be incorporated by reference.

In light of Reclamation's erroneous refusal to provide referenced material, we hereby request the subject documents and further request that if they prove to be material to our comments that we be provided an opportunity to amend our comments accordingly. The other alternative for Reclamation is to renounce the draft EA and provide a comment period that includes the availability of all referenced documents. This latter measure would be in strict compliance with the regulation cited above.

II. SPECIFIC COMMENTS TO THE DRAFT ENVIRONMENTAL ASSESSMENT

1.2 Purpose and Need

SJRECWA-8

1. Section 1.2 states that "Because Interim Flows and their associated actions are directly related to the availability of water for recirculation back to the Friant Division long-term contractors, the *Water Year 2011 Interim Flows Project Draft Supplemental Environmental Assessment* (WY 2011 Draft SEA), *Water Year 2011 Interim Flows Project Final Supplemental Assessment* (WY 2011 Final SEA), and FONSI is hereby incorporated by reference into this document." Exchange Contractors and RMC agree that Interim Flows and their associated actions are directly related to the availability of water for recirculation back to the Friant Division long-term contractors. The Exchange Contractors and RMC hereby incorporate herein as though fully set forth their comments, dated July 23, 2010, to the WY 2011 Draft SEA and Draft FONSI.²⁴

1.3 Scope

SJRECWA-9

2. The Draft EA states that "[t]he WY 2010 EA/IS, the WY 2011 Supplemental EA and the WY 2011 FONSI, which includes environmental analysis for the recapture of Interim Flows, are incorporated by reference into this document and will not be discussed at length in this EA." This EA apparently addresses only the "environmental effects of completing the requirement of returning the recaptured water to the Friant contractors for WY 2011." Since the environmental analysis for the recapture of Interim Flows is incorporated but not discussed in this Draft EA, Exchange Contractors and RMC hereby incorporate as though fully set forth their comments to the draft WY 2010 EA/IS and the draft WY 2011 Supplemental EA and WY 2011 FONSI.²⁵

Section 2.2 Proposed Action

SJRECWA-10

3. **Incomplete or Inaccurate Project Description.** The Draft EA provides no useful detail regarding the Proposed Action. In section 2.2, the Draft EA states that recaptured water "will be available at San Luis Reservoir through direct deliver to the Friant Division or through transfers and exchanges between Friant contractors and non-Friant contractors." It goes on to state that "[t]he Federal action would involve Reclamation entering into various delivery, transfer, or exchange agreements to recirculate the recaptured water to the Friant contractors. The deliveries, transfers, and exchanges would be completed

²⁴ Reclamation is in possession of these comments. For convenience, a copy of the comments of the Exchange Contractors and RMC, dated July 23, 2010, to the WY 2011 Draft SEA and Draft FONSI is available at <http://www.restoresjr.net/comments/index.html>

²⁵ Reclamation is in possession of these comments. For convenience, a copy of the Exchange Contractors and RMC, may be found at http://www.usbr.gov/mp/nepa/documentShow.cfm?Doc_ID=4390

SJRECWA-10 continued

through several mechanisms utilizing potential Federal, state, and local facilities.” These “several mechanisms” are largely unexplained. There is no information concerning exactly how such deliveries, transfers or exchanges will work to physically deliver the water, in particular to the Friant contractors. There is no information regarding exactly which exact facilities or canals or pumping plants will be involved or how much energy will be consumed. There is some information in Section 3.1 providing an overview of the water resources of South-of-Delta (“SOD”) contractors, Friant contractors and Metropolitan Water District (“MWD”), but it is sparse, sometimes incomplete, and does not tie such information back to the Proposed Action. In short, there is not enough information provided to allow an analysis of the environmental effects of such deliveries, transfers or exchanges contemplated by the Proposed Action, let alone the cumulative effects.

Section 3.1.1.1 South-of-Delta Contractors

SJRECWA-11

4. The Exchange Contractors are omitted from the list on pages 10-11 of the water agencies, but included in the narrative description of each district’s water resources on page 19.

Section 3.1.1.3 Groundwater Resources

SJRECWA-12

5. The discussion of groundwater resources in section 3.1.1.3 only provides information regarding groundwater levels until approximately 2000, citing a 2003 Department of Water Resources Bulletin. There is no information or discussion concerning groundwater levels in the last ten years or current groundwater levels despite the fact that more recent studies are available. For example, a 2009 professional paper issued by the USGS²⁶ and, more recently, a groundwater study of California’s Central Valley published in the journal Geophysical Research Letters on February 5, 2011.²⁷ Accordingly, the section is incomplete and should be revised to incorporate groundwater data available for the last ten years.

Section 3.1.2.2 Proposed Action

SJRECWA-13

6. On page 42, the Draft EA states that “[i]t can be predicted that the Friant contractors, MWD, and SOD contractors would not experience any loss or gain in water supply as a result of this action.” The Draft EA does not present any data supporting this conclusion. Moreover, the issue of “crediting” of flows stored in SLR has been one of contention. To

²⁶ Faunt, C.C., ed., 2009, Groundwater Availability of the Central Valley Aquifer, California: U.S. Geological Survey Professional Paper 1766, 225 p. Available at <http://pubs.usgs.gov/pp/1766/>

²⁷ Famiglietti, J. S. et al. 2011. Satellites measure recent rates of groundwater depletion in California’s Central Valley. Geophysical Research Letters, Vol. 38, L03403.

simply state in conclusory fashion that there will be no gain or loss of supply does not meet the requirements of CEQ Guideline 40 C.F.R. 1502.24²⁸.

SJRECWA-13 continued

3.10 Cumulative Impacts

SJRECWA-14

7. Section 3.10 states that “[i]t is speculation to assume what types of contracts, transfers, or exchanges will occur for WY 2011 or what quantities would be available for transfer based on water year type designation.” However, the Draft EA goes on to conclude that “[t]he proposed transfers, when added to other actions, do not contribute to significant increases or decreases in environmental conditions” and find that there would be no cumulative impacts caused by the Proposed Action. As noted above in Comment II.3, the Draft EA provides little detail regarding the actual transfers, exchanges, or deliveries contemplated by the Proposed Action making effective environmental review, in particular for cumulative effects, difficult if not impossible. Without such additional details, it is impossible to conclude that there are no cumulative impacts caused by the Proposed Action.

III. SPECIFIC COMMENTS TO THE DRAFT FINDING OF NO SIGNIFICANT IMPACT

1. The FONSI concludes on page 1 that this is not a major federal action that would significantly affect the quality of the human environment. As noted above in the Overall Comments, the environmental review for the recirculation of recaptured Interim Flows improperly segments or piecemeals the environmental analysis in violation of NEPA by not tiering the review off of a PEIS for the SJRRP as a whole; by segmenting the review separately from the review of the Interim Flows and recapture of Interim Flows, and by segmenting the environmental review into individual years for what is clearly a continuing program mandated by paragraph 16 of the Settlement and section 10004(a)(4) of the Act.

SJRECWA-15

Proposed Action

SJRECWA-16

2. The FONSI includes the same description of the Proposed Alternative contained in the Draft EA. Exchange Contractors and the RMC provided comments above on the lack of detail regarding the Proposed Alternative which is addressed by Comment II.3 above.

²⁸ 40 C.F.R. 1502.24 provides: Agencies shall insure the professional integrity, including scientific integrity, of the discussions and analyses in environmental impact statements. They shall identify any methodologies used and shall make explicit reference by footnote to the scientific and other sources relied upon for conclusions in the statement. An agency may place discussion of methodology in an appendix.

Michelle Banonis
March 25, 2011
Page 11

Duane Morris

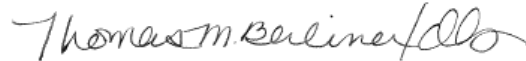
3. On page 4, the FONSI states that the public review period for the draft EA/FONSI began on March 8, 2011. It appears that the correct start date was March 9, 2011 per http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=7356 SJRECWA-17

Findings

4. Under "Water Resources," it states "[t]he Friant contractors or SOD contractors would not experience any loss or gain in water supply as a result of the Proposed Action." The Exchange Contractors and the RMC addressed the identical statement above in Comment II.6. SJRECWA-18
5. Under "Cumulative Impacts," the analysis concludes that there would be no cumulative impacts caused by the Proposed Action. The Exchange Contractors and the RMC addressed this same finding by the Draft EA above in Comment II.7. SJRECWA-19

The Exchange Contractors and the RMC appreciate this opportunity to comment on the Draft Environmental Assessment, Recirculation of Recaptured Water Year 2011 San Joaquin River Restoration Program Interim Flows and the Draft Finding of No Significant Impact. The Exchange Contractors and the RMC look forward to your response to these comments. If you have any questions regarding these comments, please contact the undersigned at 415-957-3333.

Very truly yours,



Thomas M. Berliner
DUANE MORRIS LLP

cc. Steve Chedester, SJRECWA
Mari Locke Martin, SJRRMC
Jon Rubin, Esq., SLDMWA

jsa:bah

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2.3 Comments from Arvin Edison Water Storage District

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March 25, 2011

VIA U.S. MAIL, FAX (916-978-5469) & E-MAIL: mbanonis@usbr.gov

Michelle Banonis
U.S. Department of the Interior
BUREAU OF RECLAMATION
2800 Cottage Way, MP-170
Sacramento, CA 95825

RE: Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) – Recirculation of Recaptured Water Year 2011 San Joaquin River Restoration Program (SJRRP) Interim Flows

Dear Michelle:

Thank you for the opportunity to provide comments on the subject matter. As you are aware, Arvin-Edison Water Storage District (AEWSD or District) is substantially impacted by the SJRRP, and subsequently, has significant interest in the various provisions intended to mitigate impacts, including, but not limited to, Recirculation programs. Our comments upon review of the EA/FONSI, and subsequent discussions with Reclamation staff, are as follows:

The EA covers a wide range of activities and programs that will greatly increase the opportunities for AEWSD to put its share of the Recirculation Water to beneficial use and the District greatly appreciates not only Reclamations efforts but also the timeliness. Due to Reclamations timely EA, districts now have the better part of the water year to effect potential programs for Recirculation Water.

AEWSD-1

Water Quality: One of AEWSD's remaining primary concerns is that of potential water quality impacts to our Friant supply. AEWSD understands the current Recirculation plan does not address nor allow for the physical discharge of California Aqueduct/Cross Valley Canal water into the Friant-Kern Canal (FKC). Our assumption was confirmed in discussions with Reclamation staff and by given the lack of an analysis regarding water quality impacts from such a discharge in the EA. Subsequently, AEWSD requests Reclamation provide written acknowledgement and/or explicitly state in the subject Final EA/FONSI that programs and actions approved under the subject EA does not allow for discharge of water into the FKC.

AEWSD-2

SOD Contractor List: It is AEWSD's understanding that all south-of-delta State Water Project (SWP) contractors (in addition to Metropolitan Water District of Southern California),

Page 1 of 3

AEWSD-2 continued

including but not limited to Kern County Water Agency (KCWA) are included as potential recipients of transfer and/or exchange water from a Friant district's Recirculation Water allocation; however, not all SOD contractors' are listed in Table 1. Is Table 1 intended to be an all-inclusive list? If so, AEWSD has indicated that potential KCWA member districts that may receive its Recirculation Water this year include Rosedale-Rio Bravo Water Storage District, Kern Delta Water District and Belridge Water Storage District, and we further request they be added to the list. If Reclamation would like assistance in drafting the descriptions of each district we can assist in acquiring that information.

AEWSD-3

Accordingly, it is also AEWSD's understanding that a transfer can occur within the specified time frame, however a return quantity **does not** have to occur until the subsequent year(s) and since SWP is the likely return supply that USBR approval is not necessary for the return action. In addition, it appears a return quantity of a lesser amount (not bucket-for-bucket exchange), including a complete transfer with zero return, is an acceptable method to a district managing its Recirculation Water and will be approved by Reclamation.

AEWSD-4

Leave Behind Water: It is clear in the EA that a Friant District may transfer its entire allocation of Recirculation Water and that such programs do not require return transfers at a later date or year to be approved. In other words, a district can leave behind all or a portion of their Recirculation Water in whatever water management program they utilize, provided the water is put to beneficial use in the receiving district. So the receiving district may realize a short-term gain of water for 2011 only. Seemingly conflicting however is the language at the very end of Section 3.1.2.2 stating "...It can be predicted that the Friant contractors, MWD, and SOD contractors would not experience any loss or gain in water supply as a result of this action." Perhaps the words "long-term" loss or gain should be inserted instead?

AEWSD-5

Limits on Recirculation Water: The EA proposes that Recirculation Water allocated to a district, when taken with their contract supplies, will be capped at the contract total for each district in 2011. While this may be acceptable for this year, as the SJRRP is still in its infancy, that restriction is not in fact consistent with the San Joaquin River Settlement Act. The recirculation of recaptured water, like the availability of RWA water, or benefits from Section III funding, is not intended to just fill contract totals, but instead is intended to mitigate for past (or future) impacts, whether those impacts were incurred in the present year or previous years. Subsequently, once the accounting for unmitigated impacts is adopted and in-effect, the only limit to accepting Recirculation Water should be to the extent unmitigated losses remain on a district's account.

AEWSD-6

Arvin-Edison Description: Section 3.1.1.2 describes the Friant Division Long term CVP contractors. The section on AEWSD contains several errors and or omissions worth including. Please find attached the suggested edits we request to be made in the Final EA.

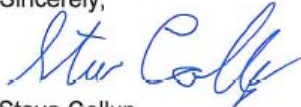
AEWSD-7

PWRPA Members: One significant edit is to the last paragraph of the AEWSD description. AEWSD is a member of the Power and Water Resources Pooling Authority (PWRPA) comprised of 15 districts and while many are already incorporated in the draft EA we request that all members be incorporated as potential agencies of receiving Recirculation Water. It is our understanding that the following districts were not explicitly stated: Princeton-Codora-Glenn Irrigation District, Provident Irrigation District, Reclamation District 108, Sonoma County Water Agency and Cawelo Water District.

CPOU: It is unclear whether a CPOU already exists that will allow this program for the 2011 water year or if Reclamation must still petition for that approval. At a minimum, it appears that the current CPOU petition (WR 2010-0032-DWR) should be listed in Section 1.4 (Reclamation's Legal and Statutory Authorities and Jurisdiction Relevant to the Proposed Federal Action) as it allows for certain described actions to occur under existing approvals.

Please provide a written response if the above mentioned understanding is inaccurate and/or not applicable. Thank you and please call or email with any questions, comments or concerns.

Sincerely,



Steve Collup
Engineer Manager

Enclosure

cc: Jeevan Muhar, Staff Engineer
Rena Ballew, USBR Fresno
Ron Jacobsma, Friant Water Authority

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2.4 Comments from Pacific Advocates



March 25, 2011

Michelle Banonis
Mid Pacific Region
U.S. Bureau of Reclamation, MP-170
2800 Cottage Way
Sacramento, CA 95828-1898

Subject: Comments on Draft EA/FONSI for Recirculation of Recaptured Water Year 2011 San Joaquin River Restoration Program Interim Flows EA

Dear Ms. Banonis:

It is our understanding that Reclamation proposes to recirculate and recapture up to 260,000 AF of San Joaquin River Restoration Program Interim Flows released from Millerton Dam for consumptive water use.

PA-1

We find that the Draft EA and FONSI do not provide sufficient information to arrive at an informed decision regarding the environmental impacts of such a complex project. In particular, Sec 16(a) (1) of the San Joaquin River Settlement states: *"The Plan shall... (1) ensure that any recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows shall have no adverse impact on the Restoration Goal, downstream water quality or fisheries"*

However, the Draft EA contains no analysis whatsoever of water quality or downstream fishery issues, such as meeting salinity requirements of SWRCB Order D-1641, the operational requirements of the various downstream Biological Opinions including Delta smelt and salmon, as well as, other water quality requirements for selenium, boron and nutrients. We point out that Reclamation and the California Department of Water Resources have been issued a Cease and Desist Order regarding ongoing violation of D-1641 water quality requirements. The Draft EA should disclose how implementation of the project will not adversely affect downstream water quality and how all downstream regulatory requirements will be met.

PA-2

We also note that SWRCB Water Right Order 2010-0029-DWR modifying Reclamation's water rights for this project specifically states: *"Any San Joaquin River water temporarily stored or routed through San Luis Reservoir shall not be delivered to south-of-Delta contractors other than Friant Division Contractors. The water need not be directly delivered, but can be made available through transfers and exchanges. Reclamation shall document that it has taken all practicable measures to provide contract water to the Friant Division Contractors, while complying with all other conditions of this Order."*

We understand this language to mean no one but Friant Division Contractors have a claim on the recirculation water "stored" in San Luis Reservoir, but provided all state laws and federal laws are met perhaps Friant Division Contractors can sell it to others. Any sales, leases or exchanges should be fully disclosed. All impacts including delivering this water to toxic soils on the west side of the San Joaquin Valley should be analyzed for water quality impacts to ground water supplies, drinking water supplies and the beneficial uses of the San Joaquin River harmed by increasing these toxic drainage discharges. The Draft EA needs to disclose in plain English the reality of this reading of the statutes and let the public know specifically what Friant Division Contractors are entitled to do with the water and the resulting associated impacts.

PA-3

The present Draft EA is confusing. The relationship with other or existing water sales, exchanges and transfers is not provided. Further confusing is how to reconcile the SWRCB order with this proposal. The Draft EA explains on page (6) that *"Friant contractors may transfer or exchange their water to other Friant or non-Friant CVP or SWP contractors, not in excess of the existing non-Friant contractor's CVP contract allocation."* The SWRCB Order prohibits any increase in non-Friant SOD water supplies, not a prohibition on increasing water above existing contract amounts. The Draft EA needs to fully disclose how to reconcile these state and federal actions. For example Reclamation has approved sales and exchanges to Westlands Water District of surface water supplies from Friant contractors, whereby these Friant contractors would use substitute supplies or groundwater supplies. Are there associated transfers made possible by the recirculation of the San Joaquin River water that will change surface or

PA-3 continued
groundwater uses? The impacts to surrounding groundwater users, increased pollution from the importation of water to irrigate toxic soils and other cumulative impacts on downstream users' fish, and wildlife needs to be disclosed and addressed.

PA-4
It is also our understanding that every one of the 28 long term Friant Division contractors must decline to receive any Section 215 surplus water before that water can be delivered to non-Friant contractors. The Reclamation has provided notice, that Section 215 surplus supplies are likely to be available in water year 2011. This condition is not disclosed and explained to the public. This is a long term contract provision guaranteeing Friant contractors a "first right of refusal" to such periodic surplus flows out of Friant Dam. Reclamation should capture and make publicly available documentation demonstrating that all 28 Friant districts have formally declined the 'surplus flows' in question before authorizing any transfer of the water to non-Friant SOD contractors.

Specifically further disclosure and clarification is also needed at:

PA-5
1. Page 38: The document should indicate conveyance capacity of the California Aqueduct.

2. Page 41: It is not clear how recirculated San Joaquin River water will end up in San Luis Reservoir if recirculation does not occur under the No Action Alternative. Wouldn't the water flow to the Delta instead? If there is a chance for "spilling" at San Luis Reservoir under No Action, wouldn't this result in reduced Delta exports and improved water quality in the South Delta, a beneficial impact?

PA-7
Land Use: Given that the project could result in increased deliveries to saline, seleniferous lands such as San Luis Unit contractors, the document fails to disclose the impact of increasing these pollutants and metals such as selenium discharges to surface and/or groundwater. The amount of salt, boron and selenium created by irrigation of an acre of such land can be calculated from the Broadview Contract Assignment EA in 2004 (Reclamation), which calculated reductions in those pollutants as a result of retiring the Broadview Water District. The savings estimated from the Broadview Contract Assignment by acre are as follows: Salt- 1.57 tons/acre; Boron- 4.81 pounds/acre; Selenium- .139 pounds/acre. The EA should assume that increased water deliveries to similar soils will result in the creation of similar amounts of pollution discharged either to groundwater or surface waters. The EA and FONSI should disclose these impacts if water is transferred from Friant contractors to non-Friant contractors that have soils containing salts, metals such as selenium, boron and other contaminants.

PA-8
Biological Resources: The Draft EA should consider an alternative using some of the recirculated water to provide full Level 2 and/or Level 4 Refuge Water supplies.

PA-9
If the project provides water to seleniferous saline lands that drain into Mud Slough, Salt Slough or the Grasslands Bypass Project, or result in ponding, there could be impacts to species covered by the Migratory Bird Treaty Act. The Grasslands Bypass Project has documented selenium mortality and elevated levels of selenium in birds covered by the MBTA.

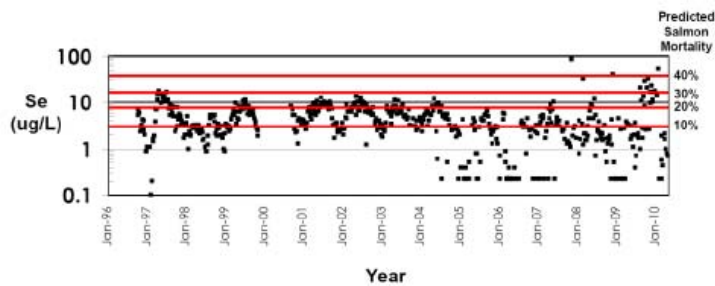
PA-10

Air Quality and Global Climate Change: Under the Proposed Action, the statement that electric motors do not emit greenhouse gases or air pollutants is completely misleading. While it is true that electric pumps don't discharge air pollutants, the energy sources for those pumps either uses greenhouse gases, or the increased energy use causes more fossil fuels to be burned. The document cannot claim that there are no impacts from the Proposed Action due to increased use of electric pumps. Electric pumps are also used for groundwater pumping, which is claimed to be a significant air quality impact of No Action. This type of analysis is not adequate. In order to make an adequate analysis and conclusion, there would have to be a comparison of the amount of electricity used for increased groundwater pumping as compared to increased pumping from recirculation. The analysis would also have to determine the amount of increased groundwater pumping, which is currently not disclosed.

PA-11

Cumulative Impacts The Draft EA does not address cumulative impacts of irrigating seleniferous lands and the negative impact on the San Joaquin River Restoration Program. Selenium concentrations at Hills Ferry averaged over 15.6 ppb from Aug 11, 2009 to Jan 20, 2010. In 2009, selenium exceeded public drinking water standards measuring 52 ppb. See the charts below for impacts to juvenile salmonids from selenium exposure (Beckon, Pers Comm).

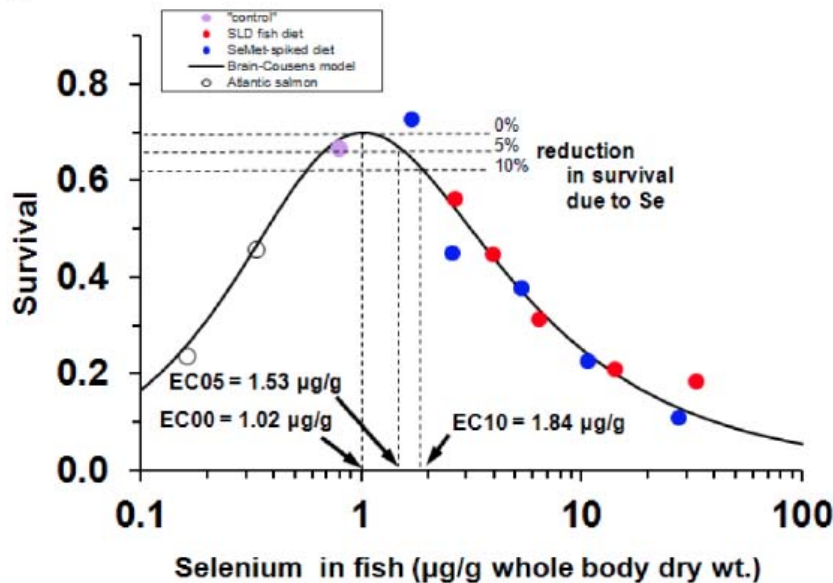
Selenium Levels and Predicted Salmon Mortality in the San Joaquin River



Selenium concentrations measured in the San Joaquin River at Hills Ferry (data from the U.S. Bureau of Reclamation)

Mortality	Tissue selenium	Water selenium
Percent	µg/g whole body dry wt.	µg/L
5%	1.531	1.92
10%	1.844	3.31
20%	2.486	7.98
30%	3.273	17.92
40%	4.336	41.01
50%	5.901	101.57
60%	8.447	291.87

These data are based on the following relationship and on Mike Saiki's data for juvenile salmon bioaccumulation in the SJ River. Depending on what model you use, and how you round off, you get slight variations from these numbers.



The Draft EA does not include any of the mitigation measures identified in SWRCB WRO 2010-0029 (DWR). All of those mitigation measures should be included.

PA-12

We urge the Reclamation to either prepare a full Environmental Impact Statement or reissue the Draft EA and FONSI with additional analyses of downstream water quality effects, clarification of the apparent discrepancy between SWRCB WRO 2010-0029 (DWR), full disclosure of the biological and water quality impacts of applying additional water on saline, selenium soils, as well as an adequate analysis on air quality and greenhouse gases. Alternately, if the required analyses are complete and there are significant environmental impacts, Reclamation should complete a full environmental statement of this proposed transfer where up the amounts of water, the timing of transfer and the acreage and locations

PA-13

are clearly defined for the benefit of the public understanding along with the impacts to areas of origin, ground water aquifers, and the local areas transferring out "surplus" supplies. This Draft EA proposes up to 260,000 acre feet of water can be diverted before reaching the Delta estuary without harm to the San Joaquin River restoration effort and the estuary. Insufficient analysis is provided to scientifically support this conclusion.

Thank you for the opportunity to comment. Please add us to your notification list for this project.

Respectfully submitted,



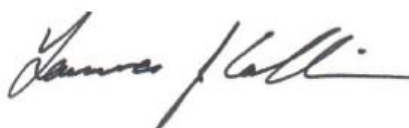
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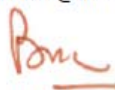
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Senator Dianne Feinstein
Senator Barbara Boxer
California Congressional Delegation
Interested Parties

Section 3 Responses to Comments

The following responses were prepared to answer questions or comments received on the Draft WY 2011 Recirculation EA and Draft Finding of No Significant Impact (Draft FONSI).

Sections 3.1 through 3.4 break down each commentor separately and provide responses to comments as outlined in the letters presented in Sections 2.1 through 2.4.

3.1 Response to San Luis & Delta-Mendota Water Authority Comments

SLDMWA-1:

The Draft WY 2011 Recirculation EA and Draft FONSI incorporates by reference the Draft and Final Water Year 2011 SJRRP Interim Flows Project Environmental Assessment (Draft and Final WY 2011 Interim Flows EA, respectively) and FONSI. The Draft WY 2011 Recirculation EA calls out this incorporation by reference in Section 1.2 – Purpose and Need and Section 1.3 – Scope. Both the WY 2011 Interim Flows release and recapture, as well as the recirculation of flows are interrelated and interdependent and are treated as such in the analysis. To provide additional clarification, the following statement shall be added to Section 1.2- Purpose and Need and Section 1.3 – Scope to provide clarity that the entire WY 2011 Interim Flows EA is incorporated: “The environmental impact analysis performed for the Water Year 2011 Interim Flows project is incorporated by reference in its entirety into this EA.”

Information on potential recirculation opportunities for recaptured WY 2011 Interim Flows was not known at the time of preparation of the Draft WY 2011 Interim Flows EA and this is expressed in Section 2.2.2 – Recapture and Recirculation as recirculation is discussed as needing “mutual agreements between Reclamation, DWR, Friant Division long-term contractors, and other south-of-Delta CVP/SWP contractors.” The Draft WY 2011 Recirculation EA discusses the specific potential mechanisms and environmental impacts of the delivery, transfer, or exchange of recaptured WY 2011 Interim Flows because this will require additional contractual action between the identified parties. Because Reclamation now has a maximum estimate of water that could potentially be recirculated and the mechanisms for moving this water, we are completing the appropriate analysis under NEPA and incorporating by reference the previous completed analysis in the Draft and Final WY 2011 Interim Flows EA.

SLDMWA-2:

The Proposed Action presented in the Draft WY 2011 Recirculation EA is the plan for recirculation, reuse, exchange, or transfer of SJRRP water recaptured during the 2011 Interim Flow releases, consistent with the Secretary’s requirements pursuant to Paragraph 16(a) of the Settlement and Section 10004(a)(4) of the San Joaquin River Restoration Settlement Act, Public Law 111-11 (Act). In addition, based on the wet hydrologic year type, Reclamation has determined the Proposed Action complies with Section 10004(f) of the Act as it “shall not result in the involuntary reduction in contract water allocations to Central Valley Project long-term contractors, other than Friant Division long-term contractors.”

As a separate process, Reclamation is working on a long-term plan for recirculation, recapture, reuse, exchange or transfer of SJRRP water associated with the long-term implementation of the Settlement and Act. Several meetings with San Luis Delta-Mendota Water Authority

(SLDMWA), San Joaquin River Exchange Contractors Water Authority (SJRECWA), Friant Water Authority (FWA), and Natural Resources Defense Council (NRDC) have occurred since November 2010. Reclamation is working with these parties on the long-term plan and intends to complete this plan as soon as practical. However, the completion of the long-term plan does not change the Proposed Action or impacts described in the EA as they are separate actions: the WY 2011 Recirculation EA being only a temporary one-year action for the recirculation of recaptured WY 2011 Interim Flows. The long-term plan will provide the mechanisms for determining recapturable water, losses, recapture locations, recirculation, and funding. This plan will explain how Reclamation will determine the availability of recapturable and recirculation water and have no bearing on the environmental effects of recirculation actions.

For recaptured WY 2011 Interim Flows, Reclamation has identified the maximum quantities of water that may be provided via recirculation. Contractual processes will work out the exact amounts to be sent to each contractor. The total quantities may be less than those amounts analyzed in the EA, but the EA assumes and analyzes the greatest possible impact to the environment from recirculation. Contractual actions processed later would be at or less than those impacts addressed in the environmental documentation and would be covered through this process. The EA's intended purpose is to establish potential maximum environmental impacts and to assess this accordingly.

3.2 Response to San Joaquin River Exchange Contractors Water Authority and San Joaquin River Resource Management Coalition Comments

SJRECWA-1:

Reclamation references these two documents in the Bibliography. Both of these documents in their entirety are provided as Appendix A and Appendix B in the Draft Recirculation of Recaptured WY 2010 San Joaquin River Restoration Program Interim Flows Draft Environmental Assessment/Finding of No Significant Impact, June 2010, which is also referenced in the Draft WY 2011 Recirculation EA Bibliography. This document was made available as of June 28, 2010 and is publically available via the internet on Reclamation's Mid-Pacific Region NEPA database at http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=5962.

SJRECWA-2:

See response to comment for SLDMWA-1.

SJRECWA-3:

Interim Flows are required to ascertain the impacts that will result from the subsequent years' Interim Flows and Restoration Flows. While the future release of additional Interim and Restoration flows is also mandated under the Settlement, the specific implementation of these later actions will benefit from data that would be collected under the proposed action, including the recirculation of recaptured WY 2011 Interim Flows.

The WY 2011 Interim Flows and associated one-year temporary actions, including recirculation, constitute a complete project under NEPA because it is a demonstration project that has independent utility and provides useful information on flows, temperatures, fish needs, seepage losses, shallow groundwater conditions, recirculation, recapture and reuse conditions, channel

capacity (high and low flows), and levee stability regardless of the future implementation of the Settlement. These data are useful independent of the SJRRP. The Proposed Action for recirculation of recaptured flows can be implemented successfully in meeting its purpose and need and objectives without any subsequent SJRRP activities. The SJRRP Program Environmental Impact Statement/Report (PEIS/R) will evaluate the cumulative effects of the implementing the SJRRP, including both Interim Flows and Restoration Flows.

SJRECWA-4:

See response to comment for SLDMWA-1.

SJRECWA-5:

See response to comment for SJRECWA-3. The release, recapture, and recirculation of WY 2011 Interim Flows are a temporary one-year action and the project has independent utility from the other tasks called out in the Settlement and the San Joaquin River Restoration Settlement Act.

SJRECWA-6:

The Proposed Action described in the Draft WY 2011 Recirculation EA is a one-year, temporary action associated with and as a result of the release of WY 2011 Interim Flows. The long-term plan for recirculation, recapture, reuse, exchange or transfer of the Interim and Restoration flows is not part of the proposed action and will be analyzed in future environmental documentation. The long-term actions are not known at this time and would be informed by the Proposed Action.

The State Water Resources Control Board has issued Water Rights Order, 2010-0029-DWR (Order) which outlines specific places of use, purposes of use, and points of diversion for the WY 2011 Interim Flows Project. Reclamation will comply with the Order and will continue to coordinate with the State Water Resources Control Board to meet requirements stipulated in the Order.

SJRECWA-7:

See response to comment SJRECWA-1. This information was publically available as of June 28, 2011 and was included in appendices to the Draft and Final Environmental Assessments for the Recirculation of Recaptured San Joaquin River WY 2010 Interim Flows. These documents are available online.

SJRECWA-8:

Comment noted. The comment does not provide any substantive new information on the Proposed Action, project alternatives, or environmental impacts. However, this Final EA incorporates by reference the Draft and Final WY 2011 Interim Flows EA in its entirety, which includes comments made to the Draft WY 2011 Interim Flows EA, and responses to those comments.

SJRECWA-9:

See response to comment SJRECWA-8.

SJRECWA-10:

The delivery, transfer, or exchange of water would be subject to existing contract totals and capacity constraints for existing facilities. Water may be moved through any of the federal, state, or local facilities outlined in the Draft WY 2011 Recirculation EA. The Proposed Action would

result only in deliveries, transfers, or exchanges that would not result in adverse environmental impacts or result in operational or capacity conflicts in existing facilities. To add clarification, the following language is added to the end of the sixth paragraph under Section 2.2 – Proposed Action: “The Proposed Action analyzed in this EA would help supplement any surface water need that a particular water district or districts could have over WY 2011. The recirculation of recaptured Interim Flows will not increase deliveries to any water district. All water delivered, transferred, or exchanged shall remain within existing contract totals for those districts. The Proposed Action in this EA does not exceed those existing contract amounts. Further, the Proposed Action is strictly limited to Interim Flows that are recaptured and stored as part of the WY 2011 Interim Flows project. Therefore, this action is temporary and short-term in nature and not intended to extend beyond WY 2011.”

To add clarification, the following language is included in Section 2.2 after the conclusion of the sixth paragraph: “Contractors outlined in this EA shall provide Reclamation with advance notice of any proposed transfer or exchange so that Reclamation can determine if the action is consistent with existing contracts and can coordinate with involved water service contractors to make sure that capacity exists within existing facilities in order to carry through with the transfer or exchange. In addition, coordination would ensure that Reclamation’s obligations to deliver water to other contractors, wildlife refuges, and other requirements would not be adversely impacted by the Proposed Action.”

SJRECWA-11:

The San Joaquin River Exchange Contractors Water Authority was inadvertently omitted from the list on pages 10-11 and should have been included. The SJRECWA is now included in the list.

SJRECWA-12:

The Department of Water Resources Groundwater Resources Bulletin, while published in 2003, is still a useful tool and relevant to providing regional groundwater information and information related to the management of groundwater resources by local, state, and federal agencies. Therefore, the utilization of the DWR Bulletin is chosen due to its pertinence to Reclamation’s role in managing water resources. Further, the discussion of hydrogeologic basin extents and characteristics is generally the same throughout the documents proposed by the SJRECWA and the DWR Bulletin. However, understanding that both the USGS and Famiglietti documents are relevant to the overall understanding of groundwater levels in and around the project area, these documents are provided as references in the Bibliography section of the Draft WY 2011 Recirculation EA, of which the changed Bibliography is provided in this Final WY 2011 Recirculation EA as part of the Errata. The mere inclusion of these documents as references to the WY 2011 Recirculation EA does not alter the assessed environmental impacts presented in the document.

SJRECWA-13:

To provide additional clarity, the last sentence under Section 3.1.2.2 that states “It can be predicted that the Friant contractors, MWD, and South-of-Delta (SOD) contractors would not experience any loss or gain in water supply as a result of this action” has been stricken and the following language has been added: “The recirculation of recaptured Interim Flows will not increase deliveries to any water district. All water delivered, transferred, or exchanged shall remain within existing contract totals for those districts. The Proposed Action in this EA does not exceed those existing contract amounts. Further, the Proposed Action is strictly limited to

Interim Flows that are recaptured and stored as part of the WY 2011 Interim Flows project. Therefore, this action is temporary and short-term in nature and not intended to extend beyond WY 2011.”

SJRECWA-14:

The analysis presented in the EA cannot presume the water year type designation before a final determination is made based on precipitation and snow pack estimates for the water year. Therefore, the EA assumes a maximum amount of water that could be transferred, up to 260,000 acre-feet (AF), and assumes a wet year type designation for the assessment of environmental impacts. This is adequate for an environmental analysis as it assesses impacts up to the greatest amount possible and provides analysis for this upward quantity. All transfers, exchanges, or deliveries will remain within the confines of existing water supply contract totals and within the existing capacities of conveyance facilities. Further, this action is solely limited to the recirculation of water that is recaptured during WY 2011 Interim Flows. The Proposed Action for recirculation of recaptured flows can be implemented successfully in meeting its purpose and need and objectives without any subsequent SJRRP activities and it is directly related to the implementation of the temporary, one-year actions assessed in the WY 2011 Interim Flows EA. The long-term plan for recirculation, recapture, reuse, exchange or transfer of flows for the overall implementation of the SJRRP is currently being evaluated. The SJRRP Program Environmental Impact Statement/Report (PEIS/R) will evaluate the cumulative effects of the implementing the SJRRP, including the release and recapture of Interim Flows and Restoration Flows.

SJRECWA-15:

See response to comment SLDMWA-1.

SJRECWA-16:

See response to comment SJRECWA-10. The FONSI will be changed to reflect the revisions made to the Final Recirculation EA text.

SJRECWA-17:

The date presented in the Draft FONSI is incorrect. This correction has been made in the FONSI, which now states that the document was made publically available on March 9, 2011.

SJRECWA-18:

See response to comment SJRECWA-13. The FONSI will be changed to reflect the revisions made to the Final Recirculation EA text.

SJRECWA-19:

See response to comment SJRECWA-14.

3.3 Response to Arvin-Edison Water Storage District Comments

AEWSD-1:

Reclamation can verify that the Proposed Action in this one-year temporary EA does not cover discharge of water from south-of-Delta facilities into the Friant-Kern Canal (FKC). If discharge of water into the FKC from south-of-Delta facilities is proposed as an option by a Friant Division long-term contractor as part of the recirculation of recaptured WY 2011 Interim Flows, it would

need to be analyzed further in additional environmental documentation and circulated to the public for comment and review.

AEWSD-2:

As suggested, the Kern County Water Agency member districts including Rosedale-Rio Bravo Water Storage District, Kern Delta Water District, and Belridge Water Storage District have been added to the environmental analysis in the document. These districts are now included and described in Section 3.1 – Water Resources. The inclusion of these districts does not alter the environmental impact findings presented in the EA.

AEWSD-3:

The EA assesses the environmental impacts of the Proposed Action on the human environment and assumes a maximum amount of water delivered, transferred, or exchanged (up to 260,000 acre-feet). However, approvals for the movement of water are contractual and have yet to be determined. All contracting actions shall be within the range of environmental analysis performed within this EA and will be reviewed and executed at a later date.

AEWSD-4:

See response to comment SJRECWA-13. To provide additional clarity, the last sentence under Section 3.1.2.2 that states “It can be predicted that the Friant contractors, MWD, and SOD contractors would not experience any loss or gain in water supply as a result of this action” has been stricken and the following language has been added: “The recirculation of recaptured Interim Flows will not increase deliveries to any water district. All water delivered, transferred, or exchanged shall remain within existing contract totals for those districts. The Proposed Action in this EA does not exceed those existing contract amounts. Further, the Proposed Action is strictly limited to Interim Flows that are recaptured and stored as part of the WY 2011 Interim Flows project. Therefore, this action is temporary and short-term in nature and not intended to extend beyond WY 2011.”

AEWSD-5:

The Proposed Action analyzed in the EA is only to assess the environmental impacts to the human environment for the recirculation of water recaptured as a result of the release of WY 2011 Interim Flows. Therefore, any speculation on actions within other years is not reviewed or discussed in this document and outside of the scope of this EA. The overall plan for recirculation, recapture, reuse, exchange or transfer of the Interim and Restoration Flows for the long-term will be analyzed in future environmental documentation once additional information on these future actions is known.

AEWSD-6:

The suggested revisions have been made to the EA.

AEWSD-7:

The suggested revisions have been made to the EA.

AEWSD-8:

The suggested authority (WR 2010-0032-DWR) has been added to Section 1.4 – Reclamation’s Legal and Statutory Authorities and Jurisdiction Relevant to the Proposed Federal Action.

3.4 Response to Pacific Advocates Comments

PA-1:

Reclamation would implement the Proposed Action in accordance with legal requirements (e.g., biological opinions, agreements, and similar legal and regulatory requirements) in place at the time the Proposed Action is implemented, including the U.S. Fish and Wildlife Service's (USFWS) Delta Smelt Biological Opinion for the Continued Long-term Operations of the Central Valley Project and State Water Project (USFWS Operations BO) (USFWS 2008) and the NMFS Biological and Conference Opinion on the Continued Long-Term Operations of the Central Valley Project and State Water Project (NMFS Operations BO) (NMFS 2009). The Reasonable and Prudent Alternatives (RPAs) in the USFWS Operations BO and the NMFS Operations BO would protect fisheries both with and without the implementation of Proposed Action. Reclamation will continue to coordinate with regulatory agencies to monitor and comply with applicable biological opinions and existing regulations for operations activities.

PA-2:

The environmental analysis performed in the EA is intended to analyze the impacts of the project to the human environment, as required by CEQ NEPA regulations. All water to be moved as part of the Proposed Action will be within existing contract totals. For additional review, see response to comment SJRECWA-13 which provides additional clarifying language.

PA-3:

The EA clarifies that all water deliveries, transfers, and exchanges will be within existing contract totals. Therefore, the Proposed Action does not increase any contractor's water supply beyond that which has been executed through existing contractual processes.

PA-4:

The discussion of the availability of 215 water supplies is outside of the scope of this EA. The Proposed Action provided in the EA is for a temporary one-year action and only related to the delivery, transfer, or exchange of recaptured WY 2011 Interim Flows.

PA-5:

The suggested revision has been included as part of this Final WY 2011 Recirculation EA. The overall capacity of the California Aqueduct is 13,100 cubic feet per second (cfs).

PA-6:

WY 2011 Interim Flows would be recaptured at various points of diversion per the environmental analysis performed for the Draft and Final Supplemental Environmental Assessments for the WY 2011 Interim Flows project, which is incorporated by reference in its entirety into this EA. This process is explained in Section 2.2.2 – Recapture and Recirculation and includes analysis of recapture at locations downstream of Friant Dam, consistent with and limited by existing operating criteria, prevailing and relevant laws, regulations, biological opinions, and court orders in place at the time the water is recaptured. Under the WY 2011 Interim Flows project, recaptured water would be exchanged for a like amount of Central Valley Project (CVP) water and/or would be recirculated and held in storage in San Luis Reservoir.

The recirculation of recaptured Interim Flows is part of, and integral to, the implementation of the Stipulation of Settlement in *NRDC, et al. v. Kirk Rodgers, et al.* (Settlement). The Settlement calls for both the Restoration Goal, which includes the release of flows, modifications to the river channel for habitat improvements, and the introduction of Chinook salmon, as well as the Water Management Goal. The Water Management Goal calls for a plan to reduce or avoid water supply impacts to the Friant Division long-term contractors by providing mechanisms to ensure that recirculation, recapture, reuse, exchange, or transfer of Interim Flows occurs. Therefore, to be in compliance with the Settlement, the implementation of the Water Management Goal (in this case, the recirculation of recaptured WY 2011 Interim Flows) is both needed and required.

Recapture of water would occur under both the No Action and the Proposed Action in the WY 2011 Recirculation EA analysis. The recapture of water is currently authorized under the WY 2011 Interim Flows Project EA and the existing Order, 2010-0029-DWR. The water would be held in San Luis Reservoir, both with or without the Proposed Action. The water that could “spill” from San Luis Reservoir would thus become part of the SOD supply. Recapture would occur at various locations along the San Joaquin River as necessary and constrained by channel capacities. No changes in amounts recaptured and river flows would occur under the No Action alternative. However, under the No Action, additional water may be available for SOD supply either as a “spill” from San Luis Reservoir, or if San Luis Reservoir is full, as direct diversion and use.

PA-7:

The recirculation of recaptured Interim Flows does not increase deliveries to any district. All water delivered, transferred, or exchanged shall remain within the existing contract totals and the subsequent environmental analysis that was prepared for these contract actions prior to contract execution. The Proposed Action in this EA does not exceed these existing contract totals. Therefore, land use would not change under the Proposed Action as this will not change the existing water contract allocations. Additionally, the recirculation element of the WY 2011 Interim Flows action reduces water supply losses that could occur as a result of the release of Interim Flows.

PA-8:

Based on the comment received and projected potential water supply need, Refuges that may express an interest in transfers, exchanges, or deliveries of recaptured WY 2011 Interim Flows were added to the list of potential water contractors/users and included in the environmental analysis. The Refuges added are East Bear Creek Unit of the San Luis National Wildlife Refuge, Merced National Wildlife Refuge, Kern National Wildlife Refuge, and Pixley National Wildlife Refuge. The inclusion of these water users does not change the environmental impact findings in the Draft WY 2011 Recirculation EA.

PA-9:

Water provided as the recirculation of recaptured WY 2011 Interim Flows, will stay within existing water contract totals and would not provide additional water to any water user beyond these pre-determined totals. Water deliveries to areas around Grasslands Bypass would not increase and would stay within these totals. Therefore, water discharge or drainage would not be expected to increase or change under the Proposed Action. Further, Reclamation shall comply with all applicable legal requirements as identified in the response to comment PA-1.

PA-10:

Much of the power utilized in CVP facilities is generated via hydroelectric power by those facilities. Therefore, the energy used to run these facilities does not typically result in the burning of fossil fuels. If the Proposed Action were not taken, groundwater pumping would be expected to increase as it would mean that standard surface deliveries would not occur and landowners and water users would increase groundwater pumping to supplement their supplies.

All water moved under this one-year temporary action would be within existing contract totals and would not increase the amount of expected water deliveries to water contractors. As recapture of WY 2011 Interim Flows has already occurred, Reclamation would need to move the water stored in San Luis Reservoir (SLR) under either the No Action or the Proposed Action alternatives. Under the No Action alternative, water may be available for SOD supply either as a “spill” from SLR, or if SLR is full, as direct diversion and use. Under the Proposed Action, water in SLR would be moved in a similar way via delivery, transfer, or exchange. In either scenario, power utilization is expected to be essentially the same for the movement of water. Therefore, the resulting greenhouse gas (GHG) emissions would not increase nor decrease under this proposed action, but would remain the same.

PA-11:

See response to comment PA-1 and PA-9.

PA-12:

The intent of this comment is unclear. There are no specific “mitigation measures” identified in the State Board Order (Order), WR 2010-0029-DWR. While interrelated, the notification process related to assessment of environmental impacts under NEPA and the approval process for actions within the Order have separate regulatory authority. However, Reclamation has and will continue to work with the State Board to meet the conditions set forth in the Order.

PA-13:

Through clarification added via the errata provided in this document, Reclamation has responded to substantive comments provided via the formal NEPA process.

Per CEQ NEPA Regulation 1502.1 – Purpose, the primary purpose of an environmental impact statement is to provide a discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives that would avoid or minimize adverse impacts. Although additional clarification has been added through the incorporation and addressing of public comments on this EA, no comments received raised impacts to any resource area to an adverse impact as a result of the Proposed Action.

Additionally, Section 1502.9 (b), Draft, Final, and Supplemental Statements of the CEQ NEPA Regulations states “Final environmental impact statements shall respond to comments as required in Part 1503 of this chapter. The agency shall discuss at appropriate points in the final statement any responsible opposing view which was not adequately discussed in the draft statement and shall indicate the agency’s response to the issues raised.” Section 1502.9 (c) goes on to state “Agencies: 1) Shall prepare supplements to either the draft or final environmental impact statement is: (i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its

impacts.” A supplemental document or recirculation of the Draft WY 2011 EA has not occurred because no comments posed or options presented in this Final WY 2011 EA have been shown to have a bearing or change on the environmental impact findings of the Proposed Action.

Section 4 Errata

Based on comments received on the Draft WY 2011 Recirculation EA, some revisions to the text were identified through review and responses to comments and are provided below. The revisions to the Draft WY 2011 Recirculation EA are one component of the materials that comprise the Final WY 2011 Recirculation EA. This errata sheet identifies certain modifications and corrections to the Draft WY 2011 Recirculation EA, which have been identified in response to public and agency comments received during the public review and comment period. The changes presented below provide additional clarification, additional information, and/or correct minor errors. The changes do not alter the conclusions related to environmental impacts that were presented in the Draft WY 2011 Recirculation EA. Additions to the Draft WY 2011 Recirculation EA are included in double underline and deletions are included in ~~strike through~~.

4.1 Section 1 – Purpose and Need for Action

Section 1.2 – Purpose and Need for Action: Page 2, Last Paragraph, the following sentence has been added:

An Environmental Assessment and Finding of No Significant Impact (FONSI) were prepared and approved for WY 2011 Interim Flows. Because Interim Flows and their associated actions are directly related to the availability of water for recirculation back to the Friant Division long-term contractors, the *Water Year 2011 Interim Flows Project Draft Supplemental Environmental Assessment* (WY 2011 Draft SEA), *Water Year 2011 Interim Flows Project Final Supplemental Environmental Assessment* (WY 2011 Final SEA), and FONSI is hereby incorporated by reference into this document. The environmental impact analysis performed for the Water Year 2011 Interim Flows project is incorporated by reference in its entirety into this EA.

Section 1.3 – Scope: Page 2, First Paragraph, the following sentence has been added:

As an initial action to guide implementation of the SJRRP, the Settlement requires that the U.S. Department of the Interior, Bureau of Reclamation (Reclamation), modify releases from Friant Dam from October 1 to September 30 for a program of Interim Flows in order to collect pertinent scientific data and to implement a monitoring program. Environmental effects for the release of interim flows from Friant Dam and down the San Joaquin River were addressed in the *Final Environmental Assessment and Finding of No Significant Impact/Initial Study and Mitigated Negative Declaration for Water Year 2010 Interim Flows Project*. Further, this information was supplemented for an additional year of Interim Flows and addressed in the WY 2011 Draft SEA, WY 2011 Final SEA, and FONSI. The environmental impact analysis performed for the Water Year 2011 Interim Flows project is incorporated by reference in its entirety into this EA.

Section 1.4 – Reclamation’s Legal and Statutory Authorities and Jurisdiction Relevant to the Proposed Federal Action: The following bulleted authority is added to the list:

- California State Water Resources Control Board, Division of Water Rights Order, WR 2010-0032-DWR.

4.2 Section 2 – Alternatives Including the Proposed Action

Section 2.2 – Proposed Action: The following language has been changed:

Transfers and exchanges shall further be subject to the following parameters:

- Transfers and exchanges addressed in this EA are solely transfers or exchanges of CVP and SWP water between Friant contractors and SOD contractors or transfers or exchanges that occur within Friant and SOD geographical areas.
- ~~There would be no restriction on directionality—transfers do not require return transfers at a later date or year.~~
- Transfers or exchanges must occur within the CVP or SWP consolidated Place-of-Use.
- No native or untilled land (fallow for three consecutive years or more) would be cultivated with the water involved in these actions.
- Transferred water can be either Agricultural (Ag) or Municipal and Industrial (M&I) water.
- The ultimate purpose of use can be for Ag, M&I purposes, fish and wildlife purpose and or groundwater recharge.
- ~~Transfers would be completed between March 1 and February 28 or February 29 of any contract year.~~
- All transfers and exchanges will be between willing sellers and willing buyers.
- Transfers or exchanges would occur without new construction or modifications to facilities.
- Transfers or exchanges are limited to existing supply and will not increase overall consumptive use.
- Transfers or exchanges for Ag would be used on lands irrigated within the last three consecutive years.
- Transfers or exchanges would not lead to any land conversions.
- Transfers or exchanges would comply with all applicable Federal, State, Local or Tribal laws or requirements imposed for the protection of the environment and Indian Trust Assets (ITA).
- Transfers or exchanges cannot alter the flow regime of natural water bodies such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as not to have a detrimental effect on fish or wildlife, or their habitats.

Section 2.2 – Proposed Action: The following language has been added to the end of the sixth paragraph:

The options presented here will not exceed a combined total of up to 260,000 AF of recaptured WY 2011 Interim Flows being moved out of SLR through recirculation and to water districts through deliveries, transfers, and exchanges. The exact totals transferred from or to, or exchanged between districts through this process shall not exceed any district’s total CVP or contract allocation. The Proposed Action analyzed in this EA would help supplement any surface water need that a particular water district or districts could have over WY 2011. The recirculation of recaptured Interim Flows will not increase deliveries to any water district. All water delivered, transferred, or exchanged shall remain within existing contract totals for those

districts. The Proposed Action in this EA does not exceed those existing contract amounts. Further, the Proposed Action is strictly limited to Interim Flows that are recaptured and stored as part of the WY 2011 Interim Flows project. Therefore, this action is temporary and short-term in nature and not intended to extend beyond WY 2011.

Contractors outlined in this EA shall provide Reclamation with advance notice of any proposed transfer or exchange so that Reclamation can determine if the action is consistent with this EA, existing contracts and can coordinate with involved water service contractors to make sure that capacity exists within existing facilities in order to carry through with the transfer or exchange. In addition, coordination would ensure that Reclamation's obligations to deliver water to other contractors, wildlife refuges, and other requirements would not be adversely impacted by the Proposed Action.

All contract allocations for possible deliveries, exchanges, and transfers are listed in Table 1.

Section 2.2 – Proposed Action: Table 1 is updated as follows:

Friant Division Contractor	Class 1 CVP Supply (AF/year)	Class 2 CVP Supply (AF/Year)	South-of-Delta Contractor (continued)	Supply (AF/Year)
Arvin-Edison Water Storage District (WSD)	40,000	311,675	Kern County Water Agency*	982,730
Chowchilla Water District (WD)	55,000	160,000	<i>Belridge WSD</i>	121,508
City of Fresno	60,000	0	<i>Kern Delta WD</i>	25,500
City of Lindsay	2,500	0	<i>Rosedale-Rio Bravo WSD</i>	29,900
City of Orange Cove	1,400	0	<i>Semitropic WSD</i>	133,000
County of Madera	200	0	Kern National Wildlife Refuge (NWR)	Level 2 and/or Level 4
Delano-Earlimart Irrigation District (ID)	108,800	74,500	Kern-Tulare WD*	40,000
Exeter Irrigation District	11,500	19,000	<i>Rag Gulch WD Assignment</i>	13,300
Fresno County Waterworks No. 18	150	0	Laguna WD	800
Fresno ID	0	75,000	Lower Tule River ID	31,102
Garfield WD	3,500	0	Merced NWR	
Gravelly Ford WD	0	14,000	Mercy Springs WD	2,842
International WD	1,200	0	Metropolitan WD	1,911,500
Ivanhoe WD	6,500	500	North Kern WSD	6,000 to 394,000 (River supplies are variably)
Kaweah Delta Water Conservation District	1,200	7,400	Oro Loma WD	4,600
Lewis Creek WD	1,450	0	Pacheco WD	10,080
Lindmore ID	33,000	22,000	Panoche WD	94,000
Lindsay-Strathmore ID	27,500	0	Patterson ID	16,500
Lower Tule River ID	61,200	238,000	Pixley ID	31,102
Madera ID	85,000	186,000	Pixley NWR	Level 2 and/or Level 4
Orange Cove ID	39,200	0	Reclamation District No. 1606	228
Porterville ID	16,000	30,000	Rosedale-Rio Bravo WSD	29,900
Saucelito ID	21,200	32,800	San Benito County WD	43,800
Shafter-Wasco ID	50,000	39,600	San Joaquin River Exchange Contractors Water Authority	840,000
Southern San Joaquin Municipal Utility District	97,000	50,000	San Luis NWR, East Bear Creek Unit	Level 2 and/or Level 4
Stone Corral ID	10,000	0	San Luis WD	125,080
Tea Pot Dome WD	7,500	0	Santa Clara Valley WD	152,500
Terra Bella ID	29,000	0	The West Side ID	5,000
Tulare ID	30,000	141,000	City of Tracy*	29,333
South-of-Delta Contractor	Supply (AF/Year)		<i>Westside ID Assignment</i>	2,500
City of Avenal	3,500		<i>Banta-Carbona ID Assignment</i>	5,000
Banta-Carbona ID	20,000		Tranquility ID	13,800
Byron-Bethany ID	20,600		Tranquility Public Utility District	70
City of Coalinga	10,000		Tri-Valley Water District	1,142
Coelho Family Trust	2,080		Tulare County	5,308
Del Puerto ID	140,210		Tulare Lake Basin WSD	88,922
Eagle Field WD	4,550		West Stanislaus ID	50,000
Fresno County	3,000		Westlands WD*	1,150,000
Fresno Slough WD	4,000		<i>Mercy Springs WD Assignment</i>	6,260
Hills Valley ID	3,346		<i>Broadview WD Assignment</i>	27,000
City of Huron	3,000		<i>Centinella WD Assignment</i>	2,500
James ID	35,300		<i>Widren WD Assignment</i>	2,990

* Includes indented contractors that follow in italics (assignment contracts)

Current SWP Contractor allocations may be found here: <http://www.water.ca.gov/swpao/docs/notices/11-06.pdf>

4.3 Section 3 – Affected Environment and Environmental Consequences

Section 3.1.1.1 South-of-Delta Contractors, Page 11, the following contractors are added to the bulleted list:

Kern County Water Agency

- Belridge Water Storage District
- Kern Delta Water District
- Rosedale-Rio Bravo Water Storage District
- Semitropic Water District

San Joaquin River Exchange Contractor's Water Authority

- Central California Irrigation District
- San Luis Canal Company
- Firebaugh Canal Water District
- Columbia Canal Company

National Wildlife Refuges

- East Bear Creek Unit, San Luis National Wildlife Refuge
- Kern National Wildlife Refuge
- Merced National Wildlife Refuge
- Pixley National Wildlife Refuge

North Kern Water Storage District

Tulare Lake Basin Water Storage District

Section 3.1.1.1, South-of-Delta Contractors, Pages 11 through 25, the following water contractor district descriptions should be added to the section:

Belridge Water Storage District

Belridge Water Storage District (BWSD) is located in western Kern County. The district has a total size of 92,000 acres, of which 52,000 acres are in agricultural production and include 60% permanent crops consisting of almonds, pistachios, and citrus groves. A portion of the remaining agricultural lands are planted in row crops. BWSD's water supply is 121,508 AF of firm entitlement SWP water. The district and its landowners participate in several groundwater banking programs within Kern County. District lands uphill and west of the California Aqueduct and water is pumped to an elevation of about 300 to 500 feet for irrigation. Lands east of the California Aqueduct are served by gravity turnouts. BWSD is partially outside of the Friant permitted place-of-use, therefore, the transfer, exchange, or delivery of water associated with this action will only occur within this area.

Kern Delta Water District

Kern Delta Water District (KDWD) is located in Bakersfield. KDWD has an SWP contract allocation of 25,500 AF. Additionally, KDWD can obtain up to 30,000 AF of Article 21 surplus water. The district covers approximately 128,000 acres and serves SWP and Kern River Water to approximately 90,000 acres, of which are mostly agricultural with some residential zones. Until recently, farmland in KDWD was mostly cotton and alfalfa/hay. However, this is progressively changing to produce corn, oats, wheat, grapes, melons, safflower, sod, strawberries, fruit trees, and nut trees. KDWD has historically received CVP surplus water either by direct contract with Reclamation, through participation with the Kern County Water

Agency, or by exchange with Arvin-Edison Water Storage District (AEWSD). Regardless of the contract method, KDWD receives CVP water through a direct connection with AEWSD. KDWD has the capability of taking CVP water from the Arvin-Edison Intake Canal running mostly west to east across the northern portion of KDWD and crossing several of KDWD's canals.

Rosedale-Rio Bravo Water Storage District

Rosedale-Rio Bravo Water Storage District (RRBWSD), located west of the City of Bakersfield, was established in 1959 to develop a groundwater recharge program to offset overdraft conditions in the regional Kern County aquifer. RRBWSD has an SWP contract allocation of 29,900 AF. Additionally, RRBWSD can obtain up to 35,000 AF of Article 21 surplus water. RRBWSD's Groundwater Storage, Banking, Exchange, Extraction & Conjunctive Use Program currently manages approximately 300,000 AF of stored groundwater in the underlying aquifer, which has an estimated total storage capacity in excess of 930,000 AF. RRBWSD acquires water for its Conjunctive Use Program from the Kern River, the Friant-Kern Canal when available, and the SWP through a water supply contract with KCWA.

RRBWSD is a SWP contractor and member unit of the KCWA. The district does not provide any municipal and industrial water to customers within its service area and irrigation water used within the district is presently supplied from landowner wells pumping from the groundwater basin. RRBWSD owns and operates over 2,000 acres of recharge ponds capable of recharging up to 600 cfs. RRBWSD manages the portion of the regional Kern County groundwater subbasin that is within its boundaries.

Semitropic Water Storage District

Semitropic Water Storage District (SWSD) is located in Kern County and delivers water to provide irrigation for approximately 140,000 acres of agriculture over its 220,582 acre district area. SMWSD has utilized a groundwater storage program since the 1990's to aid in the reduction of groundwater overdraft in the region. The district banks 700,000 AF of water in a groundwater storage bank with a capacity of 1.65 million acre-feet (SWSD). When needed, the district returns stored water to the California Aqueduct for use by its partners via exchanges or through pumpback. SWSD has the ability to deliver a maximum of 90,000 AF per year to the aqueduct and the State of California would deliver the water to SWSD's groundwater banking partners. Semitropic WSD receives a SWP contract amount of 133,000 AF per year and can receive up to 315,000 AF per year from banking partners to place into groundwater storage. Crops within SWSD consist primarily of alfalfa, cotton, fruit, grain, nuts, and vegetables.

San Joaquin River Exchange Contractor's Water Authority

The San Joaquin River Exchange Contractor's Water Authority (Exchange Contractors), which include Central California Irrigation District, Firebaugh Canal Water District, San Luis Canal Company and Columbia Canal Company, hold historic water rights to water in the San Joaquin River. Their service area is located on the west side of the San Joaquin Valley. In exchange for the CVP's regulation and diversion of the SJR at Millerton Lake, Reclamation agreed to supply water to the Exchange Contractors from the CVP's Delta supply.

Reclamation and the Exchange Contractors are parties to the Second Amendatory Contract for Exchange of Waters, Contract No. I1r-1144. Under the Contract, the United States supplies the Exchange Contractors with a substitute supply of CVP water to be used in lieu of their rights to certain waters of the San Joaquin River. Pursuant to the terms of the Contract, up to 840,000 AF

of substitute CVP water per year is made available for irrigation purposes by Reclamation from the Sacramento River and the Delta, and other sources through the CVP, and up to 650,000 AF in critical dry years. The Exchange Contractors' operations consist of the diversion of substitute water from the Delta Mendota Canal, the Mendota Pool, and possibly the San Joaquin River.

North Kern Water Storage District

North Kern Water Storage District (NKWSD)'s primary source of surface water is the Kern River. NKWSD's surface water supplies have ranged from less than 10,000 AF in a dry year to nearly 400,000 AF in a wet year, owing generally to its highly variable Kern River supply. NKWSD also has a contract with the City of Bakersfield for 20,000 AF per year of Kern River supplies through 2012. NKWSD conjunctively uses surface water and groundwater to meet the irrigation water demands of its landowners. In particular, the district's highly variable surface water supply is regulated, in part, in the underlying groundwater basin. The surface water which is placed in groundwater storage is subsequently pumped by both the district and its landowners to meet agricultural irrigation water needs.

Tulare Lake Basin Water Storage District

Tulare Lake Basin Water Storage District (TLBWSD) is a member agency of the State Water Contractors, which is a non-profit agency that purchases water from the SWP. Collectively, the State Water Contractors deliver water to 750,000 acres of agricultural lands. TLBWSD has an SWP contract entitlement for 88,922 AF per year. TLBWSD uses a combination of groundwater and surface water to meet irrigation demands.

East Bear Creek Unit, San Luis National Wildlife Refuge

The East Bear Creek Unit (EBCU) is located east of the San Joaquin River, in Merced County. The Refuge includes Bear Creek and the San Joaquin River and contains natural grasslands, vernal pools, riparian floodplain habitat, irrigated pasture and small-grain production lands.

The majority of water used by the San Luis NWR Complex, prior to the enactment of the CVPIA has been either surplus CVP water or surplus SWP water. EBCU is managed primarily for migratory waterfowl, shorebirds, marsh and water birds and their associated habitat types as well as for Endangered Species Act (ESA) listed species. The CVPIA requires that the Reclamation provide Level 2 and Level 4 water supplies to National Wildlife Refuges to meet the objectives of Public Law 102-575.

Merced National Wildlife Refuge

The Merced National Wildlife Refuge (MNWR) encompasses 10,262 acres of wetlands, native grasslands, vernal pools, and riparian areas. It was established in 1951 under the Lea Act to attract wintering waterfowl from adjacent farmland where their foraging was causing crop damage. In addition to managing natural habitats, the MNWR contains approximately 300 acres of cultivated corn and winter wheat crops and over 500 acres of irrigated pasture for wildlife.

MNWR is managed primarily for migratory waterfowl, shorebirds, marsh and water birds and their associated habitat types as well as for Endangered Species Act (ESA) listed species. The CVPIA requires that the Reclamation provide Level 2 and Level 4 water supplies to National Wildlife Refuges to meet the objectives of Public Law 102-575.

Pixley National Wildlife Refuge

The Pixley National Wildlife Refuge (PNWR) was established in 1959, and consists of approximately 6,300 acres of grasslands and wetlands. The refuge is located in southwest Tulare County, approximately five miles southwest of the community of Pixley. Portions of the PNWR lie within the historical Tulare Lake Bed.

Approximately 5,040 acres are set aside as habitat for three federally endangered species, the blunt-nosed leopard lizard, the San Joaquin kit fox, and the Tipton kangaroo rat and are also currently used for livestock grazing. In addition to providing habitat for migratory waterfowl, the primary objective of the PNWR is habitat restoration for the endangered lizard.

The refuge has no firm surface water supplies. In the past, floodwaters from Deer Creek have been diverted by PID, which provides excess water to a small area within the refuge for groundwater recharge. The refuge is located in an area of groundwater overdraft with groundwater levels between 100 to 200 feet below the ground surface. Groundwater is currently the only reliable water available to the refuge. The CVPIA requires that the Reclamation provide Level 2 and Level 4 water supplies to National Wildlife Refuges to meet the objectives of Public Law 102-575.

Kern National Wildlife Refuge

Kern National Wildlife Refuge (KNWR) was established on November 18, 1960. KNWR is located 19 miles west of the City of Delano. Approximately 5,000 to 6,500 acres consists of seasonal wetlands, irrigated moist soil units, and riparian habitat. Fall flood-up begins in mid-August and reaches its peak of flooded marsh habitat by January.

MNWR is managed primarily for desert uplands, riparian corridor and wetlands and associated habitat types as well as for Endangered Species Act (ESA) listed species. The CVPIA requires that the Reclamation provide Level 2 and Level 4 water supplies to National Wildlife Refuges to meet the objectives of Public Law 102-575. The refuge was approved to take CVPIA water in 1992, which provided an annual water supply\.

Tulare Lake Basin Water Storage District

Tulare Lake Basin Water Storage District (TLBWSD) is a member unit of the Kings River Water Association (KRWA). As a member of the KRWA, TLBWSD has a Kings River water upstream storage share of 6,404 AF and Pine Flat Reservoir storage rights of 33,229 AF. TLBWSD is a public agency which manages South Fork water deliveries at Empire No. 2 Weir near Stratford in Kings County. Its boundary includes nearly the entire Tulare Lake bed and the service area is 185,800 acres. The district is a State Water Project contractor and is connected to the California Aqueduct. Despite the district's state contract, the Tulare Lake bed relies most heavily on Kings River water for irrigation purposes. TLBWSD is located southwest of the city of Corcoran in Kings County. TLBWSD was formed in 1926 at which time all the lands in the District were fully developed. All deliveries from TLBWSD are for agricultural purposes. Main crops are cotton, seed alfalfa and grain.

Section 3.1.1.4 – First Paragraph, the following is added as the first sentence:

Contractors analyzed in this EA have the potential of utilizing the following conveyance facilities for the delivery, transfer, or exchange of water.

Section 3.1.1.4 – Conveyance Facilities, the following addition is added to California Aqueduct/San Luis Canal and San Luis Reservoir/O’Neill Forebay at the end of the first paragraph:

The overall average capacity of the California Aqueduct is 13,100 cubic feet per second.

Section 3.1.2.2 – Friant Division Long-Term Contractors, the following revisions are made to Arvin-Edison Water Storage District:

Arvin-Edison Water Storage District (AEWSD) is located in southern Kern County. AEWSD has a repayment contract with Reclamation for 40,000 AF/y of Class 1 and 311,675 AF/y of Class 2 water supplies. The Class 2 water supply comprises a large fraction of their contract allocation. However, this supply is variable. ~~The district~~ AEWSD manages this supply by using transfers and exchanges as well as utilizing an underlying groundwater reservoir to regulate water availability and to stabilize water reliability by percolating water through various spreading basins. AEWSD takes Friant CVP water from a turnout located at the terminus of the FKC, from their Intake Canal and serves landowners within its district through 45 miles of lined canals and 170 miles of pipeline.

AEWSD is located in Kern County in the southeasterly portion of the San Joaquin Valley. AEWSD was formed in 1942 and ~~its original size was 129,988 acres. Currently~~ AEWSD comprises 132,000 acres, of which, 109,230 acres are irrigated. Urbanization has changed approximately 2,500 acres of agricultural lands to M&I. AEWSD has a repayment entered into its first long-term contract with Reclamation for 40,000 AF of Class 1 and 311,675 AF of Class 2 water. The main crops in AEWSD are grapes, carrots, potatoes, oranges and cotton wheat.

AEWSD maintains ~~three~~ various spreading basins to percolate water into the aquifer for storage. Gravity and pressure fed ponds are filled from surface water supplies in “wet” years, while groundwater wells are used to extract stored water in “dry” years to meet Surface Water Service Area demands. ~~The safe yield of the groundwater supply is 89,900 AF.~~

In addition, AEWSD engages in exchanges of CVP water with the Cross Valley (CV) CVP Contractors. Historically up to 128,300 af/y of CV Contractor’s CVP water or other water supplies were delivered to AEWSD. This water is diverted from the Delta through the Aqueduct and to the CVC. In exchange, the Friant CVP water that would have flowed down the FKC to AEWSD is diverted by the CV Contractors in the FKC. Due to the variances in allocations of Friant CVP water, these exchanges may not even out each year. However, modeling indicated over the long-term the amounts of water would roughly balance. Two of the CV Contractors have terminated their exchange arrangements with AEWSD resulting in approximately up to 70,984 af/y maximum delivered to the remaining six CV Contractors and approximately up to 66,096 af/y of water returned to AEWSD. Over the last five years, on average, approximately 30,000 af/y have been exchanged (of various sources) between AEWSD and CV Contractors.

In 1997, AEWSD entered into a 25-year agreement with the Metropolitan Water District of Southern California (MWD), in which AEWSD agreed to bank approximately 250,000 AF of MWD State Water Project Supply for later extraction in drought years. AEWSD has completed construction of an Intertie pipeline connecting the terminus of its canal to the California Aqueduct to enhance the water banking and exchange program. ~~The Intertie pipeline does not create new or additional contractual supplies.~~

~~AEWSD has historically delivered an average of less than 2,000 AF/y or non CVP to two urban customers, East Niles Community Service District and Sycamore Canyon Golf Course. In 2004, AEWSD joined the Power and Water Resources Pooling Authority (PWRPA). PWRPA is authorized to, among other things, effectively study, promote, develop, conduct, design, finance, acquire, construct, and operate water and energy-related projects and programs. PWRPA member units utilize electric power to convey and treat water and recognize that water delivery and electric power consumption are directly related and that exchange of water and electric power resources is a variable means of managing both electric power consumption and water supplies. PWRPA members include AEWSD, Banta-Carbona Irrigation District, Byron-Bethany Irrigation District, Glenn-Colusa Irrigation District, James Irrigation District, Lower Tule River Irrigation District, Princeton-Codora-Glenn Irrigation District, Provident Irrigation District, The West Side Irrigation District, West Stanislaus Irrigation District, Cawelo Water District, Reclamation District 108, Santa Clara Valley Water District, Sonoma County Water Agency and Westlands Water District. PWRPA member units possess the right to receive capacity and energy from the Western Area Power Administration (WAPA), a federal agency engaged in the marketing and distribution of power generated by federally owned facilities, including the CVP.~~

Section 3.1.2.2 – Proposed Action, the following revisions are made to the last paragraph:

The Proposed Action would provide recirculated water for the Friant Division long-term contractors from SLR and provide a mechanism for transfers and exchanges between Friant contractors and to SOD contractors and MWD. ~~It can be predicted that the Friant contractors, MWD, and SOD contractors would not experience any loss or gain in water supply as a result of this action.~~ The recirculation of recaptured Interim Flows will not increase deliveries to any water district. All water delivered, transferred, or exchanged shall remain within existing contract totals for those districts, each of which had previous environmental analysis. The Proposed Action in this EA does not exceed those existing contract amounts. Further, the Proposed Action is strictly limited to Interim Flows that are recaptured and stored as part of the WY 2011 Interim Flows project. Therefore, this action is temporary and short-term in nature and not intended to extend beyond WY 2011.

Section 3.4, Cultural Resources, the following revisions have been made to the section:

“Cultural resources” is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government’s responsibility to cultural resources. Section 106 of the NHPA requires the Federal government agencies to take into consideration the effects of an their undertakings on cultural resources listed on included in, or eligible for inclusion in, the National Register of Historic Places (National Register) (NRHP). Those Cultural resources that are on included in, or eligible for inclusion in, the National Register NRHP are referred to as historic properties.

~~The San Joaquin Valley is rich in historical and prehistoric cultural resources. Cultural resources in this area are generally prehistoric in nature and include remnants of native human populations that existed before European settlement. Prior to the 18th Century, many Native American tribes inhabited the Central Valley. It is possible that many cultural resources lie undiscovered across the valley. The San Joaquin Valley supported extensive populations of Native Americans, principally the Northern Valley Yokuts, in the prehistoric period. Cultural studies in the San~~

Joaquin Valley have been limited. The conversion of land and intensive farming practices over the last century has probably disturbed many Native American cultural sites.

3.4.1 Affected Environment

The San Joaquin Valley is rich in both prehistoric and historical cultural resources. Prehistoric resources include a variety of cultural remnants, resulting from the use of the area by indigenous human populations for thousands of years before European settlement of the West. Prior to the 18th Century, numerous Native American groups inhabited California's Central Valley, with the San Joaquin Valley and surrounding foothills supporting extensive populations. Ethnographically, Northern Valley Yokuts, Southern Valley Yokuts, and Foothill Yokuts were the principal inhabitants of these areas. Land conversion and intensive farming practices over the past century have impacted many Native American cultural sites; however, it is possible that additional Native American cultural resources lie undiscovered throughout the region.

Historic-era cultural resources within the San Joaquin Valley include various built environment features related to agriculture, ranching, and transportation. Many water storage and conveyance features, such as those comprising the CVP and SWP, have historical significance and can be considered cultural resources. Several components of the CVP have been determined to historic properties eligible for inclusion in the NRHP, and a multiple properties submission for the CVP, in which the eligible property types and CVP contributing elements are identified, is under review for submission to the Keeper of the NRHP. Resources within the scope of this project include historic features of the built environment primarily those of the CVP and SWP. Components of the CVP have been determined eligible for inclusion in the National Register and have been prepared for inclusion in the National Register through a multiple property nomination. The CVP multiple property nomination is currently being reviewed for submission to the Keeper of the National Register for inclusion in the National Register.

Friant Dam is located on the San Joaquin River, 25 miles northeast of Fresno, California. Completed in 1942, the dam is a concrete gravity structure, 319 feet high, with a crest length of 3,488 feet. Construction of the canal began in 1945 and was completed in 1951. Both Friant Dam and the FKC are considered contributing elements of the CVP multiple property listing and are considered eligible for inclusion in the National Register.

3.4.2.1 No Action

Under the No Action Alternative, Reclamation would not enter into new delivery, transfer, or exchange agreements to recirculate recaptured water to the Friant contractors. There would be no Federal undertaking, as defined in Section 301(7) of the NHPA, and Reclamation would be under no obligation to complete the Section 106 process, as described in the NHPA implementing regulations at 36 CFR Part 800. The No Action Alternative would result in no impacts to cultural resources. Under the No Action Alternative, there would be no Federal undertaking as described in the in the NHPA at Section 301(7). As a result, Reclamation would not be obligated to implement Section 106 of that NHPA and its implementing regulations at 36 CFR Part 800. Because there is no undertaking, impacts to cultural resources would not be evaluated through the Section 106 process. All operations would remain the same resulting in no impacts to cultural resources.

3.4.2.2 Proposed Action

The Proposed Action Alternative to enter into delivery, transfer, or exchange agreements is an undertaking as defined in Section 301(7) of the NHPA and subject to Section 106 review. As the

~~delivery, transfer, or exchange of water, as described, would occur through existing facilities and within current water service area boundaries, without modification to existing facilities, construction of new facilities, or change in land use, the Proposed Action has no potential to cause effects on historic properties, pursuant to 36 CFR Part 800.3(a)(1). The Proposed Action Alternative would result in no impacts to cultural resources. Transferring water as described in the Proposed Action is an undertaking as described in Section 301(7) of the NHPA, initiating Section 106 of the NHPA and its implementing regulations at 36 CFR Part 800. All transfers would occur through existing facilities and water would be provided within existing service area boundaries to areas that currently use water. The Proposed Action would not result in modification of any existing facilities, construction of new facilities, change in land use, or growth. This action has no potential to cause effect to historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1). As a result, the proposed undertaking would result in no impacts to cultural resources.~~

Section 6, References - The following references are added:

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Kern Delta Water District web site

<http://kerndelta.org/index-2.html> accessed April 4, 2011.

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Reclamation (U.S. Bureau of Reclamation) December 2009. Delano-Earlimart Irrigation District and Rosedale-Rio Bravo Water Storage District Banking Program, 2009-2026, Final Environmental Assessment EA 09-92

Reclamation (U.S. Bureau of Reclamation) October 2009. Transfer of Central Valley Project Water to Kern County Water Agency in Exchange for State Water Project Water Delivered to San Luis Water District and Westlands Water District, Final Environmental Assessment EA 09-128

Reclamation (U.S. Bureau of Reclamation) May 2010. East to West Transfers Between Friant Division and South-of-Delta Central Valley Project Contractors, 2010-2011 Draft Environmental Assessment EA-10-26

Reclamation (U.S. Bureau of Reclamation) March 2008. 2008 Conditional One Year Pre-Approval of Transfers and Exchanges between Friant and Cross Valley Long-Term CVP Contractors and NCVP Contractors, Final Environmental Assessment EA 07-120

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