

## APPENDIX A

### Suspension of SJRGA Negotiations

- Letter to Ms. Maria Rea, NMFS Area Supervisor, from Ms. Susan M. Fry, Reclamation Area Manager, regarding compliance with 2009 Biological Opinion on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project
- Letter to Mr. Pablo Arroyave, Deputy Regional Director of Reclamation, from Mr. Allen Short, Coordinator, on December 14, 2010 regarding the SJRGA suspension of two-party negotiations with Reclamation and extension of VAMP for the 2011 year

Letter to Mr. Pablo Arroyave, Deputy Regional Director of Reclamation, from Mr. Allen Short, Coordinator, on June 24, 2011 regarding the SJRGA optimism that an interim agreement could be made between the SJRGA and Reclamation



## United States Department of the Interior

BUREAU OF RECLAMATION  
Mid-Pacific Region  
Bay-Delta Office  
801 I Street, Suite 140  
Sacramento, CA 95814-2536

IN REPLY REFER TO:

BDO-100  
ADM-1.10

Ms. Maria Rea  
Area Supervisor  
National Marine Fisheries Service  
Central Valley Office  
650 Capitol Mall, Suite 5-100  
Sacramento, CA 95814-4706

Subject: Compliance with 2009 Biological Opinion on the Coordinated Long-Term Operation of the Central Valley Project and State Water Project

Dear Ms. Rea:

*Maria*

As you know, the Bureau of Reclamation Mid-Pacific Region is proposing to enter into an agreement with the Merced Irrigation District (MID) to purchase spring pulse releases from Lake McClure into the Merced River. This purchase would continue to provide a 30-day spring pulse flow at Vernalis for 2 years following the expiration of the San Joaquin River Agreement (SJRA), and prior to the adoption and implementation of new objectives by the California State Water Resources Control Board (Water Board). This letter is to confirm that the MID purchase is consistent with Action IV.2.1. of the 2009 Biological Opinion on the Long-Term Operation of the Central Valley Project and State Water Project issued by National Marine Fisheries Service on June 4, 2009 (2009 Biological Opinion). This 2009 Biological Opinion states, in part: "Reclamation/DWR shall seek supplemental agreement with the San Joaquin River Group Authority (SJRGA) as soon as possible to achieve minimum long-term flows at Vernalis."

The following paragraphs provide a brief history of Reclamation's efforts to twice negotiate with the SJRGA for interim San Joaquin River flows.

Reclamation and SJRGA representatives spent the last half of 2010 attempting to negotiate a San Joaquin River interim flow agreement. This agreement employed a proportional sharing concept to assign responsibility for meeting the 1995 Water Quality Control Plan Vernalis flow objective, as implemented by the Water Board in Decision 1641 (D-1641). This proportional sharing concept called for the reservoir operators on the major San Joaquin River tributaries to make releases to meet the D-1641 Vernalis Standard in proportion to the unimpaired inflow percentage into their reservoirs as compared to the entire San Joaquin River basin. A major point of contention was that a significant percentage of releases from Friant Dam do not reach Vernalis.



due to hydraulic connectivity issues. Enclosed is the December 14, 2010, SJRGA letter to Reclamation suspending further negotiations.

The second set of negotiations would have resulted in two agreements to present to the Water Board: (1) a 3-year agreement to continue the same flow requirements as under the SJRA, but not the monitoring and export restriction components; and (2) a long-term accord, which would shift the compliance points to the reservoirs and eliminate the Vernalis compliance point. The new Federal Energy Regulatory Commission and existing Stanislaus and San Joaquin River Restoration Program flows would constitute each tributary's in-stream flow requirements. No payment except for transfer water was envisioned under the long-term accord. Enclosed is the June 24, 2011, SJRGA letter cancelling negotiations.

Given indications from MID that they might be willing to sell spring pulse flow water, Reclamation started negotiating a 2-year agreement with MID after receipt of the June 24, 2011, letter. The draft agreement includes the following terms:

- Reclamation to pay \$2.5 million for the availability and purchase of up to 25 thousand acre-feet (TAF);
- If needed, Reclamation may purchase up to an additional 25 TAF at \$85/acre foot; and
- If additional flows are needed, Reclamation may request to purchase up to an additional 40 TAF, but MID is not obligated to sell this increment.

On November 15, 2011, the MID board approved a resolution to finalize a contract with Reclamation for the assurance and sale of spring pulse flow water.

The terms of this agreement are similar to the SJRA with the following exceptions: (1) the Vernalis flow target does not include a double step component; (2) no fall flows are included because MID must now provide these flows under an agreement with the California Department of Fish and Game; and (3) the agreement does not address monitoring nor export restrictions.

Please confirm Reclamation's proposed agreement with MID constitutes partial compliance with Action IV.2.1. of the 2009 Biological Opinion, directing Reclamation and DWR to seek supplemental purchase of water from willing sellers.

If you have any further questions, please feel free to call Ms. Mary Johannis, Deputy Regional Planning Officer, at 916-978-5082 or [mjohannis@usbr.gov](mailto:mjohannis@usbr.gov).

Sincerely,



Susan M. Fry  
Area Manager

Enclosures – 2



## *San Joaquin River Group*

- Modesto Irrigation District
- Turlock Irrigation District
- South San Joaquin Irrigation District
- San Joaquin River Exchange Contractors

P.O. Box 4060  
Modesto, CA 95352  
(209)526-7405  
(209)526-7315-Fax

- Merced Irrigation District
  - Oakdale Irrigation District
  - Friant Water Authority
  - City and County of San Francisco
- 

December 14, 2010

Mr. Pablo Arroyave  
Deputy Regional Director  
Bureau of Reclamation  
Mid-Pacific Region  
2800 Cottage Way  
Sacramento, California 95825-1898

Re: *Suspension of Negotiations on Interim San Joaquin River Basin Flows*

Dear Mr. Arroyave:

The San Joaquin River Group Authority ("SJRG") managers met last Wednesday, December 8, 2010, to discuss the latest proposal from the United States Bureau of Reclamation ("USBR"). After much discussion, deliberation and review of the water supply impacts and potential benefits of the USBR's proposal, the SJRG managers have decided to suspend two-party negotiations with the USBR. It appears that the USBR's understanding of the risks and benefits of such a contract are radically different from the SJRG's view, particularly concerning the allocation of upper San Joaquin River flows. While we accepted the concept of allocating flows to each tributary for purposes of the negotiations, the final allocations proposed were not acceptable.

The SJRG managers appreciate the effort and time that the USBR has invested in trying to arrive at an interim solution, and we still believe that having regulatory certainty for the next five years will be beneficial to all parties.

Additionally, the SJRG managers have executed and transmitted to the USBR an extension of the VAMP for the year 2011. We understand the USBR had some initial questions and concerns regarding the way in which San Joaquin River restoration experimental flows will be accounted for in 2011. We hope those concerns have been resolved and look forward to receiving the executed one-year VAMP extension.

We believe that even though our negotiations did not reach a successful conclusion, the SJRG and the USBR should continue to work together closely on the myriad of issues facing San Joaquin River users, especially in light of the upcoming State Water Resources Control Board San Joaquin River basin flow objective workshop.

Mr. Pablo Arroyave  
December 14, 2010  
Page 2

The SJRGA has also begun to explore other potential alternatives to the agreement we have been discussing. We believe that it may be beneficial to engage the export communities directly to discuss an arrangement for the immediate future. If those discussions result in a concrete proposal that merits additional consideration, we will let you know.

Sincerely,

A handwritten signature in blue ink that reads "Allen Short".

ALLEN SHORT  
Coordinator

C: SJRG



# San Joaquin River Group COPY

- Modesto Irrigation District
- Turlock Irrigation District
- South San Joaquin Irrigation District
- San Joaquin River Exchange Contractors

716 Valencia Ave  
 Davis, CA 95616-0153  
 (530) 758-8633  
 (530)297-2603-Fax

- Merced Irrigation District
- Oakdale Irrigation District
- Friant Water Authority
- City and County of San Francisco

June 24, 2011

Pablo Arroyave  
 Deputy Regional Director  
 Bureau of Reclamation  
 Mid-Pacific Region  
 2800 Cottage Way  
 Sacramento, California 95825-1898

Re: *USBR Negotiations*

Dear Pablo:

It appears to the San Joaquin River Group Authority ("SJRG") that, for a number of reasons, our negotiations have reached an impasse. The predicate for our negotiations was to put an interim agreement in place so the parties in the Basin could work toward long-term agreements. This would allow for the integration of the FERC processes, Public Trust flow proceedings, Basin Plan, TMDL's, ESA section 4(d) protection for the San Joaquin River Restoration Program, and for local water issues and projects to be addressed holistically rather than *ad hoc*. It would allow all the parties to strive for regional self-sufficiency, water supply reliability, and ecosystem restoration.

Unfortunately, it appears that the State Water Resources Control Board ("SWRCB") may not presently be willing to give the parties the time to work on such an approach. The SWRCB has announced its intent to have a final Basin Plan and Plan of Implementation by July 2012, regardless of whether we have an interim agreement or not. This time frame and apparent intent moots the need for an interim agreement. Part of the problem may be that, due to the lack of resources or lack of clear direction, the SWRCB does not fully understand the consequences of imposing this schedule or of attempting to impose a regulatory framework in the manner that has been suggested by some interested parties. As a result, the SWRCB is moving toward Basin Plan flow objectives that are not supported by sound science. In fact, the SWRCB is using the very science that Judge Wanger has found to be "an abuse of discretion."

Although the SJRG remains somewhat optimistic that an interim agreement can eventually be reached, there are several other factors that make reaching an interim agreement in time sufficient enough to be of any value to the aforementioned long-term efforts highly unlikely. The resource agencies have indicated their opposition to the proposed terms of the interim agreement. As in the past, they do not believe VAMP provides sufficient flows and they are opposed to pumping levels being restricted to D-1641. Their current opposition makes the prospects of reaching consensus in the near future highly unlikely. Of equal importance, the

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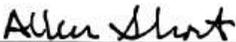
Pablo Arrayove  
June 24, 2011  
Page 2

financial disparity between what Reclamation has felt it could commit, and the needs of various SJRGA's member agencies, remains significant.

In this regard, however, and whether or not the SJRGA and Reclamation are ultimately able to reach an agreement, we believe it is imperative that Reclamation take a much more active role before the SWRCB, and work closely with the SJRGA. We must ensure the SWRCB understands that it is going in the wrong direction and that the direction that is appears to be going will result in disaster for Reclamation, the SJRGA, and the people who depend on them to manage and deliver their water supplies. We would like to set up a meeting with you in the very near future to discuss this and to explore other ways we may be able to work together toward this end.

Thank you for your time and effort in trying to put this agreement together.

Very truly yours,

  
\_\_\_\_\_  
Allen Short

AS/tb

C: SJRG

APPENDIX B

Agreement for the Availability and/or Acquisition of Water  
by the United States from Merced Irrigation District

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UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
Central Valley Project, California

AGREEMENT FOR THE AVAILABILITY AND/OR ACQUISITION OF WATER BY THE  
UNITED STATES FROM  
MERCED IRRIGATION DISTRICT

**INTRODUCTION**

This Agreement by and between the U.S. Department of the Interior, Bureau of Reclamation (Reclamation) and the Merced Irrigation District (MID), collectively, the Parties, is for the availability or purchase and use of MID water to assist in meeting San Joaquin River (SJR) spring pulse flow targets, as set forth in this Agreement, at Vernalis, for calendar years 2012 and 2013. This Agreement does not include monitoring requirements or export restrictions.

WITNESSETH, That:

**RECITALS**

WHEREAS, in 1995, the State Water Resources Control Board (SWRCB) adopted a Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (WQCP). The 1995 WQCP established a 31-day spring pulse flow objective on the lower San Joaquin River at Vernalis.

WHEREAS, in the late 1990's, the SWRCB conducted water rights proceedings to condition water rights in order to implement the 1995 WQCP. As part of those proceedings, Reclamation negotiated a 12 year settlement agreement, the San Joaquin River Agreement (SJRA) with the San Joaquin River Group Authority (SJRG), and others, to implement, among other things, a 31-day spring pulse flow on the lower San Joaquin River at Vernalis.

WHEREAS, the SJRA established a set of targeted flow rates for the 31-day spring pulse flow on the lower San Joaquin River at Vernalis based on hydrologic conditions, as well as other Delta operational objectives and biological experiments (known as the Vernalis Adaptive Management Program, or VAMP).



42 WHEREAS, in 2000, the SWRCB adopted the SJRA in Water Rights Decision 1641 (D-1641) as  
43 a temporary, phased implementation of the WQCP flow objectives for the lower San Joaquin  
44 River at Vernalis. The SWRCB adopted the SJRA temporarily to allow additional time to assign  
45 permanent responsibility to water right holders in the San Joaquin River basin. D-1641 terms  
46 and conditions in support of the SJRA expire December 31, 2011.

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48 WHEREAS, the SJRA was fully implemented from 2000 to 2011.

49

50 WHEREAS, the SWRCB is currently reviewing the flow objectives for the lower San Joaquin  
51 River at Vernalis. The SWRCB expects to have a revised WQCP adopted in 2012 or 2013.

52

53 WHEREAS, This Agreement will provide a mechanism to maintain the implementation of the  
54 Vernalis spring pulse flow targets in the SJRA (without the double-step requirement under  
55 paragraph 5.6 of the SJRA) ("Vernalis Spring Flow Target"), despite the termination of the  
56 SJRA, and the expiration of the terms and conditions in D-1641 in support of the SJRA.

57

58 WHEREAS, the Parties to this Agreement intend to seek SWRCB approval to extend  
59 implementation of the SJRA flow targets (without the double-step requirement) for two years  
60 during the term of this Agreement.

61

62 THEREFORE, Reclamation and MID are entering into this voluntary two-year agreement to  
63 provide flows from the Merced River to support the continued implementation of the Vernalis  
64 Spring Flow Target.

65

66

## 67 1.0 SPRING FLOW

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- 69 a) Reclamation shall pay MID \$2.5 million each year for the availability and ability to use  
70 up to 25,000 acre feet (AF) of Supplemental Water per year to help meet the Vernalis  
71 Spring Flow Target, said payment to be non-refundable. MID agrees to release  
72 Supplemental Water requested under this subdivision subject to the provisions of Article  
73 6.4.
- 74 b) If Supplemental Water in excess of 25,000 AF is needed to meet the Vernalis Spring  
75 Flow Target, Reclamation may request to purchase additional flows of Supplemental  
76 Water, up to 25,000 AF per year from MID at \$85 per AF; however MID is not obligated  
77 under this Agreement to sell Reclamation this additional increment of water if the Base  
78 Flow in the Lower SJR is equal or above 7,000 cfs or as described in Article 4.2, below.
- 79 c) If Supplemental Water in excess of 50,000 AF is needed to meet the Vernalis Spring  
80 Flow Target for a given year, Reclamation may request to purchase additional  
81 Supplemental Water, not to exceed 40,000 AF per year, from MID at an agreed upon  
82 price; however MID is not obligated under this Agreement to sell Reclamation any  
83 additional such flows or any increment thereof.

84

85

## 86 2.0 AUTHORITY

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88 Reclamation enters into this Agreement under the authority of Section 3406(b)(3) of the Central  
89 Valley Project Improvement Act (102 Pub. L. 575, October 1992). MID enters into this  
90 Agreement pursuant to applicable provisions of the California Water Code.

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**3.0 DEFINITIONS**

**3.1 Pulse Flow Period.** The Pulse Flow Period is the 31 consecutive day period during the months of April and May (as agreed upon by the Parties in coordination with U.S. Fish and Wildlife Service (FWS), the California Department of Fish and Game (DFG) and the National Marine Fisheries Service (NMFS)) when Supplemental Water from MID as per this Agreement may be provided to assist in meeting the Vernalis Spring Flow Target. Generally, the Pulse Flow Period starts around April 15 and ends around May 15.

**3.2 Existing Flow in the Merced River.** Existing Flow is the average flow in the Merced River that would exist absent this Agreement at the Shaffer Bridge gage or Cressey gage during the Pulse Flow Period (See Article 4.3, below).

**3.3 Supplemental Water.** Supplemental Water is all water needed from MID pursuant to this Agreement during the Pulse Flow Period, over and above the Existing Flow in the Merced River, to satisfy any Deficiencies in Flows to meet the Vernalis Spring Flow Target.

**3.4 Deficiencies in Flows to meet the Vernalis Spring Flow Target.** For purposes of this Agreement, Deficiency, or Deficiencies in Flows shall mean and be calculated to be the difference between the sum of the forecasted Base Flows in the Lower San Joaquin River at Vernalis during the Pulse Flow Period and the incremental releases from New Melones Reservoir to satisfy Reasonable and Prudent Alternatives under the Biological Opinion, in effect at the signing of this Agreement, and the Vernalis Spring Flow Target. Forecasted flows are established at the 90% exceedence forecast based on the April 1 forecast, if possible, before the Pulse Flow Period. Reclamation will incorporate estimates of typical accretions and depletions by water year type between the Shaffer Bridge/Cressey gages and the Vernalis flow compliance point in calculating Supplemental Water releases. Reclamation will coordinate with reservoir operators for other tributaries as needed and will provide MID a Daily Flow Schedule of requested Supplemental Water releases, as described in Article 3.6.

**3.5 Vernalis Spring Flow Target.** The Single-step Target Flow as defined in the SJRA and shown in Table 1 below is the Vernalis Spring Flow Target during the Pulse Flow Period. The target flows will be set as close to steady flows as practical during the entire Pulse Flow Period.

<b>Table 1. Vernalis Spring Flow Target</b>	
Base Flow in lower SJR at Vernalis (cfs)	Vernalis Spring Flow Target, minimum average flow rate over 31-day Pulse Flow Period (cfs)
0-1999	2000
2000-3199	3200
3200-4449	4450
4450-5699	5700
5700-6999	7000
7000 or greater	Existing Flow

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129  
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**3.6 Daily Flow Schedule.** The Daily Flow Schedule is the schedule of mean daily flows in the Merced River by which the Supplemental Water will be provided during the Pulse Flow

131 Period (See Article 4.3, below).  
132

133 **3.7 Base Flow in Lower San Joaquin River at Vernalis.** The Base Flow in the Lower  
134 SJR at Vernalis is the estimated flow absent this Agreement, excluding the incremental releases  
135 from New Melones Reservoir to satisfy Reasonable and Prudent Alternatives under the  
136 Biological Opinion in effect at the signing of this Agreement.  
137

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139 **4.0 AUGMENTATION OF MERCED RIVER'S SPRING FLOW**  
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141 **4.1 Defining the Pulse Flow Period.** The Parties agree that generally the Pulse Flow  
142 Period will occur from April 15 to May 15. However, the actual Pulse Flow Period will be  
143 defined depending on biological and hydrologic conditions. By mid-March, a tentative Pulse  
144 Flow Period will be defined by Reclamation and MID, in coordination with the FWS, DFG and  
145 NMFS. This tentative Pulse Flow Period will be used in subsequent planning, and will be  
146 modified only as a result of significantly changed circumstances. The Daily Flow Schedule for  
147 the 31-day Pulse Flow Period will be developed by Reclamation and MID, in coordination with  
148 the FWS, DFG and NMFS. The Daily Flow Schedule may be modified at any time upon  
149 agreement of the Parties to this Agreement.  
150

151 **4.2 Estimating Need for Supplemental Water.** By March 20<sup>th</sup> of each year<sup>1</sup>,  
152 Reclamation will estimate whether there is a need to provide Supplemental Water in order to  
153 assist in meeting the Vernalis Spring Flow Target. Reclamation will select the Vernalis Spring  
154 Flow Target based on an estimate of Base Flow in the Lower San Joaquin River from the set of  
155 targets shown in Table 1. If there is a Deficiency in Flows, Reclamation will calculate the  
156 amount of Supplemental Water needed to satisfy the deficiency. MID will review the analysis  
157 and either concur with the estimate of Supplemental Water needed, if any, or if MID does not  
158 concur, MID and Reclamation shall meet within 10 days to endeavor to resolve the dispute.  
159

160 **4.3 Designating the reference gage.** The reference gage for the flows will be the MID  
161 gage at Shaffer Bridge when flow is less than 220 cfs or the California Department of Water  
162 Resources (CDWR) Cressey gage when flows are greater than 220 cfs. However, if the Parties  
163 agree that the Shaffer Bridge gage can be accurately rated above 220 cfs, then that gage may be  
164 used for all flows.  
165

166 **4.4 Planning and implementing operations.** Monthly operations forecasts will be made  
167 starting in early February, depending upon the availability of the February 1<sup>st</sup> CDWR runoff  
168 forecast. The operations forecasts will be updated as the runoff forecasts are updated. The  
169 Parties will develop the Daily Flow Schedule by March 20<sup>th</sup><sup>1</sup>. MID will monitor operations and  
170 make adjustments during the Pulse Flow Period using the best available real-time data. MID will  
171 provide an accounting of the Supplemental Water after the Pulse Flow Period using provisional  
172 mean daily flow data from the appropriate reference gage(s).  
173

174 **4.5 Waiver of Supplemental Water Requirement.** When the Existing Flow in the  
175 Merced River exceeds 800 cubic feet per second (cfs), MID will have no obligation to release  
176 any Supplemental Water under this Agreement. During such years, the Parties nevertheless

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<sup>1</sup> The Estimate of Supplemental Water and associated Daily Flow Schedule will be based on the March 1<sup>st</sup> forecast, but will be adjusted, if necessary, to reflect the April 1<sup>st</sup> forecast.

177 agree to conduct the joint operations forecasting and coordinated planning and operations  
178 scheduling activities called for by this Agreement for the purpose of achieving best use of the  
179 Existing Flow in the Merced River to support the objectives of this Agreement.  
180  
181

182 **5.0 TERM**  
183

184 This Agreement shall remain in effect until December 31, 2013, unless terminated earlier in  
185 writing by agreement of the Parties, or as provided in Article 8.0.  
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188 **6.0 OBLIGATIONS OF PARTIES**  
189

190 **6.1 Payment.** Consistent with Article 1.0(a), Reclamation shall pay MID \$2.5 million by  
191 March 1 of each year for the Term of this Agreement for the availability and ability to use up to  
192 25,000 AF of Supplemental Water to help meet the Vernalis Spring Flow Target. If more than  
193 25,000 AF of Supplemental Water is needed to meet any Deficiencies in Flows, Reclamation will  
194 negotiate with MID for additional amounts of Supplemental Water in accordance with the  
195 provisions of Articles 1.0(b) and 1.0(c) and payment shall be made upon invoicing as provided in  
196 Article 6.2.  
197

198 (a) MID shall register at the Central Contractor Registration (CCR) Web site  
199 at [www.ccr.gov](http://www.ccr.gov) prior to execution of this Agreement.

200 (b) All payments by Reclamation under this Agreement shall be made by  
201 electronic funds transfer (EFT) using the EFT information contained in the CCR database. MID  
202 is responsible during performance and through final payment of this Agreement for the accuracy  
203 and completeness of the data within the CCR database, and for any liability resulting from the  
204 Government's reliance on inaccurate or incomplete data. To remain registered in the CCR  
205 database after the initial registration, MID is required to review and update on an annual basis  
206 from the date of initial registration or subsequent updates, its information in the CCR database to  
207 ensure it is current, accurate and complete.  
208

209 **6.2 Invoicing**

210 (a) On or before January 15 of each year, MID shall submit an invoice for  
211 \$2.5 million for Supplemental Water as defined in Article 1.0 (a).  
212

213 (b) Subsequent to the last day of each Pulse Flow Period during which  
214 Supplemental Water as defined by Articles 1.0 (b) and 1.0 (c) has been provided to  
215 Reclamation pursuant to this Agreement, MID shall submit an invoice to Reclamation  
216 requesting payment for the total quantity provided.

217 (c) In accordance with the Prompt Payment Act, Reclamation shall pay MID  
218 within 30 days upon receipt of a proper invoice that includes the following information  
219 for verification and payment processing purposes:

- 220 (1) Name and address of MID;  
221  
222 (2) Invoice date and number;  
223 (3) MID's Taxpayer Identification Number;  
224 (4) Accounting and Appropriation Data "H37 1205 6051 000  
225 00 0 0";  
225 (5) The Agreement Number 11-WC-20-0156;

- 226 (6) Name and phone number of person to notify in event of  
227 defective invoice;  
228 (7) Remittance address; and  
229 (8) Invoices submitted in accordance with Article 6.2(b) shall  
230 include a table identifying the daily quantities and source of water made available to Reclamation  
231 pursuant to this Agreement during the Pulse Flow Period, including the reference gages' (Article  
232 4.3) meter records, as applicable. This table must show the total quantity of Supplemental Water  
233 provided to Reclamation pursuant to this Agreement.  
234  
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236 **6.3 Contingent on Appropriations.** The expenditure or advance of any money or the  
237 performance of any obligation of Reclamation under this Agreement shall be contingent upon  
238 appropriation or allotment of funds. No liability shall accrue to the United States in case funds  
239 are not appropriated or allotted. No liability shall accrue to MID, nor shall an obligation arise to  
240 release any Supplemental Water contemplated hereunder unless appropriations or allotments  
241 have been made to Reclamation for the amount of Supplemental Water requested.  
242

243 **6.4 Consequence of No Payment.** In any year that Reclamation does not pay MID \$2.5  
244 million by March 1 of that year, MID shall have no obligation to supply any Supplemental Water  
245 under this Agreement.  
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247

## 248 **7.0 NO INJURY TO NEW MELONES OPERATIONS**

249

250 MID agrees that the replenishment of stored water in Lake McClure released for the Vernalis  
251 Spring Flow Target may impact Reclamation. Reclamation is impacted during periods when  
252 Reclamation's releases from New Melones Reservoir, in addition to its releases absent this  
253 Agreement, are made to meet the SWRCB Vernalis salinity objective, or when Standard Permit  
254 Term 93 is in effect. MID will compensate for the impact by releasing water from Lake McClure  
255 at times when releases from New Melones are being made to meet the SWRCB Vernalis salinity  
256 objective, or when Standard Permit Term 93 is in effect, on a schedule coordinated with  
257 Reclamation per Article 4.2 above. The impact will be set to zero if Reclamation makes a flood  
258 release from New Melones prior to or during releases by MID to compensate for an impact.  
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## 261 **8.0 TERMINATION**

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263 **8.1 Re-negotiation; Termination.** In the event that either Party, or the Parties, discover  
264 that the assumptions on which this Agreement is based with respect to water supply, water rights,  
265 or other material facts or circumstances, are incorrect or have changed, the Parties shall attempt  
266 to re-negotiate the terms of this Agreement, if needed. If after 60 days, attempts to re-negotiate  
267 this Agreement are not successful, then any Party may terminate this Agreement. If the SWRCB  
268 does not approve the extension of the SJRA flow targets, as requested by the Parties, either MID  
269 or Reclamation may terminate this Agreement. The termination date of this Agreement shall be  
270 effective immediately upon notice to the other Party.  
271

272 **8.2. Termination for Breach.** If Reclamation fails to pay the MID as required by Article  
273 1.0(a) and 6.1, then, after a 45-day notice to cure default has been given to Reclamation, then  
274 MID may terminate this Agreement. If MID fails to perform its obligations for any reason under

275 this Agreement, then the Reclamation may terminate this Agreement.  
276

277 **8.3. Effect of Termination.** Upon termination of this Agreement, MID is under no  
278 obligation to provide any Supplemental Water and will refund any money paid by Reclamation  
279 for which no Supplemental Water was provided by MID. Neither Party will seek judicial relief  
280 for any reason should this Agreement be terminated pursuant to the terms of this Agreement.  
281

282  
283 **9.0 REPRESENTATION BY COUNSEL.** This Agreement is entered into freely and  
284 voluntarily. The Parties to this Agreement acknowledge their representation by counsel of their  
285 own choice, or that they have had the opportunity to consult with counsel of their own choosing,  
286 in the negotiations that preceded the execution of this Agreement and in connection with the  
287 preparation and execution of this Agreement. Each of the parties hereto executes this Agreement  
288 with full knowledge of its significance and with the express intent of affecting its legal  
289 consequences.  
290

291  
292 **10.0 APPLICABLE BY LAW.** This Agreement shall be construed under and shall be deemed  
293 to be governed by federal law and the laws of the State of California, to the extent not  
294 inconsistent with federal law.  
295

296  
297 **11.0 MODIFICATION OF AGREEMENT.** No supplement, modification, waiver, or  
298 amendment with respect to this Agreement shall be binding unless executed in writing by the  
299 Party against whom enforcement of such supplement, modification, waiver or amendment is  
300 sought.  
301

302  
303 **12.0 SIGNATORIES' AUTHORITY.** The signatories to this Agreement on behalf of all of the  
304 Parties hereto warrant and represent that they have authority to execute this Agreement and to  
305 bind the Parties on whose behalf they execute this Agreement.  
306

307  
308 **13.0 REASONABLE COOPERATION.** The Parties hereto shall reasonably cooperate with  
309 each other, including the execution of all necessary further documents, if any, to carry out the  
310 purpose and intent of this Agreement.  
311

312  
313 **14.0 UNITED STATES AND DISTRICT NOT LIABLE.**  
314

315 **14.1** MID shall not assert that the United States, its officers, agents and employees are  
316 legally liable for damages of any nature whatsoever arising out of any actions or omissions by  
317 MID, its officers, agents and employees related to the performance of this Agreement where such  
318 liability is caused by an act, error or omission of MID, its officers, agents or employees.  
319

320 **14.2** The United States shall not assert that MID, its officers, agents and employees are  
321 legally liable for damages of any nature whatsoever arising out of any actions or omissions by the  
322 United States, its officers, agents and employees related to the performance of this Agreement  
323 where such liability is caused by an act, error or omission of the United States, its officers, agents

324 or employees.

325

326 **14.3** Within thirty (30) days of receipt by either party of any third party claim for liability  
327 arising from actions within the scope of this Agreement, the party receiving the claim shall notify  
328 the other party of such claim and provide a copy of the claim to the other party, if it is in written  
329 form. Nothing in this article shall be construed to limit the right of either party to assert such  
330 affirmative defenses and file such cross complaints as may be appropriate in relation to any claim  
331 affecting the liability of such party.

332

333

334 **15.0 RIGHTS, BINDING EFFECT, ASSIGNMENTS, OTHER DOCUMENTS.** Nothing in  
335 this Agreement affects any legal rights or responsibilities of the Parties, except as expressly  
336 stated herein. This Agreement shall be binding on successors and assigns, provided that no  
337 assignment shall be effective without the express written consent of the other Party. This  
338 Agreement of the Parties is contained within the four corners of this Agreement which represents  
339 the full Agreement between the Parties, and no other document is needed to interpret or form the  
340 Agreement.

341

342

343 **16.0 EFFECTIVE DATE.** The Parties hereto deem this Agreement to be signed and of binding  
344 legal effect as of the date on which the last signatory hereto signs the Agreement.

345

346

347 **17.0 NOTICE TO PARTIES.** All notices required under or regarding this Agreement shall be  
348 made in writing and addressed to the signatories below.

349

350

351 Executed at Sacramento, California on the dates hereafter affixed.

352

353

354

355

356 **UNITED STATES BUREAU OF RECLAMATION**

357

358

359 By: \_\_\_\_\_ Date: \_\_\_\_\_

360

Donald R. Glaser  
Regional Director, MP Region

361

362

363 Address: 2800 Cottage Way  
364 Sacramento, CA 95825-1898

365

366

367 **MERCED IRRIGATION DISTRICT (MID)**

368

369

370 By: \_\_\_\_\_ Date: \_\_\_\_\_

371

John Sweigard  
General Manager

372

Contract Number 11-WC-20-0156

373  
374 Address: Merced Irrigation District  
375 720 W. 20<sup>th</sup> Street  
376 Post Office Box 2288  
377 Merced, CA 95344-0288  
378  
379

## APPENDIX C

### Cultural Resources

Letter to Doug Kleinsmith, Natural Resources Specialist, from Joanne Goodsell, Reclamation archaeologist, regarding cultural resources on the San Joaquin River. The Proposed Action does not have the potential to cause effects on historic properties. Dated November 04, 2011

**From:** Goodsell, Joanne E

**Sent:** Friday, November 04, 2011 4:25 PM

**To:** Kleinsmith, Douglas H

**Cc:** Barnes, Amy J; Bruce, Brandee E; Dunay, Amy L; Fogerty, John A; Leigh, Anastasia T; Nickels, Adam M; Overly, Stephen A; Perry, Laureen (Laurie) M; Soule, William E; Williams, Scott A

**Subject:** San Joaquin Interim Flow Agreement - Project No. 07-SCAO-036.26

Project No. 07-SCAO-036.26

Project Name: San Joaquin River Interim Flow Agreement

Doug:

Reclamation's Proposed Action, as negotiated between Reclamation and Merced Irrigation District, to provide two years of an alternative implementation of the minimum instream "pulse" flow targets for the San Joaquin River Basin at Vernalis, is the type of activity that does not have the potential to cause effects on historic properties, assuming such properties are present, pursuant to 36 CFR Part 800.3(a)(1). As such, Reclamation has no further obligations related to the Proposed Action under Section 106 of the National Historic Preservation Act, as amended.

This email memo is intended to convey the conclusion of the Section 106 process for this undertaking. Please retain a copy of this memo with the EA administrative record.

Sincerely,

Joanne Goodsell, M.A., Archaeologist  
Bureau of Reclamation, Mid-Pacific Regional Office  
2800 Cottage Way, MP-153  
Sacramento, CA 95825  
(916) 978-5499 [jgoodsell@usbr.gov](mailto:jgoodsell@usbr.gov)

## APPENDIX D

### Memorandum of Understanding between CDFG and MID



MEMORANDUM OF UNDERSTANDING BETWEEN  
CALIFORNIA DEPARTMENT OF FISH AND GAME  
AND  
MERCED IRRIGATION DISTRICT  
REGARDING  
OCTOBER INSTREAM FLOWS, OTHER INTERIM INSTREAM FLOWS  
AND FISHERY STUDIES IN THE LOWER MERCED RIVER

This MEMORANDUM OF UNDERSTANDING ("MOU") is made by and between the State of California, as represented by the Department of Fish and Game ("FISH AND GAME"), and the Merced Irrigation District, ("MERCED"), and both hereinafter collectively referred to as "PARTIES", for the combined purposes of (1) providing increased Merced River instream flows in October during fall-run chinook salmon upstream migration, spawning, and egg maturation and incubation; (2) providing interim Merced River minimum instream flow improvements during a thirty-one (31) day period in April and May as the PARTIES agree to maintain or enhance the fishery resource during the period; (3) completing studies of the fall-run chinook salmon, evaluating the status of steelhead trout and other aquatic resources, including the alternatives for improved management of water temperature [and other aquatic resources] of the lower Merced River; and (4) creating a process for defining improved management for beneficial uses of water in the lower Merced River water

shed. For purposes of this agreement the "lower Merced River" shall mean the reach of the Merced River from Crocker-Huffman Diversion Dam to the confluence with the San Joaquin River.

#### I. RECITALS

A. The PARTIES recognize that fall-run chinook salmon stocks of the San Joaquin River and its tributaries represent important fishery resources of the State of California. These include fall-run chinook salmon which annually utilize the Merced River, downstream from Crocker-Huffman Diversion Dam, for the purpose of immigration, spawning, egg maturation and incubation, juvenile rearing and emigration. All San Joaquin River system salmon stocks have been reduced in recent years, resulting from numerous factors, including but not limited to drought and other factors affecting their habitat, and reducing their survival, though some recent improvements have been observed. The PARTIES also recognize the anecdotal nature of scientific knowledge on steelhead trout in the Merced River, and the importance of clarifying the status of this fish in the Merced River.

B. Through its operation, MERCED's Merced River Development Project, ("PROJECT") as licensed by the Federal

Energy Regulatory Commission ("FERC") can materially affect the amount, quality and timing of instream flows available downstream of Crocker-Huffman Diversion Dam (lower Merced River), thereby potentially affecting the welfare and success of salmon stocks and other fishery resources in that stretch of the Merced and San Joaquin Rivers.

C. During 1992, MERCED, acting on behalf of the People of Eastern Merced and Mariposa Counties, filed petitions to change Licenses 2685, 6047 and 11395 (Application Numbers 1224, 10572 and 16186), before the California State Water Resources Control Board ("BOARD"). The petitioners, in part, sought to change and expand the place of use of permits of MERCED to include the Mariposa Town Planning Area of Mariposa County ("TOWN") and that portion of Merced County defined as the El Nido Irrigation District ("EL NIDO"), as described in those Applications. FISH AND GAME, acting on behalf of the People of the State of California, filed a protest to MERCED's petitions alleging that, lacking appropriately scheduled instream flows and other measures, the proposed changes could adversely affect salmon and other resources of the Merced River.

D. After successful consultation and agreement with MERCED, FISH AND GAME conditionally withdrew its protest on the petition to change License 2685 (Application 1224) to add a point of diversion and expand the place of use to include the TOWN in April, 1994. The BOARD has since acted on the aspect of MERCED's petition concerning the TOWN. FISH AND GAME has not withdrawn its protest to MERCED's petition to change its Licenses 2685, 6047, and 11395 (Application Numbers 1224, 10572, and 16186, respectively) regarding EL NIDO.

E. In June of 1994, MERCED requested that its petitioned changes regarding EL NIDO be removed from the BOARD's hearing list. The PARTIES have worked actively since that time to mutually resolve concerns and develop this MOU.

F. On March 17, 1992 MERCED petitioned the BOARD to modify Licenses 2865, 6047, and 11395 (Applications 1224, 10572, and 16186, respectively), to add EL NIDO as an additional place of use to said licenses and to consolidate the licenses, permits, applications and other water rights of EL NIDO into those of MERCED. FISH AND GAME protested MERCED's petition, identifying concerns for resident and anadromous fishery in the Merced River, the need for

improved flow, particularly in April/May and October each year and the need to perform detailed studies of the Merced River salmon fishery for the purpose of prescribing an appropriate instream flow schedule. Since 1992 significant progress has been made on the FISH AND GAME instream flow study and temperature model, particularly for the spawning life stage of salmon. FISH AND GAME believes there is a serious deficit in the existing federal and state stream flow requirements in the lower Merced River and desires an increase in the instream flow requirement to provide improved spawning and migratory conditions in April/May and October each year. Study progress on other aquatic resources has been limited due to stream flow and funding availability. However, since 1999, MERCED and FISH AND GAME have begun joint studies proposed in this MOU in anticipation of its ultimate adoption by the PARTIES.

The PARTIES have developed a Joint Study Plan which defines the objectives, the performance and the fiscal responsibilities for the remaining studies (Exhibit "A"). The PARTIES have also defined and agreed to acceptable October instream flows and the necessary interim spring flow conditions (Exhibit "B"). Exhibits "A" and "B" are attached hereto and incorporated herein by this reference.

G. MERCED is required by its FERC power license, issued on April 8, 1964, to release PROJECT water to the Merced River below the PROJECT for fish enhancement (Article 40 & 41, 31 F.P.C. at 901). The FERC fish flow schedule is divided into two (2) categories, a normal year release schedule and a dry year release schedule. A "Dry Year" is defined in the FERC license as a year in which the forecasted April 1 through July 31 unimpaired runoff, as published in the May 1st bulletin of the California Department of Water Resources("DWR") for the station, "inflow to Exchequer" is less than 450,000 Acre Feet (AF). A "Normal Year" is defined by FERC as a year in which the forecasted April 1 through July 31 unimpaired runoff, as published in the May 1 bulletin of the DWR for the station "inflow to Exchequer" is more than 450,000 AF. In the "Normal Year" release schedule, 43,734 AF of PROJECT water is released annually to the Merced River downstream of the PROJECT. The "Dry Year" release schedule totals 33,024 AF annually. The monthly flows provided under this FERC license are tabulated below.

In October, 1967, MERCED executed a contract with the State of California, known as the Davis-Grunsky ("DG") Contract for State funds in the amount of \$8,000,000, to be

used for the construction of recreational facilities at the PROJECT, as required by FERC, as well as the construction of fish enhancement facilities on the Merced River downstream of the PROJECT, in the vicinity of the Crocker-Huffman Diversion Dam, operated by FISH AND GAME. The DG also provides for MERCED to maintain continuous flow of between 180 and 220 cfs in the Merced River spawning area each year during the period October 31 to March 31. The Merced River spawning area is described as a 20 mile (+/-) reach of the Merced River between the Crocker-Huffman Diversion Dam and Shaffer Bridge (Oakdale Road). Annual DG flows for fish enhancement total from 53,912 to 65,982 AF. The monthly flows are tabulated below:

\* FERC flows are met by DG flows from October 31 through March 31.

Month	FERC (Normal/n)		FERC (Dry/d)		D-G (High/n)		D-G (Low)/l		TOTAL FLOWS (n/n)		TOTAL FLOWS(d/l)	
	(CFS)	(AF)	(CFS)	(AF)	(CFS)	(AF)	(CFS)	(AF)	(CFS)	(AF)	(CFS)	(AF)
Jan	75	4612	60	3689	220	13527	180	11068	220	13527	180	11068
Feb	75	4165	60	3332	220	12218	180	9997	220	12218	180	9997
Mar	75	4612	60	3689	220	13527	180	11068	220	13527	180	11068
Apr	75	4463	60	3570		0		0	75	4463	60	3570
May	75	4812	60	3689		0		0	75	4612	60	3689
Jun	25	1488	15	893		0		0	25	1488	15	893
Jul	25	1537	15	922		0		0	25	1537	15	922
Aug	25	1537	15	922		0		0	25	1537	15	922
Sep	25	1488	15	893		0		0	25	1488	15	893
Oct 01-15	25	744	15	446		0		0	25	744	15	446
Oct 16-31	75	2380	60	1904		0		0	75	2380	60	1904
Nov	100	5951	75	4463	220	13091	180	10711	220	13091	180	10711
Dec	100	6149	75	4612	220	13527	180	11068	220	13527	180	11068
Total		43738		33025		65892		53912		84140		67153

H. The PARTIES recognize that MERCED and FISH AND GAME are both signatory PARTIES to the San Joaquin River Agreement (SJRA) approved by the BOARD in April 1999, which proposes to

undertake a twelve (12) year study commonly referred to as the Vernalis Adaptive Management Plan ("VAMP"). The VAMP is designed to investigate the relationship between flows and delta exports to help determine fishery needs in the Delta while at the same time implementing levels of protection for Delta fisheries consistent with the BOARD's 1995 Water Quality Control Plan. Pursuant to that Agreement, the San Joaquin River Group Authority (SJRGA) members have agreed to meet specified Vernalis flow requirements for Delta protection and to complete studies over a twelve (12) year period which began in 2000, which requirements were adopted by the BOARD in D-1641. Those members and the SJRGA have executed a Division Agreement in 1998 which assigns to each SJRGA member some responsibility for specified target flows at Vernalis on the San Joaquin River. MERCED's responsibility ranges between 50% and 100% of such flows. These specified target flows will be provided in the Merced River during the thirty-one (31) day, April/May, pulse flow period in a manner that: (a) facilitates the studies defined in Exhibit "A" in the Merced River; and (b) are timed for arrival at Vernalis pursuant to the requirements of SJRA.

NOW, THEREFORE, the PARTIES agree as follows:

ARTICLE I

1.0. Purpose

1.1.1. To establish and evaluate an increased salmon spawning, egg incubation and migratory stream flow requirement in the lower Merced River in October to complement existing minimum stream flow requirements.

1.1.2. To implement an annual interim spring flow schedule which will: (a) incrementally increase protection of the chinook salmon stock of the Merced River during completion of said studies, (b) provide for experimentation in the amount and timing of instream flows and (c) ascertain if acceptable criteria for protection of salmon can be provided conjunctively with other beneficial water uses through water management.

1.1.3. To commit the PARTIES to the completion of a program of studies intended to identify the long-term instream flow and other needs of chinook salmon and evaluate the presence and status of steelhead trout in the Merced River. If, the PARTIES agree that the studies conducted pursuant to this MOU, together with other information, indicate that steelhead trout are present in the Merced River, then the PARTIES will create a program of studies

intended to identify the long-term instream flow and other needs of steelhead trout. The PARTIES acknowledge, however, that the level of interim spring water provided for any year of study is subject to the constraints imposed by the water year type, storage sufficiency, and regulatory impacts upon both PARTIES.

1.1.4. To commit the PARTIES to reconnaissance and feasibility studies regarding physical and operational alternatives for managing the cold water pool in MERCED'S PROJECT, and to jointly pursue funding for a later design, permitting, environmental compliance and construction, as necessary for the identified preferred alternative.

1.2. This MOU shall pertain only to fishery resources, habitat and studies related to the lower Merced River. The stream flows and studies provided for under this MOU shall be coordinated with other studies throughout the San Joaquin River Basin and Delta. The PARTIES recognize that there are other downstream activities which materially affect the Merced River salmon stock, most notably the survival of migrant chinook salmon to and from the Merced River. The PARTIES also acknowledge that said downstream aspects need to be addressed in the near future and that, despite any issue of the adequacy of instream flows which are provided for the

Merced River below Crocker-Huffman Diversion Dam, full recovery of the Merced River fishery production may be hampered, pending correction of existing problems associated with downstream diversions, ocean mortality, Delta diversions and fish passage, and other fishery issues through the Delta.

1.3. In order to more completely accomplish the goals of this MOU, and optimize the benefit of scientific knowledge gained, the PARTIES agree to use their best efforts to coordinate the performance of the studies conducted pursuant to Exhibit "A" with studies conducted on the other San Joaquin River tributaries and in the Delta.

1.4. It is the intention of the PARTIES that this MOU shall become the instrument through which FISH AND GAME will conditionally dismiss its protest of MERCED's Petition, as described in Recital F.

## ARTICLE II

### 2.0. Merced River Flow Augmentation

#### 2.1. October Flows

2.1.1. The PARTIES agree to request that the BOARD add a condition to MERCED's License numbers 2685, 6047 and 11395 to augment and improve the existing minimum instream flow requirement in October as defined in Exhibit "B" to improve salmon migration, spawning and egg incubation

throughout the designated spawning reach of the Merced River.

2.1.2. MERCED shall provide 12,500 acre feet of additional water (as measured above its current requirement of 2,350 or 3,124 AF defined in the FERC license) for release after September 30 each year. Such water shall be released by MERCED below Crocker-Huffman Diversion Dam annually, on a schedule developed by FISH AND GAME and agreeable to MERCED, as set forth in Exhibit "B" attached hereto and incorporated herein if not agreed.

2.1.3. FISH AND GAME shall provide the requested October schedule to MERCED by August 15 of each year and the PARTIES shall agree on the final schedule by September 15 each year. The PARTIES shall consider fluctuations in water surface elevations in the Merced River when adopting the annual schedule. If the PARTIES cannot agree on a schedule by September 15 of any year, then the default schedule set forth in Exhibit "B" shall apply. FISH AND GAME's suggested schedule for the fall flows shall be consistent with its best efforts to avoid the dewatering of salmon redds.

2.1.4. The reference gage for this additional water shall be the United States Geologic Survey ("USGS") gage at Shaffer Bridge. In the event that the annual schedule at any time exceeds 220 cubic feet per second, the DWR Cressey gage

will be used. The Shaffer Bridge gage is not accurate beyond approximately 220 cubic feet per second.

2.1.5. The reference gage for these October flows shall remain consistent with the reference gage used for other required minimum stream flows. In the event that the USGS Shaffer Bridge reference gages are changed in the FERC license or DG, or abandoned, the PARTIES shall meet, agree and implement the necessary changes to keep the required stream flow reference gages consistent with the purpose and intent of this MOU.

2.1.6. MERCED shall use the DWR California Data Exchange Center (CDEC) station at Cressey (at flows in excess of 220 cfs) to ensure compliance for the October flows. In the event that DWR abandons its virtual real time data station at Cressey, MERCED shall install or replace the station with comparable telemetry equipment.

2.1.7. MERCED shall use its best management practices to ensure that the water released for fall flows traverses the salmon spawning grounds.

2.1.8. The PARTIES recognize that MERCED may operate the PROJECT under its current license in such a manner as to cause discretionary releases, sometimes referred to as "flood control" releases, from the PROJECT to be made

on a schedule that could result in satisfaction of its obligations under this MOU, for either or both of the supplemental requirements herein for spring and fall flows. The obligations of MERCED under the SJRA are met in a like manner. It is the intent of the PARTIES that, whenever reasonably possible, in the discretion of MERCED, its supplemental flow obligations hereunder may be met in a like manner. However, if such PROJECT operation is not capable of fully meeting MERCED's obligations hereunder it shall bypass PROJECT inflow or release previously stored water to satisfy its obligations hereunder. Additionally, when reasonably available the PARTIES will explore the use of additional flood control releases for further enhancement of environmental resource and studies in the lower Merced River.

## 2.2. Interim Spring Flows

2.2.1. The PARTIES agree to provide for annual spring interim increases in required flows and the use of "pulse flow" releases or bypass of water from Lake McClure to the Merced River below Crocker-Huffman Diversion Dam to provide an incremental improvement in anadromous and resident fish habitat, and to satisfy the experimental flow conditions of the study program (Exhibit "A"). MERCED shall provide the water set forth in Exhibit "B" as it relates to spring flows

attached hereto on the times set forth therein. Except when MERCED is in flood control operation pursuant to the Army Corps of Engineers permit, the PARTIES agree that the interim Spring water provided herein shall be in addition to the Spring flow releases currently required in its FERC license. The PARTIES recognize that exact incremental increases are difficult to manage.

2.2.2. The water year type criteria for the interim flow shall be based on the "60-20-20" Water Year Hydrologic Classification for the San Joaquin River published in the BOARD's May 22, 1995 Water Quality Control Plan (Page 24).

2.2.3. The reference gage for this interim spring water shall be the USGS gage at Shaffer Bridge to remain consistent with the reference gage now used in MERCED's FERC License 2179 and DG #17. In the event that the scheduled flow exceeds 220 cfs, the DWR Cressey gage will be used as the reference gage. MERCED shall use the DWR California Data Exchange Center ("CDEC") station at Cressey. However, in the event that the PARTIES agree that the Shaffer Bridge USGS gage can be accurately rated above 220 cfs, such gage may continue as the reference gage.

2.2.4. MERCED desires to make all such annual interim spring flow releases through its power plants. The

PARTIES agree that, prior to the releases of annual interim spring flows outside the power plants, the PARTIES shall meet and attempt to schedule such releases through the power plants.

2.2.5. For the duration of the SJRA and the therein incorporated VAMP, the water supplied by MERCED pursuant to the SJRA/VAMP for spring flows, shall, satisfy the requirements of MERCED, under existing conditions to provide increased interim flows to the Merced River for the spring out-migration of juvenile salmon and for other research contemplated in Exhibit "A". In recognition of the fact that the SJRA/VAMP may not, by its own terms, be modified without the consent of all parties including the BOARD, and the fact that both MERCED and FISH AND GAME are parties to that agreement, if an amendment to the SJRA/VAMP is contemplated that would further modify the flow regime on the Merced River, the PARTIES hereto will meet and confer in good faith to discuss the impacts of such proposed amendment upon this MOU. If both PARTIES agree to any amendment of the SJRA/VAMP which affects Merced River interim spring flows, and provided the BOARD approves the MOU such agreement shall be deemed to modify this agreement with respect to the interim spring flow requirements.

2.2.6 In the event that the SJRA is terminated before its expiration as approved by the BOARD, MERCED will continue to provide supplemental interim spring flows at such times and in such quantities as are set forth in the Merced River Adaptive Management Plan (MRAMP) agreement between MERCED, FISH AND GAME, and the United States Bureau of Reclamation ("USBR"), United States Fish and Wildlife Services (USFWS), AND California Department of Water Resources (CDWR), a copy of which is attached hereto and incorporated herein by this reference as Exhibit "C". This MRAMP will have no effect unless the SJRA is terminated prior to the BOARD approved expiration date of the SJRA.

2.2.7. In further recognition of the water supply and other impacts associated with the spring interim flows, the PARTIES agree to jointly develop proposals and pursue the use of available fishery mitigation or other funding to plan and construct physical projects within MERCED's service area with the dual purpose of (a) increasing the discretionary water supply and water management opportunities available to MERCED, and (b) further improving instream flow for fisheries in the Merced River. Priority shall be placed on projects providing benefits in below normal or drier years, or consecutive dry or critical years. The PARTIES shall use

their best efforts to identify such projects within the first three (3) years of this MOU in order for timely implementation during the remaining term of the MOU. However, nothing contained herein shall commit the PARTIES to accept, maintain or operate any specific project not otherwise acceptable to FISH AND GAME and the Board of Directors of MERCED.

2.2.8. In all wet and above normal water year types MERCED shall operate and use its best efforts to provide, during agreed periods, additional water (exceeding the agreed interim and October flows) which might otherwise be spilled, but only to the extent it can do so within its flood control parameters.

2.2.9. All flows, including the October flows defined in Section 2.1, and other descriptions of water amounts are in addition to those currently legally required of MERCED in its FERC license and DG. This MOU is not intended to provide interim spring water in addition to that which may be required of MERCED pursuant to any order to MERCED from the BOARD, arising out of the provisions for complying with water quality standards for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (BAY DELTA). If the BOARD requires MERCED to contribute an amount of water for

purposes of complying with fishery or water quality standards for the BAY DELTA that is less than those flows specified in this MOU, then MERCED shall release the flows specified in this MOU, absent additional regulatory requirements. If the BOARD requires MERCED to contribute an amount of water greater than those flows specified in this MOU, then the PARTIES agree that the amount of flows specified in this MOU shall count toward MERCED's required compliance with such order. Such flows may be satisfied when they can be made available through operational flood control or bypass releases by MERCED.

2.3. Merced Management and Technical Advisory Committees

2.3.1. The PARTIES recognize the value of interaction at both management and technical levels as the various activities defined in this MOU proceed to completion. The PARTIES agree to share and exchange all monitoring information in a timely manner for the Merced River and other sub-basins.

2.3.2. Management Committee: The Management Committee ("MC") is comprised of one (1) management representative from each of FISH AND GAME and MERCED. Their role is to oversee all activities of the Merced Technical Advisory Committee ("MTAC"), to request and receive

recommendations from the MTAC, and to make policy decisions regarding MTAC issues including, but not limited to, water supply issues pursuant to Exhibit "B". MC shall operate by consensus and be responsible for resolving all issues elevated to it by the MTAC. MC will meet at least annually or as often as necessary to perform its function. The MC meetings will comply with the requirements of the Ralph M. Brown Act (California Government Code Section 54950 et. seq.)

2.3.3. Technical Advisory Committee: Under the direction of MC, MTAC will consist of one (1) member formally designated from the technical staffs of FISH AND GAME, MERCED USBR, USFWS, and CDWR, will coordinate flow scheduling pursuant to this MOU, study protocol, develop and propose study amendments, and make recommendations on funding issues, and information sharing and exchange. Field data, final study data, results and reports shall be shared and exchanged by the MTAC participants. Either party may specifically invite any additional persons to attend such meetings as invitees, and all additional invitees may participate in an advisory capacity in such MTAC meetings; however, in the event of such invitees' attendance, two (2) business days notice will be given. These meetings are not intended to be public policy meetings, but rather technical solution

meetings, to assist in implementing public policy. MTAC and the process defined herein are not intended to supersede the independent authority of any party participating in the MTAC process.

2.3.4. Monitoring of expenditures provided through this MOU will be accomplished on a continuing basis by the funding party and reported through MTAC meetings. Recommendations for the redirection of funds, or the "leveraging" of these funds to expand priority monitoring activities defined in Exhibit "A" shall be developed by the MTAC and provided in advance MC for decisions. Monitoring of studies performed outside the scope of Exhibit "A" shall be discussed and shared by the (MTAC).

2.3.5 Designated MTAC members will receive meeting notices, agendas and brief minutes.

2.3.6. The PARTIES agree to provide the administrative, clerical and support facilities for the MTAC to fulfill its tasks, on an annually rotating basis. MERCED shall perform this role for the first year and then every other year thereafter for the duration of this MOU. FISH AND GAME shall perform these duties during the remaining years.

2.3.7. The MTAC shall meet three (3) times a year, or more frequently if necessary, generally during the summer,

winter and early spring months. A standard schedule of these three meetings shall be established at the first formal MTAC meeting. Any additional meetings shall be established as needed on a consensus basis.

2.3.8. The PARTIES intend and agree to share and exchange annual and interim draft and final study field data and final study data results and reports through the MTAC meetings to foster the cooperative commitment of the MOU signatories at all levels. Relevant information developed outside the scope of the study defined in Exhibit "A" shall also be shared through the MTAC meetings.

2.4. Joint Study Plan

2.4.1. The PARTIES agree to fund and implement the program of study described in Exhibit "A" in accordance with the budget described therein. The PARTIES shall provide previously acquired equipment as necessary and available to complete said studies. MERCED shall provide funding for the purchase of fishery tags, tagging and recovery efforts, analysis and other equipment necessary to the study. MERCED will also provide reasonable services to the study.

2.4.2. FISH AND GAME shall provide participation of biologists and temporary help for the tagging required by the studies in Exhibit "A" on a reimbursable basis as

provided in Section 2.4.5 below. FISH AND GAME biologists will also participate in various field studies on a reimbursable basis, as provided in Section 2.4.5 below.

2.4.3. FISH AND GAME shall provide and maintain necessary study fish and holding facilities at Merced River Hatchery to the extent feasible. Heavy equipment necessary to site and remove large field equipment (e.g. Rotary Screw Traps) shall be provided by the PARTIES.

2.4.4. FISH AND GAME shall assist MERCED in obtaining permits as necessary. FISH AND GAME will also assist MERCED installing and operating trapping or sampling stations all pursuant to this MOU.

2.4.5. MERCED shall, to the extent of its funding commitments and contributions, reimburse FISH AND GAME, to the extent of such expenses, under separate reimbursement agreement, for costs, including, but not limited to, costs for temporary help, operating costs and overhead to tag and transport study fish, assist in sampling and recovery of tagged and natural fish, repair or maintain equipment necessary for the field studies, collating and summarizing data or other temporary duties. MERCED shall not be required to reimburse FISH AND GAME for FISH AND GAME's activities and studies on the Merced River which do not arise from this MOU.

2.4.6. In the event that study fish are not available at Merced River Hatchery, MERCED will be notified as soon as reasonably possible.

2.5. Temperature Management Study

2.5.1. During the first six (6) years of this MOU, MERCED shall fund development and calibration of a state of the art temperature model of the PROJECT's reservoirs, a stream temperature model of the lower Merced River from Merced Falls Dam downstream to its confluence with the Merced River and the linkage of these two models in order to create a "tool" acceptable to MERCED and FISH AND GAME to evaluate physical and operational improvement options for the PROJECT. MERCED shall also fund a reconnaissance and feasibility level study of the mutually agreed cold water pool management alternatives, defined according to the process set forth in Exhibit "A" and in accordance with the funding commitments therein and consistent with its efforts to obtain grant funding.

2.6. Duration and Final Agreement

2.6.1. The interim flow releases provided for in this MOU, other than the 12,500 acre feet in October each year, shall be made by MERCED until a final agreement regarding long-term instream flow requirements is executed by

the PARTIES, or this MOU is amended for that purpose, or such time as the BOARD or other regulatory agency with jurisdiction adopts new flow requirements, whichever occurs first.

2.6.2. Nine (9) years from the date of this MOU or at intervals mutually agreeable to the PARTIES, or at the time near completion of the studies described in Exhibit "A", whichever occurs first, the results, along with other pertinent information, shall be considered by the PARTIES in identifying an acceptable long term instream flow program and other measures necessary to protect the lower Merced River fishery resources. It is anticipated that complete data exchange between the PARTIES will occur and regular guidance to the MTAC to develop strategies/scenarios for improved management of water supplies to protect the beneficial uses of water in the lower Merced River Watershed will be provided by MC to MTAC well prior to the completion of these studies.

2.6.3. At or near the end of the term of this MOU, a final agreement is anticipated, which would contain mutual recommendations to afford long-term fishery resource protection. Said recommendations or the study results may be provided to the BOARD, together with a mutual request that they be implemented as a condition of any permit or license

issued pursuant to Applications No. 1224, 10572 and 16186.

2.6.4. During the course of implementing the studies defined in Exhibit "A", the MTAC shall identify and propose a protocol of modifications, additions or deletions to Exhibit "A" which may be beneficial to the PARTIES. Said proposals shall be developed by one or more MTAC participants, discussed in detail by the MTAC, and then presented to the MC for possible integration into Schedule "A" as an amendment to this MOU, or for consideration and accomplishment, through venues outside this MOU. Such proposals shall be developed to a level comparable to those study elements defined in Exhibit "A" as a minimum (i.e. purpose, need, protocol, life stage, lead and costs, duration and sequence within the term of this MOU).

2.6.5. In the event said final agreement cannot be made within nine (9) years or within one (1) year following concurrence of the PARTIES that the studies pursuant to Exhibit "A" as defined in this MOU is materially completed, or up to four (4) years following the last release of salmon tagged or marked released for the study described in Exhibit "A", whichever occurs first, the PARTIES agree that either Party may submit its independent recommendations and request to the BOARD. Notwithstanding the foregoing, in the event

that anticipated timing of the implementation from Merced Water Supply Plan ("MWSP") issues are accelerated, or FISH AND GAME or MERCED believes an early termination of the studies is warranted, the PARTIES agree to meet and confer with a view to accelerating the studies contemplated in Exhibit "A" and shortening the time for the final agreement.

### ARTICLE III

#### 3.0. Merced Water Supply Plan

3.1. MERCED is currently in the process of updating the local study known as MWSP which is being jointly conducted with the City of Merced and the University of California, Merced. The goal of this study is to identify all sources of water within the study area (the area generally includes all of Merced County east of the San Joaquin River channel not otherwise contained in another water agency), to identify and meet water needs of the same area through the year 2040, which includes balancing the groundwater at 1999 levels. The study contemplates additional water for instream uses, as well as additional uses of applied water. FISH AND GAME has participated in the early phases of the study as a Technical Committee member.

3.2. The MWSP has, in addition to conservation and operational improvements, identified the potential diversion

of above normal Merced River flows for off stream groundwater storage as a part of a conjunctive use program, as a means to achieve a balanced regional water budget while at the same time providing a larger more predictable flow for instream use over time.

3.3. It is the intent of the PARTIES that studies performed under this MOU, if fully performed and funded substantially identify instream flow requirements and coldwater pool management alternatives on the Merced River. These requirements may thereafter be used by MERCED, FISH AND GAME, University of California Merced planners, the BOARD and others in pursuing implementation of the MWSP and other goals. To that end, FISH AND GAME agrees to participate in discussions and implementation of the MWSP consistent with its duties and funding appropriations in the State Budget. In the event such participation exceeds FISH AND GAME's staffing or funding capabilities, and the PARTIES desire direct involvement of FISH AND GAME, the PARTIES shall pursue reimbursement for such participation. Said reimbursements shall be funded by MERCED under a separate reimbursement agreement or may be funded by others interested in implementation of the MWSP. Upon initial agreement of the project features, level of impacts, acceptable mitigation of

the phased MWSP, the PARTIES may pursue a joint presentation to the BOARD on water right applications or amendments necessary for all or part of the Plan.

#### ARTICLE IV

##### 4.0 Protest Dismissal

4.1. FISH AND GAME agrees to conditionally dismiss its protest to MERCED's Petitions to BOARD Application numbers 1224, 10572 and 16186, pertaining to the consolidation of MERCED and EL NIDO, provided any order issued pursuant to said Petition: (1) incorporates an acceptable extract of this MOU as a condition of the license or permit; (2) provides for continuing jurisdiction of the BOARD to review the implementation of this MOU; and (3) requires review of the license or permit terms in the year 2010 or when the interim spring flows terminate, whichever is earlier.

#### ARTICLE V

##### 5.0 Other Items

5.1. The PARTIES agree that they will work with other water agencies and other appropriate entities in an attempt to implement other conjunctive use programs that would augment Merced River flows so as to improve habitat conditions for chinook salmon and other fishery resources.

In that event, this MOU will be amended, by mutual agreement of the PARTIES as appropriate.

5.2. Nothing herein shall be construed to require any action which would, of itself, constitute any infraction or violation of either the Constitution of the United States of America or the State of California, or of any federal or state statute or regulation.

5.3. It is the intent of the PARTIES to implement:

5.3.1. The plan of studies as described in Exhibit "A",

5.3.2. October and interim spring flows set forth in Exhibit "B", and

5.3.3. In the event of the early termination of the SJRA/VAMP, the provisions of the MRAMP set forth in Exhibit "C".

5.3.4. It is recognized and agreed that funding for the plan of studies described in Attachment A-2 of Exhibit "A" is contingent upon approval of the budgets of FISH AND GAME, and MERCED, as applicable. However, MERCED committed, at a Board of Directors meeting held on August 20, 2002, to fund the studies in the amount listed in Attachment A-2 of Exhibit "A" under "Proposed MID Totals".

5.4. Miscellaneous

5.4.1. Nothing in this MOU is intended or shall be construed as a waiver by FISH AND GAME of its rights and obligations pursuant to statutory laws or common law public trust doctrine.

5.4.2. The PARTIES agree to discuss, in advance of any BOARD proceeding concerning Merced River instream flows in which either party participates, the impact of such proceeding on the obligations set forth in this MOU.

5.4.3. This MOU may be modified, based upon written concurrence of both PARTIES.

5.5. This MOU shall be effective when executed by both PARTIES and approved by the State Department of General Services and the BOARD. However, the PARTIES agree that implementation of increased flows in the Merced River and the start of funding for the studies identified in this MOU may be undertaken prior to any action on this MOU by the BOARD.

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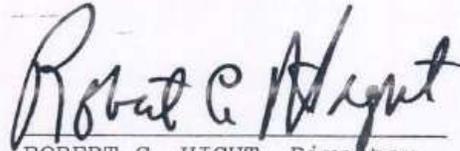
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Executed at Merced and Sacramento, California on the

dates as hereafter affixed.

8/20/02  
Date

  
ROBERT C. HIGHT, Director  
California Department  
of Fish and Game

8/21/02  
Date

  
ROSS ROGERS  
General Manager  
Merced Irrigation District

## APPENDIX E

### Indian Trust Assets

Letter to Doug Kleinsmith, Natural Resource Specialist, from Patricia Rivera, Native American Affairs Specialist, regarding effects on Indian Trust Assets for the San Joaquin River Interim Agreement. The Proposed Action does not have the potential to affect Indian Trust Assets

**Bernal, Yvonne K**

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**From:** Kleinsmith, Douglas H  
**Sent:** Friday, October 21, 2011 1:53 PM  
**To:** Bernal, Yvonne K  
**Subject:** FW: ITA Request for San Joaquin River Interim agreement

Yvonne,

Here is the ITA evaluation from our ITA coordinator.

Doug

*Douglas Kleinsmith*  
Natural Resource Specialist  
Bureau of Reclamation  
2800 Cottage Way, Sacramento CA  
(916) 978-5034  
[dkleinsmith@usbr.gov](mailto:dkleinsmith@usbr.gov)

**From:** Rivera, Patricia L  
**Sent:** Tuesday, October 18, 2011 4:19 PM  
**To:** Kleinsmith, Douglas H  
**Subject:** RE: ITA Request for San Joaquin River Interim agreement

Doug,

I reviewed the proposed action to provide two years of an alternative implementation of the D-1641 pulse flow targets. The term of two years is set by the negotiating parties (Reclamation and Merced Irrigation District) as a result of a number of considerations. The proposed project is:

1. To purchase water on the Merced River to supplement New Melones Reservoir releases to provide a proposed 31-day spring pulse flow target
2. To operate New Melones Reservoir the same as it has been historically operated during the SJRA to the base flow objectives (Feb through April 14 and May 16 through June)
3. To operate the Stanislaus River to meet the "IV 2.1, Phase II" Biological Opinion flow requirements (Spring and October operations)
4. To operate the Jones Pumping Plant in conformance with OCAP and the RPA export limitations

The proposed project is different than the SJRA in the following ways:

1. Does not include the "double step" in flow target
2. Subtraction of Tuolumne River and DMC water contributions to spring pulse flow
3. More stringent export limitation
4. No HOR barrier
5. No SJRA-specific fish studies

The proposed action does not have a potential to affect Indian Trust Assets.

Patricia