

RECLAMATION

Managing Water in the West

Final Environmental Assessment

Temporary One-Year Transfer and Exchange of Recaptured San Joaquin River Restoration Program Flows from Madera Irrigation District and Chowchilla Water District to Red Top



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

April 2013

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.

Table of Contents

	Page
Section 1 Introduction	5
Overview of the Final Red Top EA	5
Section 2 Comments	6
2.1 Comments from Friant Water Authority.....	7
2.2 Comments from Arvin Edison Water Storage District	9
Section 3 Responses to Comments	11
3.1 Responses to Comments from Friant Water Authority.....	11
3.2 Response to Comments from Arvin-Edison Water Storage District	14
Section 4 Errata	15
Section 5 List of Preparers and Reviewers	19
Section 6 References	20

List of Acronyms and Abbreviations

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
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
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
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
SLR	San Luis Reservoir
SWP	State Water Project
SWRCB	State Water Resources Control Board
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 or repayment contracts, 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 service or repayment contracts 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, deliver, 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 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.

This page left blank intentionally

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 Temporary One-Year Transfer and Exchange of San Joaquin River Restoration Program (SJRRP) Flows from Madera Irrigation District and Chowchilla Water District to Red Top (Final Red Top EA). This Final EA is being prepared to analyze the impacts to the human environment from transferring recaptured SJRRP flows from transferring and/or exchanging Interim and Restoration Flows from Madera Irrigation District and Chowchilla Water District to the Red Top area lands. Because Interim and Restoration 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 SJRRP Program Environmental Impact Statement/Environmental Impact Report (PEIS/R) and associated Record of Decision (ROD), signed September 28, 2012.

Overview of the Final Red Top 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 Redtop EA includes all comments received on the Draft Environmental Assessment for a Temporary One-Year Transfer and Exchange of Recaptured San Joaquin River Restoration Program Flows from Madera Irrigation District and Chowchilla Water District to Red Top (Draft Red Top EA) and the responses to those comments. The Final Red Top EA serves as the factual support document for the conclusions in the corresponding FONSI.

This Final Red Top EA is composed of two documents: the Draft Red Top EA and the Final Red Top EA. The Draft Red Top EA was available for public review on March 22, 2013 and a notice was sent to potentially interested parties for a one-week public review period that closed on March 29, 2013. This Final Red Top EA contains a list of commentors on the Draft Red Top EA and their comment letters. Both volumes of the Draft and Final Red Top EAs must be read together. This Final Red Top EA does not repeat the information in the Draft Red Top 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 in Section 3 and the Draft WY 2013-2017 Recirculation EA need not be recirculated for additional public review and comment.

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 Red Top EA has not occurred because no comments posed or options presented in this Final Red Top 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 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.,AEWSD-1). Responses to comments are provided in Section 3 – Responses to Comments and are numbered corresponding to the numbers assigned in the letter.

**Table 1:
Summary of Comment Letters Received and
Abbreviations Used to Identify and Respond to Comments**

Abbreviation	Agency	Affiliation
FWA	Friant Water Authority	Local Agency
AEWSD	Arvin-Edison Water Storage District	Local Agency

2.1 Comments from Friant Water Authority



Harvey A. Bailey
Chairman of the Board

Nick Canata
Vice Chairman

Tom Runyon
Secretary/Treasurer

Ronald D. Jacobsma
General Manager

D. Zackary Smith
General Counsel

Member Agencies
Arvin-Edison W.S.D.
Delano-Earlimart I.D.
Exeter I.D.
Fresno I.D.
Ivanhoe I.D.
Kaweah Delta W.C.D.
Kern-Tulare W.D.
Lindmore I.D.
Lindsay-Strathmore I.D.
Lower Tule River I.D.
Madera I.D.
Orange Cove I.D.
Pixley I.D.
Porterville I.D.
Saucelito I.D.
Shafter-Wasco I.D.
Stone Corral I.D.
Tea Pot Dome W.D.
Terra Bella I.D.
Tulare I.D.

March 29, 2013

VIA E-MAIL: mabanonis@usbr.gov and mmanzo@usbr.gov

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

RE: Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) – Temporary One-Year Transfer and Exchange of Recaptured San Joaquin River Restoration Program (SJRRP) Flows from Madera Irrigation District and Chowchilla Water District to Red Top

Dear Michelle and Mario:

Thank you for the opportunity to review and comments on the subject temporary transfer EA and FONSI although we are concerned that the limited review time may not have provided ample opportunity for a clear understanding and review of the documents or implications of the transfer. In that regard, and since the subject transfer will not likely occur for several weeks or months, we request that the comment period be extended by a minimum of one to two weeks.

FWA-1

The Friant Water Authority (Authority or FWA) is providing these comments on behalf of its member agencies that have provided water to implement the SJRRP and rely heavily on the recapture and recirculation of Interim Flows released to the River and we reserve the right to supplement them if additional comment time is provided.

The Authority is generally supportive of facilitating transfers that may be a part

Main Office
854 N. Harvard Avenue
Lindsay, CA 93247

Phone: 559-562-6305
Fax: 559-562-3496

Sacramento Office
1107 9th Street, Suite 702
Sacramento, CA 95814

Phone: 916-346-4165
Fax: 916-346-3429

Website: www.friantwater.org

of the solution to the subsidence conditions in the Red Top area. We are also generally in favor of programs that efficiently increase the Recaptured and Recirculation Water available to Friant districts. However, it is not entirely clear from the project description whether there is a potential for impacts to the total amounts of water that may be recaptured or whether it could result in an allocation of Recaptured water that is not consistent with prior practice. FWA-2

For example, because the Project Description includes the use of the Mendota Pool and Reach 3 for conveyance of the transfer water, It is unclear if the proposed transfer will affect the mechanism or quantity of Recaptured Water. For example if conveyance of transferred water to Sack Dam or the Arroyo Canal takes place when recapture capacity in the Mendota Pool is limited, it could reduce the total recaptured volume. Also, it is not explicitly stated that the amounts of Recaptured Water available to MID and CWD will be based on their ratable share of all recaptured water or if their share of Recaptured Water will be enhanced in any way by the conveyance pathway that involves deliveries via Arroyo Canal or direct diversion at Sack Dam. (In our view, it should be the former) FWA-3

If the transfer pathway also involves a mechanism for recapture, it would seem it could be viewed somewhat in the same context as other alternative Recaptured and Recirculation Water programs (i.e. Exchange Contractors, the Westlands 40/60 program, Meyers Banking 50/50 program, James Irrigation program, etc.). In this regard, the following questions/observations are noted:

- Is the direct delivery of transfer water to the Arroyo Canal a recapture mechanism and, if so, what would be the relative priority of each of these recapture mechanisms? FWA-4

- How does this affect overall recapture accounting and allocation of Recaptured Water? FWA-5

- If direct delivery of the transfer water is part of the recapture mechanism, would that then allow for allocation of Recaptured Water supplies in SLR to other Friant districts such that the water recaptured during transfer is considered a portion of total recaptured water to be ratably allocated to all impacted Friant Contractors? FWA-6

Thank you and please call or email me with any questions, comments or concerns.

Sincerely,



Stephen H. Ottemoeller
Water Resources Manager
Friant Water Authority

2.2 Comments from Arvin Edison Water Storage District

ARVIN-EDISON WATER STORAGE DISTRICT

PRESIDENT
HOWARD R. FRICK

VICE PRESIDENT
EDWIN A. CAMP

SECRETARY-TREASURER
JOHN C. MOORE

ENGINEER-MANAGER
STEVEN C. COLLUP

ASSISTANT MANAGER
DAVID A. NIXON

STAFF ENGINEER
JEEVAN S. MUHAR

20401 BEAR MOUNTAIN BOULEVARD
MAILING ADDRESS: P.O. BOX 175
ARVIN, CALIFORNIA 93203-0175

TELEPHONE (661) 854-5573
FAX (661) 854-5213

EMAIL arvined@aewsd.org

DIRECTORS

DIVISION 1
RONALD R. LEHR

DIVISION 2
JEFFREY G. GIUMARRA

DIVISION 3
HOWARD R. FRICK

DIVISION 4
DONALD M. JOHNSTON

DIVISION 5
JOHN C. MOORE

DIVISION 6
EDWIN A. CAMP

DIVISION 7
CHARLES FANUCCI

DIVISION 8
DONALD VALPREDO

DIVISION 9
KEVIN E. PASCOE

March 29, 2013

Via Electronic Mail: mabanonis@usbr.gov & mmanzo@usbr.gov

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

RE: Draft Environmental Assessment (EA) and Draft Findings of No Significant Impact (FONSI) – Temporary One-Year Transfer and Exchange of Recaptured San Joaquin River Restoration Program (SJRRP) Flows from Madera Irrigation District and Chowchilla Water District to Red Top

Dear Michelle and Mario:

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 therefore, has significant interest in the various provisions intended to mitigate impacts, including, but not limited to, Recapture and Recirculation programs. Our comments upon review of the subject EA/FONSI (program), and subsequent discussions with Reclamation staff, are as follows:

The subject EA/FONSI covers a range of activities and a program that could potentially affect AEWSD's (and other Friant districts) overall share of the Recaptured and Recirculation Water.

AEWSD is generally in favor of programs that efficiently increase the Recaptured and Recirculation Water available to Friant districts, especially during the current "capacity constraint" era. **However, due to the short review period allowed for this Draft EA/FONSI (less than 7 days), AEWSD has several unanswered questions regarding the proposed program and mostly related to the Recapture and Recirculation Water accounting procedures.**

AEWSD is hopeful that by operating the subject program, the program will not in any manner negatively impact either the overall 2013 Recaptured and Recirculation Water supplies available to Friant or the ratable distribution of Recaptured Water to Friant contractors. AEWSD expects that the subject program will only increase or at a minimum maintain the

AEWSD-1

Page 1 of 2

same quantity (with and without program test) of Recaptured and Recirculation Water for 2013.

AEWSD-1

It is unclear to AEWSD if and how the proposed program will affect the mechanism or quantity of Recaptured Water. For example, if conveyance to Sack Dam or the Arroyo Canal takes place when recapture capacity in the Mendota Pool is limited, it could reduce the total recaptured volume. Also, it is not explicitly stated that the amounts of Recaptured Water available to Madera Irrigation District (MID) and Chowchilla Water District (CWD) will be based on their ratable share of all Recaptured Water or if their share of Recaptured Water will be enhanced in any way by the proposed conveyance pathway that involves deliveries via Arroyo Canal.

AEWSD-2

If the proposed program pathway also involves a mechanism for recapture, it would seem it could be viewed somewhat in the same context as the other available alternative Recaptured and Recirculation Water programs (i.e. Exchange Contractors, the Westlands 40/60 program, Meyers Banking 50/50 program, James Irrigation program, etc.). In this regard, the following questions/observations are noted:

- What is the priority of each of these Mendota Pool and/or upstream of Sack Dam programs?

AEWSD-3

- At what operational conditions and/or constraints does the subject program water get utilized? As an example, recall in 2012, Friant recapture amounts were diminished due to "water quality issues surrounding Delta-Mendota Canal (DMC) operations and the Mendota Pool." AEWSD assumes the subject program will NOT result in a similar operation where potential Friant recapture is ultimately reduced.

AEWSD-4

- How does the subject program affect overall recapture accounting?

AEWSD-5

- Does the direct delivery of the program water from San Joaquin River (not via DMC) then allow for reallocation of MID/CWD supplies in San Luis Reservoir to other Friant districts?

AEWSD-6

Thank you, and please call or email with any questions, comments or concerns.

Sincerely,



Steve Collup
Engineer Manager

cc: Jeevan Muhar, Staff Engineer
Ernest Conant Esq., Young Wooldridge
Ron Jacobsma, Friant Water Authority

SCC:JSM:sj/AEWSD/USBP/Enr/Docs/AE.Com.2012.EA/Recirculation.Plan.to.Re6.Top.01.09.13.doc

Section 3 Responses to Comments

The following responses were prepared to answer questions or comments received on the Draft Red Top EA and Draft Finding of No Significant Impact (Draft FONSI). Sections 3.1 through 3.2 break down each commenter separately and provide responses to comments as outlined in the letters presented in Sections 2.1 through 2.2.

3.1 Responses to Comments from Friant Water Authority

FWA- 1:

The CEQ website, located at: <http://ceq.hss.doe.gov/welcome.html#ea> states the following: “The purpose of an EA is to determine if a proposed action or its alternatives have potentially significant environmental effects. Applicable Federal, State, and local agencies, applicants, and, to the extent practicable, the public all participate in EA preparation. However, since agencies themselves determine the extent of public involvement, interested individuals should consult the agency to determine how the agency will engage the public.”

Additionally, the CEQ published the document, *A Citizen’s Guide to the NEPA: Having your Voice Heard, December 2007*. This document states, “When preparing an EA, the agency has discretion as to the level of public involvement. The CEQ regulations state that the agency shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing EAs. Sometimes agencies will choose to mirror the scoping and public comment periods that are found in the EIS process. In other situations, agencies make the EA and a draft FONSI available to interested members of the public.”

As CEQ NEPA guidance does not require a formal public review period and because the document was posted for a non-required review period to allow public comment, Reclamation has gone beyond the statutory requirements in meeting its obligations for public review of the EA. Reclamation, as the lead agency for NEPA, has the determination of the level of environmental impacts and the discretion over the level of public involvement, Reclamation has determined that the review period for this minor and non-controversial action is appropriate and was provided to the public to the extent practicable. Further, nothing in the commenter’s letter indicates the need for additional review or disclosure of environmental impacts not accounted for in the Draft EA. Therefore, the review period has expired and it is in the discretion of the agency not to extend the comment deadline.

FWA – 2:

Consistent with the Stipulation of Settlement in *NRDC et al., v. Kirk Rodgers et al.*, (Settlement), the San Joaquin River Restoration Settlement Act, Title X of Public Law 111-11 (Act), CVP water rights, the Friant Division long-term contractors (Friant Contractors) CVP contracts, and in order to best achieve the WMG, this action will not change or effect the manner in which Reclamation has made Recapture and Recirculation Water available to Friant Contractors since 2011. Accordingly, Reclamation will make the same amount of Recapture and Recirculation Water to Madera Irrigation District (MID) and/or Chowchilla Water District (CWD) with or without this action.

FWA-3:

The commenter's example did not include a key component of the action, which is that it provides for the instantaneous recapture and recirculation of MID's and/or CWD's pro-rata amount of Recapture and Recirculation Water at Arroyo Canal, and is not replacing or offsetting any other potential recapture opportunities. Accordingly, this action would have the reverse effect of what the example describes and would actually provide for an increase in the overall recapture and recirculation of Interim Flows and Restoration Flows (SJRRP Flows). While the action would actually increase the overall Recapture and Recirculation Water under the example, Reclamation will make the same amount of Recapture and Recirculation Water to MID and/or CWD with or without this action.

FWA-4:

No, this action was requested by and is solely for the recapture and recirculation of MID's and CWD's pro-rata amount of Recapture and Recirculation Water. Implementation of the Recapture and Recirculation Program includes Reclamation entering into a wide array of agreements for the benefit of: all of the Friant Contractors; select groups of Friant Contractors; and, individual Friant Contractors. While the recapture agreements noted by the commenter are for the benefit of all of the Friant Contractors, this is due to situational opportunities and is not a requirement. In order to best achieve MID's and CWD's district goals, they have elected to have their pro-rata amount of Recapture and Recirculation Water diverted directly out of the San Joaquin River and transferred and exchanged to the Red Top lands in lieu of being recaptured pursuant to the default priority below:

1. Exchanges with Central Valley Project (CVP) contractors in Mendota Pool;
2. Westlands Water District 60/40 program;
3. Marvin Meyers 50/50 program; and,
4. James Irrigation District 60/40 program;

While we normally follow the default priority, as it generally makes to most Recapture and Recirculation Water available, there are additional opportunities, such as this action, that make use of the Recapture and Recirculation Water more efficiently.

For example, Friant Contractor A determines that it would best accomplish its districts goals if its pro-rata amount of Recapture and Recirculation Water was not exchanged with the CVP contractors in Mendota Pool (Program #1), but instead banked with James Irrigation District (Program #4). Accordingly, Friant Contractor A would request Reclamation to bank its pro-rata amount of Recapture and Recirculation Water with James Irrigation District (Program #4). Note: due to the terms of the agreements for Programs 2, 3, and 4 their priority cannot be changed.

FWA-5:

Accounting for this action will be consistent with the methods of accounting used by Reclamation since 2011 for tracking the various recapture programs and various exchange, directly delivery, and transfer programs undertaken by the Friant Contractors. Reclamation will make the same amount of Recapture and Recirculation Water to MID and/or CWD with or without this action.

FWA-6:

Consistent with our practice of making Recapture and Recirculation Water available to the Friant Contractors since 2011, the amount of water made available in San Luis Reservoir will account

for the Recapture and Recirculation Water directly diverted from the San Joaquin River and transferred and exchanged to the Red Top lands by MID and CWD. Reclamation will make the same amount of Recapture and Recirculation Water to MID and/or CWD with or without this action.

3.2 Response to Comments from Arvin-Edison Water Storage District

AEWSD – 1:

See Response to Comment FWA - 2, above.

AEWSD – 2:

See Response to Comment FWA – 3, above.

AEWSD – 3:

See Response to Comment FWA – 4, above.

AEWSD – 4:

See Response to Comment FWA – 3, above.

AEWSD – 5:

See Response to Comment FWA – 5, above.

AEWSD – 6:

See Response to Comment FWA – 6, above.

Section 4 Errata

Based on comments received on the Draft WY 2013-2017 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 2013-2017 Recirculation EA are on component of the materials that comprise the Final WY 2013-2017 Recirculation EA. This errata sheet identifies certain modifications and corrections to the Draft WY 2013-2017 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 2013-2017 EA. Additions to the Draft WY 2013-2017 Recirculation EA are included in double underline and deletions are included in ~~strikethrough~~.

List of Acronyms and Abbreviations: Page iii, the following acronym is added:
SJRRP Flows – Interim and Restoration Flows

2.2 Proposed Action: Page 13, Figure 1 is replaced as follows:
(see next page)

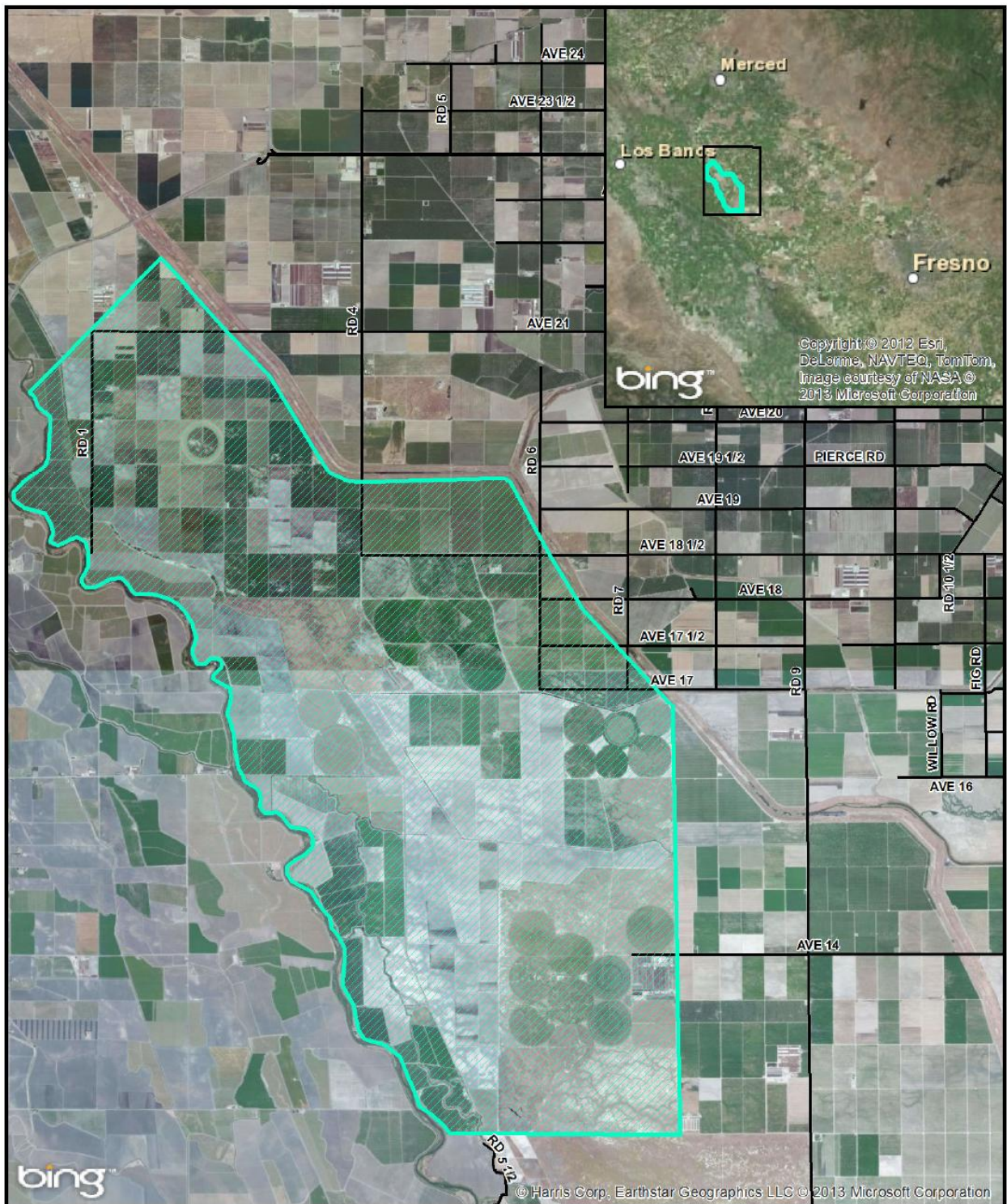
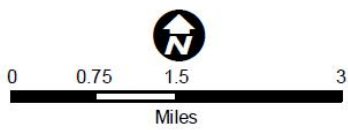


Figure 1: Vicinity Map



Date: 4/2/2013

3.1.1 Water Resources - Affected Environment: Page 16, text is revised:

Madera Irrigation District

MID is a Friant Division Long-Term Contractor and holds a contract with Reclamation providing for the delivery, subject to certain shortage provisions, of up to 85,000 AF/y of Class 1 and 186,000 AF/y of Class 2 Ag water from the Friant Division of the CVP. In 1975 Hidden Dam was completed on the Fresno River, providing a more regulated flow. MID entered into a long-term contract with Reclamation for water from Hensley Lake behind Hidden Dam. MID annexed lands for 24,000 AF/y projected average yield for new water generated by the Hidden Dam project. ~~This 24,000 AF/y is both federal water and MID's water rights water from Sequel Diversion from the San Joaquin River watershed.~~ MID has pre-1914 water rights at Franchi Dam from the Fresno River Watershed, the Big Creek Diversion from the Merced River Watershed, and the Soquel Diversion from the San Joaquin River Watershed. ~~of 20,000 AF/y from Sequel Big Creek~~

A portion of the City of Madera lies within the boundaries of MID. These lands are assessed on a per square-foot basis and receive groundwater recharge benefit from canals that pass through the City. MID does not provide surface water supplies to the City of Madera. The main crops in Madera Irrigation District's service area are grapes, almonds, cotton, cereals, and grasses.

~~Water supplied under the Hidden Dam contract with Reclamation is for the conservation yield. The Big Creek and Soquel diversions provide an annual average supply of 10,000 and 9,700 acre feet respectively. The Fresno River adjudicated and appropriative average annual supply is approximately 20,000 acre feet and is inclusive of the Big Creek and Soquel diversions.~~

~~MID and surrounding area is within a groundwater deficient area as designated by the State DWR. MID considers their recharge to be from percolation ponds located throughout the district. MID monitors the depth to static water level within the district although MID does not provide groundwater. Private landowners have wells and extract groundwater when surface water supplies are not available. The groundwater quality is considered to be of excellent quality as it does not exceed any of the maximum contaminant levels for secondary drinking water standards. However, in recent years the groundwater in areas near Hwy 99 and Avenue 12 has a plume of the nematicide (dibromochloropropane (DBCP)) that flows southwesterly through the basin. Studies conducted in 1993 indicated the DBCP in the groundwater had decreased significantly. The groundwater in areas surrounding the Tri Valley Growers olive plant (Oberti Olives) near Avenue 13 and Road 26 contains salt brine. Tri Valley Growers are implementing remediation measures to correct this problem under the regulatory direction of the Regional Water Quality Control Board.~~

A portion of the eCity of Madera lies within the boundaries of MID. These lands are assessed on a per square-foot basis and receive groundwater recharge benefit from canals that pass through the city. MID does not provide surface water supplies to the eCity of Madera. The main crops in Madera Irrigation District's service area are grapes, almonds, cotton, cereals, and grasses.

3.3.2.1 Environmental Consequences – No Action: Page 23, text is revised:

~~Under the No Action Alternative, MID and CWD would not transfer and/or exchange water to the Red Top area. and would potentially engage in another mechanism to direct deliver, transfer, or exchange recaptured SJRRP Interim Flows. It is anticipated that these recirculation~~

~~mechanisms would utilize existing conveyance facilities which would have no known effect to species or critical habitat in area.~~

Section 5 List of Preparers and Reviewers

Mario Manzo, Project Manager, San Joaquin River Restoration Program

Michelle Banonis, Natural Resources Specialist, San Joaquin River Restoration Program

Section 6 References

- Anderson, J, F Chung, M Anderson, L Brekke, D Easton, M Ejetal, R Peterson, and R Snyder. 2008. *Progress on Incorporating Climate Change into Management of California's Water Resources*. Climatic Change (2008) 87 (Suppl 1):S91–S108 DOI 10.1007/s10584-007-9353-1
- Belridge Water Storage District web site
<http://www.belridgewsd.com/Facts.aspx>, accessed April 4, 2011.
- California Natural Diversity Database (CNDDDB) 2009. California Department of Fish and Game, Wildlife and Habitat Data Analysis Branch. Sacramento, CA.
- Council on Environmental Quality, Executive Office of the President, December 2007. A Citizen's Guide to the NEPA, Having Your Voice Heard. Washington, D.C.
- Department of Water Resources (DWR). 2003. California's Groundwater, Bulletin 118.
<http://www.water.ca.gov/groundwater/bulletin118/update2003.cfm>, accessed September 22, 2009.
- Environmental Protection Agency (EPA). 2009: Website – Climate Change, Basic Information.
<http://www.epa.gov/climatechange/basicinfo.html> accessed September 23, 2009.
- Famiglietti, J. D. et al. 2001: Satellites Measure Recent Rates of Groundwater Depletion in California's Central Valley. Geophysical Research Letters, Vol. L03403.
- Friant Water Users Authority; *The Friant Division Facts Booklet*.
http://friantwater.org/friant_facts/Friant_Booklet_Information.pdf
- Kern Delta Water District web site
<http://kerndelta.org/index-2.html> accessed April 4, 2011.
- Kings River Water Association/Kings River Conservation District, 2009. The Kings River Handbook. http://www.krcd.org/pdf/Kings_River_Handbook_2009.pdf
- Reclamation (U.S. Bureau of Reclamation) 2010. United States Bureau of Reclamation. Website:
http://www.usbr.gov/projects/Project.jsp?proj_Name=Friant%20Division%20Project
accessed: January, 2010.
- Reclamation (U.S. Bureau of Reclamation) June 2009. Arvin-Edison Water Storage District/Metropolitan Water District 2009-2010 Water Exchange Program, Final Environmental Assessment EA 09-97
- Reclamation (U.S. Bureau of Reclamation) June 2010. Long-Term Annual Exchange of up to 4,000 Acre-Feet of Water Per Year Between Paramount Citrus Association and its Related Companies and the Tulare Irrigation District, Draft Environmental Assesment EA 08-41

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

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 – San Joaquin River Restoration Program – Central Valley Project – Friant Division*.

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*

Reclamation (U.S. Bureau of Reclamation) September 2009. San Joaquin River Restoration Program Water Year 2010 Interim Flows Project Final Environmental Assessment/Initial Study and Finding of No Significant Impact/Mitigated Negative Declaration.

Reclamation (U.S. Bureau of Reclamation) June 2010. San Joaquin River Restoration Program Water Year 2011 Interim Flows Project Draft Supplemental Environmental Assessment and Draft Finding of No New Significant Impact.

Second Amendatory Contract for Exchange of Waters, Contract No. I1r-1144, February 14, 1968

U.S. Geological Survey 2009. Groundwater Availability of the Central Valley Aquifer, California. Professional Paper. 766, 225p. <http://pubs.usgs.gov/pp/1766/>

U.S. Fish and Wildlife Service (USFWS) 1998. Final CVPIA Administrative Proposal on Water Transfers.

U.S. Fish and Wildlife Service (USFWS) 2009. http://www.fws.gov/sacramento/es/spp_lists/auto_list_form.cfm. Accessed September 21, 2009. Document Number 090921084619. Site last updated January 29, 2009.