DRAFT ENVIRONMENTAL ASSESSMENT
2010 WARREN ACT CONTRACT AND LICENSE FOR DELTA LANDS RECLAMATION DISTRICT 770 Appendix A
Appendix A Draft Contract
May 2010

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

TEMPORARY CONTRACT BETWEEN THE UNITED STATES AND DELTA LANDS RECLAMATION DISTRICT NO. 770 PROVIDING FOR CONVEYANCE OF NON-PROJECT WATER

Table of Contents

Article No.	<u>Title</u>	Page No.
	Preamble	1
	Explanatory Recitals	
1	Definitions	
2	Term of Contract	5
3	Introduction, Conveyance, and Discharge of Non-Project Water	5-7
4	Measurement of Non-Project Water	
5	Operation and Maintenance by Operating Non-Federal Entity	9-11
6	Payments and Adjustments	11-12
7	Medium for Transmitting Payments	12-13
8	Excess Capacity	13-14
9	Acreage Limitation Provisions OMMITTED	
10	Receipt and Distribution of Non-Project WaterSale, Transfer,	
	or Exchange of Non-Project Water	
11	Water Conservation	15
12	United States Not Liable	15-16
13	Opinions and Determinations	16-17
14	Protection of Water and Air Quality	17-18
15	Charges for Delinquent Payments	18
16	Equal Employment Opportunity	18-20
17	Certification of Non-Segregated Facilities	20
18	Compliance with Civil Rights Laws and Obligations	20-21
19	General ObligationBenefits Conditioned Upon Payment	
20	Books, Records, and Reports	
21	Contingent upon Appropriation or Allotment of Funds	22

Table of Contents - continued

Article No.	<u>Title</u>	Page No.
22	Assignment LimitedSuccessors and Assigns Obligated	22
23	Officials Not to Benefit	
24	Changes in Contractor's Organization	
25	Notices	
26	Incorporation of Exhibits	
27	Contract Drafting Considerations	
	Signature Page	24
	Exhibit A – Contractor's Boundary Map	
	Exhibit B – Conveyance Rates	
	Exhibit C – Source(s) of Contractor's Non-Project Water	
	Exhibit D – Quality Assurance Project Plan	

1	Temporary Warren Act Contract – Year 2010 - 2011		
2	Contract No. 10-WC-20-4063		
3 4 5 6	UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION Central Valley Project, California		
7 8 9 10	TEMPORARY CONTRACT BETWEEN THE UNITED STATES AND DELTA LANDS RECLAMATION DISTRICT NO. 770 PROVIDING FOR CONVEYANCE OF NON-PROJECT WATER		
11	THIS CONTRACT, made this day of, 2010 ,		
12	pursuant to the Act of June 17, 1902 (32 Stat. 388), and acts amendatory thereof or		
13	supplementary thereto, including the Act of February 21, 1911 (36 Stat. 925), and Section 305 of		
14	the Reclamation States Emergency Drought Relief Act of 1991, enacted March 5, 1992		
15	(106 Stat. 59), all collectively hereinafter referred to as the Federal Reclamation laws, between		
16	the UNITED STATES OF AMERICA, hereinafter referred to as the United States, represented		
17	by the officer executing this Contract, hereinafter referred to as the Contracting Officer, and		
18	DELTA LANDS RECLAMATION DISTRICT NO. 770, hereinafter referred to as the		
19	Contractor;		
20	WITNESSETH, That:		
21	EXPLANATORY RECITALS		
22	[1 st] WHEREAS, the United States has constructed and is operating the Central		
23	Valley Project, California, for diversion, storage, carriage, distribution and beneficial use, for		
24	flood control, irrigation, municipal, domestic, industrial, fish and wildlife mitigation, protection		
25	and restoration, generation and distribution of electric energy, salinity control, navigation and		

other beneficial uses, of waters of the Sacramento River, the American River, the Trinity River, and the San Joaquin River and their tributaries; and

[2nd] WHEREAS, pursuant to the Act of February 21, 1911 (36 Stat. 925), commonly referred to as the Warren Act, the Secretary of the Interior may enter into contracts for the impoundment, storage, and carriage of Non-Project Water to the extent the Project facilities have Excess Capacity, and any such contracts shall be upon terms and conditions as the Secretary determines to be just and equitable; and

[3rd] WHEREAS, the Contractor is responsible for protecting lands within its boundaries from floods, and during periods when, flood waters from the Kings, St. John's (a channel of the Kaweah River), and/or Tule Rivers can reach the Contractor's boundaries, causing damage to farm land or other property and/or jeopardizing public safety; and

[4th] WHEREAS, beginning in 1978, through a series of letter agreements and contracts, made pursuant to the Warren Act, the Contractor has used Excess Capacity in Project Facilities to convey potentially damaging flood flows of Non-Project Water from the Kings River, St. John's River (a channel of the Kaweah River), and Tule River, to help alleviate damage to farm land, property and crops, and risk to public safety within the Contractor's boundaries; and

[5th] WHEREAS, the Contractor's most recent Warren Act contract, Contract
No. 08-WC-20-3678, dated July 11, 2008, expired February 28, 2009, and the Contractor desires
to enter into a long-term Warren Act contract to use Excess Capacity in the Friant Division
Project Facilities to divert Non-Project Water from said Rivers during periods of excessive
rainfall; and

48	[6 th] WHEREAS, until the long-term Warren Act contract can be executed, it is		
49	the intention of the parties hereto to enter into a temporary contract pursuant to the Warren Act		
50	for use of Excess Capacity in the Project Facilities for the conveyance of Non-Project Water		
51	from said Rivers; and		
52			
53	[7 th] WHEREAS, to the extent Excess Capacity is available, the United States		
54	is willing to convey said Non-Project Water through the Project Facilities in accordance with the		
55	5 terms and conditions hereinafter stated.		
56	NOW, THEREFORE, in consideration of the covenants herein contained, the		
57	parties agree as follows:		
58	<u>DEFINITIONS</u>		
59	1. When used herein unless otherwise distinctly expressed, or manifestly		
60	incompatible with the intent of the parties as expressed in this Contract, the term:		
61	(a) "Calendar Year" shall mean the period January 1 through December 31,		
62	both dates inclusive;		
63	(b) "Contracting Officer" shall mean the Secretary of the Interior's duly		
64	authorized representative acting pursuant to this Contract or applicable Reclamation law		
65	or regulation;		
66	(c) Omitted		
67	(d) Omitted		
68	(e) "Excess Capacity" shall mean capacity in the Project Facilities in excess		
69	of that needed to meet the Project's authorized purposes, as determined solely by the		
70	Contracting Officer, which may be made available to convey Non-Project Water;		

71	(f) Omitted
72	(g) Omitted
73	(h) Omitted
74	(i) Omitted
75	(j) Omitted
76	(k) "Non-Project Water" shall mean water acquired by or available to the
77	Contractor from the source(s) identified in Exhibit C that has not been appropriated by
78	the United States;
79	(l) "Operating Non-Federal Entity" shall mean the non-federal entity that has
80	the obligation pursuant to a separate agreement with the United States to operate and
81	maintain all or a portion of the Project Facilities, and which may have funding
82	obligations with respect thereto;
83	(m) "Project" shall mean the Central Valley Project, owned by the United
84	States and managed by the Department of the Interior, Bureau of Reclamation;
85	(n) "Project Facilities" shall mean the Friant-Kern Canal and associated
86	facilities, constructed as features of the Friant Division, Central Valley Project;
87	(o) "Rates" shall mean the amount to be paid to the United States by the
88	Contractor, as set forth in Exhibit B, for the use of Excess Capacity in the Project
89	Facilities made available pursuant to this Contract;
90	(p) Omitted;
91	(q) "Secretary" shall mean the Secretary of the Interior, a duly appointed
92	successor, or an authorized representative acting pursuant to any authority of the
93	Secretary and through any agency of the Department of the Interior; and

- 94 (r) "Year" shall mean the period from and including March 1 of the Calendar 95 Year through the last day of February of the following Calendar Year.
 - (s) "Friant Division Contractors" shall mean those contractors situated within the Friant Division permitted place of use and possessing a long-term water service contract, repayment contract, or assignment contract with Reclamation.

TERM OF CONTRACT

2. This Contract shall become effective June 1, 2010 and shall remain in effect through May 31, 2011: *Provided*, That upon written notice to the Contractor, this Contract may be terminated by the Contracting Officer at an earlier date, if the Contracting Officer determines that the Contractor has not been complying with one or more terms or conditions of this Contract.

INTRODUCTION, CONVEYANCE, AND DISCHARGE OF NON-PROJECT WATER

3. (a) During the term of this Contract, the Contractor may introduce up to an aggregate total of 250,000acre-feet of Non-Project Water into Project Facilities at milepost 29.10 for Kings River water, at milepost 69.45 for St. Johns River water (a channel of the Kaweah River), and at milepost 95.67 for Tule River water. The United States or the designated Operating Non-Federal Entity shall convey the Non-Project Water through Excess Capacity in the Project Facilities from said point(s) of introduction for diversion on behalf of the Contractor to Friant Division Contractors or discharged through existing gates at the terminus of the Project Facilities into the Kern River on behalf of the Contractor: *Provided*, That the quantity of Non-Project Water to be diverted by the Friant Division Contractors or discharged on behalf of the Contractor from Project Facilities shall not exceed the quantity of Non-Project Water previously

introduced into the Project Facilities by the Contractor at said point(s) of introduction, less 5 percent for conveyance losses.

118

119

120

121

122

123

124

125

126

127

128

129

130

131

132

133

134

135

136

137

138

- Prior to the introduction of Non-Project Water into the Project Facilities, the (b) Contractor shall submit a schedule to the Contracting Officer and the designated Operating Non-Federal Entity showing the quantities of Non-Project Water to be introduced into the Project Facilities, and the desired time or times for conveyance of said Non-Project Water for diversion by Friant Division Contractors and/or discharge into the Kern River: <u>Provided</u>, That the Contractor is not required to initially schedule conveyance of the maximum quantity of Non-Project Water for which the Contractor desires conveyance during the term of this Contract. The initial schedule and any revision(s) thereof shall be in a form acceptable to the Contracting Officer and shall be submitted at such times and in such manner as determined by the Contracting Officer. The Contractor shall not introduce Non-Project Water into the Project Facilities unless and until the schedule and any revision(s) thereof have been approved by the Contracting Officer and the Operating Non-Federal Entity. Introduction of waters is subject to the Operating Non-Federal Entity verifying adequate means for diversion of the introduced water to the Friant Division Contractors and/or for discharge to the Kern River. Discharge of flows to the Kern River will be subject to approval by the Kern Rivermaster acknowledging available channel capacity and acceptance of the Non-Project Water.
- c) All Non-Project Water must be diverted from or discharged from the Project Facilities up to 30 days from the date of introduction and/or upon expiration or termination of this Contract whichever is sooner.
- (d) Unless otherwise agreed to in writing by the Contracting Officer, the
 Non-Project Water shall be introduced into and conveyed on behalf of the Contractor through

existing Project Facilities. Temporary inflow or pumping facilities required to effectuate the introduction of Non-Project Water into the Project Facilities and/or the diversion or discharge of the Non-Project Water on behalf of the Contractor from the Project Facilities, shall be the Contractor's responsibility, at its own cost and expense to obtain all necessary rights-of-way for such facilities, including the appropriate right-of-use agreement(s) or other authorizations issued by the United States for any such facilities located on right-of-way for existing Project Facilities. The Contractor, at its own cost and expense, shall be responsible for providing, installing, operating, maintaining, repairing, and replacing said inflow and pumping facilities. The Contractor hereby grants to the Contracting Officer and the Operating Non-Federal Entity access to all temporary inflow and pumping facilities installed by the Contractor.

- (e) The introduction, conveyance, diversion, and/or discharge of Non-Project Water pursuant to this Contract will not be supported with Project-use energy. If electrical power is required to pump the Non-Project Water into, through or from the Project Facilities, the Contractor shall be responsible for the acquisition and payment of all electrical power and associated transmission service charges.
- (f) The introduction of Non-Project Water into the Project Facilities by the Contractor shall be conditioned upon compliance by the Contractor with the environmental measures described in the environmental documentation prepared in connection with the execution of this Contract and with the terms of the applicable operations procedures approved by the Contracting Officer.

MEASUREMENT OF NON-PROJECT WATER

4. (a) All Non-Project Water shall be measured and recorded at the point(s) of introduction and point(s) of delivery established pursuant to Article 3 herein with measurement

devices acceptable to the Contracting Officer and the methods used to make such measurements shall be in accordance with sound engineering practices.

- (b) Unless otherwise agreed to in writing by the Contracting Officer, the Contractor, at its own cost and expense, shall be responsible for providing, installing, operating, maintaining, repairing, and replacing all measurement devices required under this Contract in accordance with Short-Term License Contract Number 10-LC-20-0258 dated May 31, 2010, or other requisite authorization(s) issued by the United States. The Contractor shall be responsible for all costs associated with the issuance of such Short-Term License and authorization(s).
- (c) The Contractor shall maintain accurate records of the quantity of Non-Project Water, expressed in acre-feet, introduced into the Project Facilities at said authorized point(s) of introduction and shall provide such records to the Contracting Officer and the Operating Non-Federal Entity at such times and in such manner as determined by the Contracting Officer.
- (c.1) The Contractor shall provide, to the Contracting Officer and the Operating Non-Federal Entity by July 31, 2011, a Floodwater Report and Delivery Plan accounting for the Non-Project Water pumped into and/or discharged from the Project Facilities. The report shall be in a form acceptable to the Contracting Officer.
- (c.2) The Operating Non-Federal Entity shall be responsible for measuring the quantity of Non-Project Water either diverted from the Project Facilities by Friant Division Contractors or discharged into the Kern River through the existing gate at the terminus of the Project Facilities and shall maintain accurate records of such diversions and/or discharges of Non-Project Water and shall provide such records to the Contracting Officer and the Contractor monthly and otherwise upon request.

(d) Upon the request of either party to this Contract, the Contracting Officer shall investigate, or cause to be investigated by the Operating Non-Federal Entity, the accuracy of all measurements of Non-Project Water required by this Contract. If the investigation discloses errors in the recorded measurements, such errors shall be promptly corrected. If the investigation discloses that measurement devices are defective or inoperative, the Contracting Officer shall take any necessary actions to ensure that the responsible party makes the appropriate adjustments, repairs, or replacements to the measurement devices. In the event the Contractor, as the responsible party, neglects or fails to make such adjustments, repairs, or replacements to the measurement devices within a reasonable time and to the reasonable satisfaction of the Contracting Officer, the Contracting Officer may cause such adjustments, repairs, or replacements to be made and the costs thereof shall be charged to the Contractor and the Contractor shall pay said charges to the United States immediately upon receipt of a detailed billing therefore. For any period of time during which accurate measurements of the Non-Project Water have not been made, the Contracting Officer shall consult with the Contractor and the Operating Non-Federal Entity prior to making a determination of the quantity of Non-Project Water delivered for that period of time and such determination by the Contracting Officer shall be final and binding on the Contractor.

187

188

189

190

191

192

193

194

195

196

197

198

199

200

201

202

203

204

205

206

207

208

209

OPERATION AND MAINTENANCE BY OPERATING NON-FEDERAL ENTITY

5. (a) The operation and maintenance of the Project Facilities to be used to convey, divert and/or discharge the Non-Project Water on behalf of the Contractor, and responsibility for funding a portion of the costs of such operation and maintenance, have been transferred from the United States to the Friant Water Authority, the designated Operating Non-Federal Entity, pursuant to a separate agreement, identified as Contract No. 8-07-

20-X0356, dated March 1, 1998, as amended and assigned. That separate agreement shall not interfere with or affect the rights or obligations of the Contractor or the United States hereunder.

- (b) The Contractor shall pay directly to the Friant Water Authority, or to any successor approved by the Contracting Officer, under the terms and conditions of the separate agreement described in subdivision (a) of this Article, all rates, charges, or assessments of any kind, including any assessment for reserve funds, that the Friant Water Authority or such successor determines, sets, or establishes for the operation and maintenance of the portion of the Project Facilities operated and maintained by the Friant Water Authority or such successor.
- (c) For so long as the operation and maintenance of any portion of the Project Facilities used to convey, divert, and/or discharge the Non-Project Water on behalf of the Contractor is performed by the Friant Water Authority, or any successor thereto, the Contracting Officer shall adjust those components of the Rates for the Non-Project Water conveyed, diverted, and/or discharged under this Contract by deleting the costs associated with the activity being performed by the Friant Water Authority or its successor.
- (d) In the event the United States reassumes operation and maintenance of any portion of the Project Facilities from the Operating Non-Federal Entity, the Contracting Officer shall so notify the Contractor, in writing, and shall revise the Rates on Exhibit B to include the costs associated with the operation and maintenance activities reassumed by the United States. The Contractor shall, thereafter, in the absence of written notification from the Contracting Officer to the contrary, pay the Rates, specified in the revised Exhibit B directly to the United States in compliance with Article 6 of this Contract.

PAYMENTS AND ADJUSTMENTS

- 6. (a) Upon execution of this Contract by the Contractor, the Contractor shall pay to the United States the sum of \$500, which shall constitute an administrative charge hereunder.
- (b) At the time the Contractor submits a schedule, or any revision(s) thereof pursuant to subdivision (c) of Article 3 herein, the Contractor shall make an advance payment to the United States equal to the total amount payable pursuant to the applicable Rates shown on Exhibit B for each acre-foot of Non-Project Water to be introduced into the Project Facilities.

 Non-Project Water shall not be introduced into Project Facilities by the Contractor prior to such payment being received by the United States.
 - (c) Omitted

(d) The amount of any overpayment by the Contractor by reason of the quantity of Non-Project Water introduced into the Project Facilities and conveyed pursuant to this Contract, as conclusively determined by the Contracting Officer, having been less than the quantity which the Contractor otherwise under the provisions of this Contract would have been required to pay for, shall be applied first to any accrued indebtedness arising out of this Contract then due and owing to the United States by the Contractor. Any amount of such overpayment then remaining shall be refunded to the Contractor: *Provided, however*, That no refund shall be made by the United States to the Contractor for any quantity of Non-Project Water deemed to be unused water donated to the United States for Project purposes pursuant to subdivision (d) of Article 3 herein nor for the administrative charge required pursuant to subdivision (a) of this Article.

254	(e) All payments made by the Contractor pursuant to subdivision (b) of this		
255	Article shall be covered into the Reclamation Fund pursuant to Section 3 of the Act of February		
256	21, 1911 (36 Stat. 925).		
257	(f) The payment of the Rates set forth in this Article for the use of Excess		
258	Capacity are exclusive of O&M costs to be paid directly to the Operating Non-Federal Entity by		
259	the Contractor, and any additional charges that the Contractor may assess its water users. In		
260	accordance with the Act of February 21, 1911 (36 Stat. 925), the Contractor may not impose on		
261	its water users any charge for the use of Excess Capacity that exceeds the amount paid to the		
262	United States and to the Operating Non-Federal Entity; <i>Provided</i> , That the Contractor may also		
263	charge its water users such additional amounts as are necessary to cover the Contractor's		
264	reasonable administrative costs in contracting with the United States for the use of Excess		
265	Capacity in the Project Facilities.		
266			
267	MEDIUM FOR TRANSMITTING PAYMENTS		
268 269 270 271	7. (a) All payments from the Contractor to the United States under this Contract shall be by the medium requested by the United States on or before the date payment is due. The required method of payment may include checks, wire transfers, or other types of payment specified by the United States.		
272 273 274 275 276	(b) Upon execution of the Contract, the Contractor shall furnish the Contracting Officer with the Contractor's taxpayer's identification number (TIN). The purpose for requiring the Contractor's TIN is for collecting and reporting any delinquent amounts arising out of the Contractor's relationship with the United States.		
277	(c). At the date of executing this Contract, the Contractor has complied with		
278	the provisions of subdivision (b) of this Article.		

EXCESS CAPACITY

280	8. (a) The availability of Excess Capacity shall be determined solely by the
281	Contracting Officer. Nothing contained in this Contract shall limit or preclude the United States
282	from utilizing available capacity in the Project Facilities for the storage and conveyance of
283	Project Water pursuant to Federal law, Reclamation law or policy, and existing contract(s); or (2)
284	for using Excess Capacity in the Project Facilities for the storage and conveyance of any other
285	supplies of Non-Project Water.
286	(b) The Contracting Officer and the Operating Non-Federal Entity shall not be
287	obligated to convey, divert, or discharge Non-Project Water during periods of maintenance or for
288	other operating requirements.
289	(c) If at any time the Contracting Officer determines that there will not be
290	Excess Capacity in the Project Facilities sufficient to allow the Non-Project Water to be
291	introduced into, conveyed, diverted, and/or discharged from Project Facilities in accordance with
292	an approved schedule submitted by the Contractor, the Contracting Officer shall so notify the
293	Contractor in writing. Within 24 hours of said notice, the Contractor shall revise its schedule
294	accordingly.
295	(d) No provision of this Contract shall be construed in any way as a basis for
296	the Contractor to establish a priority to or a permanent right to the use of Excess Capacity in the
297	Project Facilities nor to set a precedent to obligate the United States to enter into contracts with
298	any other entities or individuals for the conveyance or storage of Non-Project Water.
299	ACREAGE LIMITATION PROVISIONS
300	9. (a) Omitted
301	
302 303	RECEIPT AND DISTRIBUTION OF NON-PROJECT WATER SALE, TRANSFER, OR EXCHANGE OF NON-PROJECT WATER

10. (a) The parties hereto acknowledge that this Contract does not grant any permission or entitlement to the Contractor to extract and/or divert Non-Project Water from the source(s) described on Exhibit C or to change the nature or place of use of its rights to said Non-Project Water in any way. It is the responsibility of the Contractor to comply with all applicable Federal, State, and local laws, including, but not limited to, State water law in relation to the Non-Project Water. It is expressly understood by the parties that the United States is only providing conveyance capacity for the Non-Project Water and does not claim any interest in the acquisition or use of the Non-Project Water beyond the terms specifically set forth in this Contract.

- (b) The Contracting Officer makes no representations as to the accuracy of the description or of the validity of the Contractor's rights to the Non-Project Water listed in Exhibit C.
- employees, including the Operating Non-Federal Entity, from every claim for damage to persons or property, direct or indirect, resulting from the Contracting Officer's determination of the quantity of Excess Capacity available in the Project Facilities for conveyance of the Contractor's Non-Project Water, the determination that the Non-Project Water introduced into Project Facilities must be terminated, and the elimination from Exhibit C of any source(s) of Non-Project Water.

WATER CONSERVATION

11. (a) Prior to the delivery of water provided from or conveyed through federally constructed or federally financed facilities pursuant to this Contract, the Contractor shall develop a water conservation plan, consistent with the plans required by Section 210(b) of the RRA and Part 427.1 of the Water Conservation Rules and Regulations effective January 1, 1998.

328 (b) Omitted.

(c) Due to the nature and source of this Non-Project Water as addressed in the third WHEREAS and as identified in subdivision (k) of Article 1 of this Contract, a water conservation plan is not applicable in this circumstance.

UNITED STATES NOT LIABLE

- 12. (a) The United States, its officers, agents and employees, including the Operating Non-Federal Entity, shall not be responsible for the control, care, or distribution of the Non-Project Water before it is introduced into or after it is conveyed through the Project Facilities. It is specifically understood by the parties hereto that the United States is only providing conveyance capacity for the Non-Project Water and does not claim any interest in the acquisition or use of the Non-Project Water beyond the terms specifically set forth in this Contract.
- (b) The Contractor shall indemnify and hold the United States, its officers, agents and employees, including the Operating Non-Federal Entity, harmless from legal liability for damages of any nature whatsoever arising out of any actions or omissions of the Contractor, its officers, agents and employees, resulting from the Contractor's performance of this Contract, including the manner or method in which the Non-Project Water identified on Exhibit C is introduced into the Project Facilities and diverted from such Project Facilities for Friant Division Contractors and/or discharged into the Kern River. The Contractor further releases the United States, its officers, agents and employees, including the Operating Non-Federal Entity, from every claim for damage to persons or property, direct or indirect, resulting from the Contracting Officer's determination of the quantity of Excess Capacity available in the Project Facilities for conveyance of the Non-Project Water on behalf of the Contractor, the determination that the

Non-Project Water introduced into Project Facilities must be terminated, and the elimination from Exhibit C of any source(s) of Non-Project Water. Nothing contained in this Article shall be construed as an assumption of liability by the Contractor with respect to such matters.

OPINIONS AND DETERMINATIONS

- 13. (a) Where the terms of this Contract provide for actions to be based upon the opinion or determination of either party to this Contract, said terms shall not be construed as permitting such action to be predicated upon arbitrary, capricious, or unreasonable opinions or determinations. Both parties, notwithstanding any other provisions of this Contract, expressly reserve the right to seek relief from and appropriate adjustment for any such arbitrary, capricious, or unreasonable opinion or determination. Each opinion or determination by either party shall be provided in a timely manner. Nothing in subdivision (a) of this Article is intended to or shall affect or alter the standard of judicial review applicable under Federal law to any opinion or determination implementing a specific provision of Federal law embodied in statute or regulation.
- (b) The Contracting Officer shall have the right to make determinations necessary to administer this Contract that are consistent with the provisions of this Contract, the laws of the United States and the State of California, and the rules and regulations promulgated by the Secretary. Such determinations shall be made in consultation with the Contractor to the extent reasonably practicable.

PROTECTION OF WATER AND AIR QUALITY

14. (a) Project Facilities used to convey Non-Project Water on behalf of the Contractor shall be operated and maintained in the most practical manner to maintain the quality of the Non-Project Water at the highest level possible as determined by the Contracting Officer: Provided, That the United States does not warrant the quality of the Non-Project Water conveyed on behalf of the Contractor and is under no obligation to furnish or construct water

treatment facilities to maintain or improve the quality of the Non-Project Water conveyed on behalf of the Contractor.

- (b) The Contractor shall comply with all applicable water and air pollution laws and regulations of the United States and the State of California; and shall obtain all required permits or licenses from the appropriate Federal, State, or local authorities necessary for the conveyance of Non-Project Water on behalf of the Contractor; and shall be responsible for compliance with all Federal, State, and local water quality standards applicable to surface and subsurface drainage and/or discharges generated through the use of Project Facilities or Contractor facilities or Non-Project Water conveyed and on behalf of the Contractor.
- (c) This Article shall not affect or alter any legal obligations of the Secretary to provide drainage or other discharge services.
- (d) The Non-Project Water introduced into the Project Facilities shall be of such quality, as determined solely by the Contracting Officer, as to not significantly degrade the quality of the Project water. If it is determined by the Contracting Officer that the quality of the Non-Project Water from any source(s) identified in Exhibit C will significantly degrade the quality of Project Water in or introduced into the Project Facilities, the Contractor shall, upon receipt of a written notice from the Contracting Officer, arrange for the immediate termination of the introduction of Non-Project Water from such sources(s) into the Project Facilities, and Exhibit C shall be modified to delete such sources(s) of Non-Project Water.
 - (e) Omitted

(f) At all times during the term of this Contract, the Contractor shall be in compliance with the requirements of the then-current Quality Assurance Project Plan (Plan) prepared by the Contracting Officer for Non-Project Water introduced into and conveyed through the Project Facilities. The Plan, as identified in Exhibit D, describes the sample collection procedures, water testing methods, and data review process, including quality control/quality assurance protocols, to verify analytical results.

403 the Non-Project Water meets the Bureau of Reclamation's water quality acceptance criteria. 404 CHARGES FOR DELINQUENT PAYMENTS 405 15. The Contractor shall be subject to interest, administrative, and penalty (a) 406 charges on delinquent payments. If a payment is not received by the due date, the Contractor 407 shall pay an interest charge on the delinquent payment for each day the payment is delinquent 408 beyond the due date. If a payment becomes 60 days delinquent, in addition to the interest 409 charge, the Contractor shall pay an administrative charge to cover additional costs of billing and 410 processing the delinquent payment. If a payment is delinquent 90 days or more, in addition to 411 the interest and administrative charges, the Contractor shall pay a penalty charge for each day the 412 payment is delinquent beyond the due date, based on the remaining balance of the payment due 413 at the rate of 6 percent per year. The Contractor shall also pay any fees incurred for debt 414 collection services associated with a delinquent payment. 415 The interest charge rate shall be the greater of either the rate prescribed (b) 416 quarterly in the Federal Register by the Department of the Treasury for application to overdue 417 payments or the interest rate of 0.5 percent per month. The interest charge rate will be determined as of the due date and remain fixed for the duration of the delinquent period. 418 419 When a partial payment on a delinquent account is received, the amount 420 received shall be applied first to the penalty charges, second to the administrative charges, third to the accrued interest, and finally to the overdue payment. 421 422 EQUAL EMPLOYMENT OPPORTUNITY 423 424 16. During the performance of this Contract, the Contractor agrees as follows: 425 The Contractor will not discriminate against any employee or applicant for 426 employment because of race, color, religion, sex, disability, or national origin. The Contractor 427 will take affirmative action to ensure that applicants are employed, and that employees are 428 treated during employment, without regard to their race, color, religion, sex, disability, or 429 national origin. Such action shall include, but not be limited to the following: employment, 430 upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; 431 rates of pay or other forms of compensation; and selection for training, including apprenticeship. 432 The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of 433 434 this nondiscrimination clause. 435 (b) The Contractor will, in all solicitations or advertisements for employees 436 placed by or on behalf of the Contractor, state that all qualified applicants will receive 437 consideration for employment without regard to race, color, religion, sex, disability, or national

The Contracting Officer reserves the right to require additional analyses to ensure

402

438

origin.

(g)

- with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 445 (d) The Contractor will comply with all provisions of Executive Order No.
 446 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary
 447 of Labor.
- 448 (e) The Contractor will furnish all information and reports required by
 449 Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the
 450 Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and
 451 accounts by the Contracting Agency and the Secretary of Labor for purposes of investigation to
 452 ascertain compliance with such rules, regulations, and orders.

- (f) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this Contract or with any of such rules, regulations, or orders, this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965 or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (g) The Contractor will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by the rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions, including sanctions for noncompliance: *Provided, however*, That in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

CERTIFICATION OF NONSEGREGATED FACILITIES

17. The Contractor hereby certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments and that it does not permit its employees to perform their services at any location under its control where segregated facilities are maintained. It certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments and that it will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this certification is a violation of the Equal Employment Opportunity clause in this Contract. As used in this certification, the term

"segregated facilities" means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, or national origin, because of habit, local custom, disability, or otherwise. The Contractor further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Employment Opportunity clause; that it will retain such certifications in its files; and that it will forward the following notice to such proposed subcontractors (except where the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A Certification of Nonsegregated Facilities must be submitted prior to the award of a subcontract exceeding \$10,000 which is not exempt from the provisions of the Equal Employment Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually). Note: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS

- 18. (a) The Contractor shall comply with Title VI of the Civil Rights Act of 1964 (42 U.S.C. 2000d), Section 504 of the Rehabilitation Act of 1973 (P.L. 93-112, as amended), the Age Discrimination Act of 1975 (42 U.S.C. 6101, *et seq.*), Title II of the Americans with Disabilities Act of 1990 if the entity is a State or local government entity [Title III if the entity is a non-government entity], and any other applicable civil rights laws, as well as with their respective implementing regulations and guidelines imposed by the U.S. Department of the Interior and/or Bureau of Reclamation.
- (b) These statutes require that no person in the United States shall be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving financial assistance from the Bureau of Reclamation on the grounds of race, color, national origin, disability, or age. By executing this Contract, the Contractor agrees to immediately take any measures necessary to implement this obligation, including permitting officials of the United States to inspect premises, programs, and documents.
- (c) The Contractor makes this agreement in consideration of and for the purpose of obtaining any and all Federal grants, loans, contracts, property discounts, or other Federal financial assistance extended after the date hereof to the Contractor by the Bureau of Reclamation, including installment payments after such date on account of arrangements for Federal financial assistance which were approved before such date. The Contractor recognizes and agrees that such Federal assistance will be extended in reliance on the representations and

520 agreements made in this Article and that the United States reserves the right to seek judicial enforcement thereof. 521 522 (d) Complaints of discrimination against the Contractor shall be investigated 523 by the Contracting Officer's Office of Civil Rights. 524 GENERAL OBLIGATION--BENEFITS CONDITIONED UPON PAYMENT 525 19. The obligation of the Contractor to pay the United States as provided in (a) 526 this Contract is a general obligation of the Contractor notwithstanding the manner in which the 527 obligation may be distributed among the Contractor's water users and notwithstanding the default 528 of individual water users in their obligation to the Contractor. 529 The payment of charges becoming due pursuant to this Contract is a (b) 530 condition precedent to receiving benefits under this Contract. The United States shall not make 531 Non-Project Water available to the Contractor through Project Facilities during any period in 532 which the Contractor is in arrears in the advance payment of Rates and charges due the United 533 States. The Contractor shall not deliver Non-Project Water under the terms and conditions of 534 this Contract for lands or parties that are in arrears in the advance payment of rates and charges 535 as levied or established by the Contractor. 536 BOOKS, RECORDS, AND REPORTS 537 20. The Contractor shall establish and maintain accounts and other books and records 538 pertaining to administration of the terms and conditions of this Contract, including 539 the Contractor's financial transactions; water supply data; and project land and rights-of-way 540 use agreements;; and other matters that the Contracting Officer may require. Reports shall be 541 furnished to the Contracting Officer in such form and on such date or dates as the Contracting 542 Officer may require. Subject to applicable Federal laws and regulations, each party to this 543 Contract shall have the right during office hours to examine and make copies of the other party's 544 books and records relating to matters covered by this Contract. 545 CONTINGENT UPON APPROPRIATION OR ALLOTMENT OF FUNDS 546 21. The expenditure or advance of any money or the performance of any obligation of 547 the United States under this Contract shall be contingent upon appropriation or allotment of 548 funds. Absence of appropriation or allotment of funds shall not relieve the Contractor from any 549 obligations under this Contract. No liability shall accrue to the United States in case funds are 550 not appropriated or allotted. 551 ASSIGNMENT LIMITED--SUCCESSORS AND ASSIGNS OBLIGATED 552 The provisions of this Contract shall apply to and bind the successors and assigns 553 of the parties hereto, but no assignment or transfer of this Contract or any right or interest therein 554 by either party shall be valid until approved in writing by the other party.

555	OFFICIALS NOT TO BENEFIT		
556 557 558	23. No Member of or Delegate to the Congress, Resident Commissioner, or official of the Contractor shall benefit from this Contract other than as a water user or landowner in the same manner as other water users or landowners.		
559	CHANGES IN CONTRACTOR'S ORGANIZATION		
560 561 562 563 564	24. While this Contract is in effect, no change may be made in the Contractor's organization, by inclusion or exclusion of lands or by any other changes which may affect the respective rights, obligations, privileges, and duties of either the United States or the Contractor under this Contract including, but not limited to, dissolution, consolidation, or merger, except upon the Contracting Officer's written consent.		
565	<u>NOTICES</u>		
566 567 568 569 570 571 572	shall be deemed to have been given, on behalf of the Contractor, when mailed, postage prepaid, or delivered to Bureau of Reclamation, South-Central California Area Office, 1243 "N" Street, Fresno, California 93721, and on behalf of the United States, when mailed, postage prepaid, or delivered to the Board of Trustees of Delta Lands Reclamation District No. 770, Post Office Box 877, Corcoran, California 93212. The designation of the addressee or the address		
573	INCORPORATION OF EXHIBITS		
574	26. Exhibits A through D are attached hereto and incorporated herein.		
575	CONTRACT DRAFTING CONSIDERATIONS		
576 577 578 579	27. The articles or any portions thereof in this Contract that are double-spaced have been drafted, negotiated, and reviewed by the parties hereto, each of whom is sophisticated in the matters to which this Contract pertains, and no one party shall be considered to have drafted the stated articles		

580 581	IN WITNESS WHEREOI first above written.	F, the parties hereto have executed this Contract as of the day and year
582	mst decre without	UNITED STATES OF AMERICA
583		By:
584		Regional Director
585		Mid-Pacific Region
586		Bureau of Reclamation
	(SEAL)	DELTA LANDS RECLAMATION DISTRICT NO. 770
587		By:
588		By: President of the Board of Directors
589	Attest:	
590	By:	
	Secretary of the Bo	ard of Directors

EXHIBIT A DELTA LANDS RECLAMATION DISTRICT NO. 770 CONTRACTOR'S BOUNDARY MAP

EXHIBIT B DELTA LANDS RECLAMATION DISTRICT NO. 770 YEAR 2010 CONVEYANCE RATES (Per Acre-Foot)

	(1) M&I Cost of
Cost Component	Service
Water Marketing	\$ 3.20
Conveyance	
O&M	*
Capital	\$ 6.46
Other Cost	\$ 2.40
Total:	\$12.06

(1) The M&I Cost of Service Rate is the Contractor's rate to introduce Non-Project Water as defined in Exhibit C into Friant Division facilities.

Additional details of rate components are available on the Internet at www.mp.usbr.gov/cvpwaterrates/.

^{*}Conveyance operation and maintenance costs were removed for ratesetting purposes and are billed directly by the Operating Non-Federal Entity.

EXHIBIT C SOURCE(S) OF DELTA LANDS RECLAMATION DISTRICT NO. 770 NON-PROJECT WATER

The Non-Project Water conveyed pursuant to this Contract will be potentially damaging flood flows diverted by the Contractor from one or more of the following sources:

- 1. From the Kings River at Milepost 29.10 of the Friant-Kern Canal
- 2. From the St. John's River (a channel of the Kaweah River) at Milepost 69.45 of the Friant-Kern Canal
- 3. From the Tule River at Milepost 95.67 of the Friant-Kern Canal

Exhibit C1 and C2 provide the letters from the organizations that address the introduction of Non-Project Water from the Kings River and the Tule River into the Friant-Kern Canal for the term of this Contract. Exhibit C3 addresses the introduction of Non-Project Water from the St. John's River into the Friant-Kern Canal through September 30, 2010. If the Contractor wants to introduce Non-Project Water from the St. John's River into the Friant-Kern Canal after September 30, 2010, the Contractor shall submit to the Contracting Officer and the Operating Non-Federal Entity an updated letter(s) for the introduction of Non-Project Water from the St. John's River for the period October 1, 2010 through May 31, 2011. Without this additional documentation, the Contracting Officer will not allow the continued introduction of St. John's River Non-Project Water into the Friant-Kern Canal.

EXHIBIT D

Placeholder for the Quality Assurance Project Plan

DRAFT ENVIRONMENTAL ASSESSMENT
DRAFT ENVIRONMENTAL ASSESSMENT
2010 WARREN ACT CONTRACT AND LICENSE FOR DELTA LANDS RECLAMATION DISTRICT 770
Appendix B
Water Quality Requirements for use of the Friant-Kern Canal
May 2010

RECLAMATION

Managing Water in the West

Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals Water Quality Monitoring Requirements



Friant-Kern Canal in Tulare County (Credit: Ted Holzem, Mintier & Associates)



U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Region

March 7, 2008

United States Bureau of Reclamation South-Central California Area Office and Friant Water Authority

Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals Water Quality Monitoring Requirements

This Policy describes the approval process, implementation procedures, and responsibilities of a Contractor requesting permission from the U.S. Bureau of Reclamation (Reclamation) to introduce non-project water into the Friant-Kern and Madera Canals, features of the Friant Division of the Central Valley Project (CVP). The monitoring requirements contained herein are intended to ensure that water quality is protected and that domestic and agricultural water users are not adversely impacted by the introduction of non-project water. The discharge of non-project water shall not in any way limit the ability of either Reclamation or the Friant Water Authority (Authority) to operate and maintain the Canals for their intended purposes nor shall it adversely impact existing contracts or any other agreements. The discharge of non-project water into the Canals will be permissible only when there is excess capacity in the system as determined by the Authority and or Reclamation.

The Contractor shall be responsible for securing other requisite Federal, State or local permits.

Reclamation, in cooperation with the Authority, will consider all proposals to convey non-project water based upon this Policy's water quality criteria and implementation procedures established in this document. Table 1 provides a summary of the Policy's water quality monitoring requirements.

This policy is subject to review and modification by Reclamation and the Authority. Reclamation and the Authority reserve the right to change the water quality monitoring requirements for any non-project water to be conveyed in the Friant-Kern and Madera Canals.

A. Types of Non-Project Water

This policy recognizes three types of non-project water with distinct requirements for water quality monitoring.

1. "Type A" Non-Project Water

Water for which analytical testing demonstrates complete compliance with California drinking water standards (Title 22)¹, plus other constituents of concern recommended by the California Department of Health Services. Type A water must be tested every year for the full list of

^{1.} Title 22. The Domestic Water Quality and Monitoring Regulations specified by the State of California Health and Safety Code (Sections 4010-4037), and Administrative Code (Sections 64401 et seq.), as amended.

constituents listed in Table 2. No in-prism (within the Canal) monitoring is required to convey Type A water.

2. "Type B" Non-Project Water

Water that generally complies with Title 22, but may exceed the Maximum Contaminant Level (MCL) for certain inorganic constituents of concern to be determined by Reclamation and the Authority on a case-by-case basis. This water may be discharged into the Canal over short-intervals. Type B water shall be tested every year for the full list of constituents in Table 2, and more frequently for the identified constituents of concern. Flood Water and Ground Water are Type B non-project water.

Type B water may not be pumped into the Friant-Kern Canal within a half-mile upstream of a delivery point to a CVP Municipal and Industrial contractor. At this time, there are no M & I Contractors served from the Madera Canal.

The introduction of Type B water into the Friant-Kern and Madera Canals will require regular in-prism monitoring to confirm that the CVP water delivered to downstream customers is suitable in quality for their needs. The location, frequency, and parameters of in-prism monitoring will be determined by Reclamation and the Authority on a case-by-case basis.

3. "Type C" Non-Project Water

Type C Water is non-project water that originates in the same source as CVP water but that has not been appropriated by the United States. For example, non-project water from a tributary within the upper San Joaquin River watershed, such as the Soquel Diversion from Willow Creek above Bass Lake, is Type C water. Another example is State Water Project water pumped from the California Aqueduct and Cross Valley Canal into the lower Friant-Kern Canal. No water quality analyses are required to convey Type C water through the Friant-Kern or Madera Canals because it is physically the same as Project water.

B. Authorization

The Warren Act (Act of February 21, 1911, ch. 141, 36 Stat. 925), as supplemented by Section 305 of Public Law 102-250, authorizes Reclamation to contract for the carriage and storage of non-project water when excess capacity is available in Federal water facilities. The terms of this Policy are also based on the requirements of the Clean Water Act (33 U.S.C. 1251 et seq.), the Endangered Species Act of 1973 (P.L. 93-205), the National Environmental Policy Act of 1969 (NEPA, 42 U.S.C. 4321 et seq.), the Reclamation Act of 1902 (June 17, 1902 as amended), and the Safe Drinking Water Act of 1974 (P.L. 93-523, amended 1986) and Title XXIV of the Reclamation Projects Authorization and Adjustments Act of 1992 (P.L. 102-575, 106 Stat 4600).

C. General Requirements for Discharge of Non-Project Water

1. Contract Requirements

A Contractor wishing to discharge non-project water into the Friant-Kern or Madera Canals must first execute a contract with Reclamation. The contract may be negotiated with Reclamation's South Central California Area Office (SCCAO) in Fresno.

2. Facility Licensing

Each non-project water discharge facility must be licensed by Reclamation and the Authority. The license for erection and maintenance of structures may be negotiated with the SCCAO.

3. Prohibition When the Canal is Empty

Non-project shall not be conveyed in the Friant-Kern or Madera Canals during periods when the canal is de-watered for maintenance.

D. Non-Project Discharge, Water Quality, and Monitoring Program Requirements

1. General Discharge Approval Requirements

Each source of non-project water must be correctly sampled, completely analyzed, and be approved by Reclamation prior to introduction into the Friant-Kern or Madera Canals. The Contractor shall pay the cost of collection and analyses of the non-project water required under this policy².

2. Water Quality Sampling and Analyses

Each source of Type A and B non-project water must be tested every year for the complete list of constituents of concern and bacterial organisms listed in Table 2. The analytical laboratory must be approved by Reclamation (Table 3).

3. Water Quality Reporting Requirements

Water quality analytical results must be reported to the Contracting Officer for review.

4. Type B Water Quality Monitoring

Reclamation will provide a Quality Assurance Project Plan (QAPP) that will describe the protocols and methods for sampling and analysis of Type B non-project water.

^{2.} Reclamation will pay for the collection and analyses of quarterly baseline samples collected at Friant Dam and Lake Woolomes.

The program may include sampling of canal water upstream and downstream of the Contractor's discharge point into the Friant-Kern or Madera Canal. The location of samples, and the duration and frequency of sampling, and the list of constituents to be analyzed, may be changed upon review of measured trends in concentration of those constituents of concern.

E. Control of Water Quality in the Friant Division

The quality of CVP water will be considered impaired if the conveyance of the Contractor's non-project water is causing the quality of CVP water to exceed a maximum contaminant level specified in Title 22 (Table 2).

Reclamation, in consultation with the Authority, will direct the Contractor to stop the discharge of non-project water from this source into the Friant-Kern or Madera Canal.

F. Baseline Water Quality Analysis

Every four months, Reclamation will collect samples of water from the Friant-Kern Canal near Friant Dam and near Lake Woolomes. These samples will be analyzed for Title 22 and many other constituents. The purpose of theses samples is to identify the baseline quality of water in the canal. No direct analysis within the Madera Canal will be conducted at this time.

The cost of this analysis will be borne by Reclamation under the CVP Baseline water quality monitoring program.

G. Water Quality Data Review and Management

All water quality data must be sent to Reclamation for review, verification, and approval. All water quality data will be entered into a database to be maintained by Reclamation. All field notes and laboratory water quality analytical reports will be kept by the Authority. All water quality data will be available upon request to the Contractor and other interested parties.

Definitions

CVP or Project water

Water that has been appropriated by the United States for the Friant Division of the CVP. The source of Project water in the Friant Division is the San Joaquin River watershed.

Non-project water

Water that has not been appropriated by the United States for the Friant Division of the CVP. This includes groundwater, and surface water from other streams and rivers that cross the Friant-Kern and Madera Canals, such as Wutchumna Ditch.

Maximum Contaminant Level

Usually reported in milligrams per liter (parts per million) or micrograms per liter (parts per billion).

Non-project discharge system

The pipe and pumps from which non-project water enters the Friant Division.

Title 22

The Domestic Water Quality and Monitoring Regulations specified by the State of California Health and Safety Code (Sections 4010-4037), and Administrative Code (Sections 64401 et seq.), as amended.

Type A water

This is non-project water that meets California drinking water standards. This water must be tested every year for the full list of Title 22 constituents. No in-stream monitoring is required to convey Type A water in the Friant Division.

Type B water

This is non-project water that has constituents that may exceed the California drinking water standards. This water must be tested every year for the full list of Title 22 constituents, plus annually for constituents of concern. Field monitoring is required of each source and of water upstream and downstream of the discharge point.

Type C water

This is non-project water from the same watershed as Project water that has not been appropriated by the United States for the Central Valley Project. Water from Soquel Creek diversion or the State Water Project are Type C water. No water quality analyses are required to convey this water in the Friant-Kern Canal.

Table 1. Water Quality Monitoring Requirements in the Friant DivisionTable 2. Title 22 California Drinking Water StandardsTable 3. List of Labs Approved by Reclamation

Table 1. Water Quality Monitoring Requirements - Friant Division, Central Valley Project

Type of Water	Location	How often will a sample be collected?	What will be measured in the water?	Who will collect samples?
Project Water	Friant Lake Woolomes	January, April, June, October January, April, June, October	Title 22 and bacterial constituents (1) (2) Title 22 and bacterial constituents (1) (2)	Reclamation, MP-157 Reclamation, MP-157
Type A Non-Proje	ect Water	Every year	Title 22 and bacterial constituents (1) (2)	Contractor
Type B Non-Project Water		Every year Title 22 and bacterial constituents (1) (2) Every month (5) Constituents of concern (5) Every week (5) EC, turbidity, etc.(3) (5)		Contractor Contractor Friant Water Authority
Type C Non-Proj	ect Water	None required		
Project water	Upstream of each Type B discharge (4) Downstream of each Type B discharge (4)	Every week (5) Every week (5)	EC, turbidity, etc.(3) (5) EC, turbidity, etc.(3) (5)	Friant Water Authority Friant Water Authority

Notes:

This water quality monitoring program is subject to change at any time by the Contracting Officer.

Revised: 08/16/2007 SCC-107

⁽¹⁾ California Department of Health Services, California Code of Regulations, Title 22, Division 4, Chapter 15, Domestic Water Quality and Monitoring, http://www.dhs.ca.gov/ps/ddwem/publications/Regulations/regulations_index.htm.

⁽²⁾ Cryptosporidium, Giardia, total coliform bacteria

⁽³⁾ Field measurements.

⁽⁴⁾ Location to be determined by the Contracting Officer

⁽⁵⁾ To be determined by the Contracting Officer, if necessary.

U.S. Bureau of Reclamation
Friant Water Authority
Friant Division, California
Water Quality Monitoring Requirements

Table 2a. Water Quality Constituents

CONSTITUENT OR PARAMETER	Units	Recommended Method	California DHS Maximum Contaminant Level		CAS Registry Number
Primary Constituents (CCR § 64431)					
Aluminum	μg/L	EPA 200.7	1,000	1	7429-90-5
Antimony	μg/L	EPA 200.8	6	1	7440-36-0
Arsenic	μg/L	EPA 200.8	10	16	7440-38-2
Asbestos	MFL > 10μm	EPA 100.2	7	1	1332-21-4
Barium	μg/L	EPA 200.7	1,000	1	7440-39-3
Beryllium	μg/L	EPA 200.7	4	1	7440-41-7
Cadmium	μg/L	EPA 200.7	5	1	7440-43-9
Chromium	μg/L	EPA 200.7	50	1	7440-47-3
Cyanide	μg/L	EPA 335.4	150	1	57-12-5
Fluoride	mg/L	EPA 300.1	2	1	16984-48-8
Mercury (inorganic)	μg/L	EPA 245.1	2	1	7439-97-6
Nickel	μg/L	EPA 200.7	100	1	7440-02-0
Nitrate (as NO3)	mg/L	EPA 300.1	45	1	7727-37-9
Total Nitrate + Nitrite (as Nitrogen)	mg/L	EPA 353.2	10	1	
Nitrite (as Nitrogen)	mg/L	EPA 300.1	1	1	14797-65-0
Selenium	μg/L	EPA 200.8	50	1	7782-49-2
Thallium	μg/L	EPA 200.8	2	1	7440-28-0
Secondary Constituents (CCR § 64449)					
Aluminum	μg/L	EPA 200.7	200	6	7429-90-5
Chloride	mg/L	EPA 300.1	250/500/600	7	16887-00-6
Color	units	SM 2120 B	15	6	
Copper	μg/L	EPA 200.7	1,000	6	7440-50-8
Foaming agents (MBAS)	mg/L	SM 5540 C	0.5	6	
Iron	μg/L	EPA 200.7	300	6	7439-89-6
Manganese	μg/L	EPA 200.7	50	6	7439-96-5
Methyl-tert-butyl ether (MtBE)	μg/L	EPA 524.2	5	6	1634-04-4
Odor - Threshold	threshold units	SM 2150 B	3	6	
Silver	μg/L	EPA 200.7	100	6	7440-22-4
Specific conductance (EC)	μS/cm	SM 2510 B	900/1600/2200	7	
Sulfate	mg/L	EPA 300.1	250/500/600	7	14808-79-8
Thiobencarb	μg/L	EPA 525.2	1	6	28249-77-6
Total dissolved solids (TDS)	mg/L	SM 2540 C	500/1000/1500	7	
Turbidity	NTU	EPA 180.1	5	6	
Zinc	mg/L	EPA 200.7	5	6	7440-66-6

Table 2a. Water Quality Constituents

CONSTITUENT	11-2-	Recommended	California DHS Maximum		CAS Registry
OR PARAMETER	Units	Method	Contaminant Level		Number
Other required analyses (CCR § 64449 (I	o)(2); CCR § 64670)				
Bicarbonate	mg/L	SM 2320B		8	
Calcium	mg/L	SM3111B		8,12	7440-70-2
Carbonate	mg/L	SM 2320B		8	
Copper	mg/L	EPA 200.7	1.3	14	7440-50-8
Hardness	mg/L	SM 2340 B		8	
Hydroxide alkalinity	mg/L	SM 2320B		8,12	
Lead	mg/L	EPA 200.8	0.015	14	7439-92-1
Magnesium	mg/L	EPA 200.7		8	7439-95-4
Orthophosphate	mg/L	EPA 365.1		12	
pH	units	EPA 150.1		8,12	
Silica	mg/L	EPA 200.7		12	
Sodium	mg/L	EPA 200.7		8	7440-23-5
Temperature	degrees C	SM 2550		12	
•	ŭ				
Radiochemistry (CCR § 64442)					
Radioactivity, Gross Alpha	pCi/L	SM 7110C	15	3	
licrobiology					
Cryptosporidium	org/liter		No MCL, measure for p	oresence	(surface water o
Fecal Coliform	MPN/100ml		No MCL, measure for p	oresence	(surface water o
Giardia	org/liter		No MCL, measure for	oresence	(surface water o
Total Coliform bacteria	MPN/100ml		No MCL, measure for p	oresence	(surface water o
Organic Constituents (CCR § 64444)					
EPA 504.1 method					
Dibromochloropropane (DBCP)	μg/L	EPA 504.1	0.2	4	96-12-8
Ethylene dibromide (EDB)	μg/L	EPA 504.1	0.05	4	206-93-4
PA 505					
Chlordane	μg/L	EPA 505	0.1	4	57-74-9
Endrin	μg/L	EPA 505	2	4	72-20-8
Heptachlor	ua/l	EPA 505	0.01	4	70 44 0
Hantachlar anavida	μg/L	Li /\ 300			76-44-8
Heptachlor epoxide		EPA 505	0.01	4	76-44-8 1024-57-3
·	μg/L			4	
Hexachlorobenzene Hexachlorocyclopentadiene		EPA 505	0.01	4 4 4	1024-57-3
Hexachlorobenzene	μg/L μg/L	EPA 505 EPA 505	0.01 1	4	1024-57-3 118-74-1
Hexachlorobenzene Hexachlorocyclopentadiene	μg/L μg/L μg/L	EPA 505 EPA 505 EPA 505	0.01 1 50	4	1024-57-3 118-74-1 77-47-4
Hexachlorobenzene Hexachlorocyclopentadiene Lindane (gamma-BHC)	µg/L µg/L µg/L µg/L	EPA 505 EPA 505 EPA 505 EPA 505	0.01 1 50 0.2	4 4 4	1024-57-3 118-74-1 77-47-4 58-89-9
Hexachlorobenzene Hexachlorocyclopentadiene Lindane (gamma-BHC) Methoxychlor	µg/L µg/L µg/L µg/L µg/L	EPA 505 EPA 505 EPA 505 EPA 505 EPA 505	0.01 1 50 0.2 30	4 4 4 4	1024-57-3 118-74-1 77-47-4 58-89-9 72-43-5
Hexachlorobenzene Hexachlorocyclopentadiene Lindane (gamma-BHC) Methoxychlor Polychlorinated biphenyls Toxaphene	µg/L µg/L µg/L µg/L µg/L	EPA 505 EPA 505 EPA 505 EPA 505 EPA 505	0.01 1 50 0.2 30 0.5	4 4 4 4	1024-57-3 118-74-1 77-47-4 58-89-9 72-43-5 1336-36-3
Hexachlorobenzene Hexachlorocyclopentadiene Lindane (gamma-BHC) Methoxychlor Polychlorinated biphenyls Toxaphene	µg/L µg/L µg/L µg/L µg/L µg/L	EPA 505 EPA 505 EPA 505 EPA 505 EPA 505 EPA 505	0.01 1 50 0.2 30 0.5	4 4 4 4	1024-57-3 118-74-1 77-47-4 58-89-9 72-43-5 1336-36-3
Hexachlorobenzene Hexachlorocyclopentadiene Lindane (gamma-BHC) Methoxychlor Polychlorinated biphenyls Toxaphene EPA 508 Method	µg/L µg/L µg/L µg/L µg/L	EPA 505 EPA 505 EPA 505 EPA 505 EPA 505	0.01 1 50 0.2 30 0.5 3	4 4 4 4 4	1024-57-3 118-74-1 77-47-4 58-89-9 72-43-5 1336-36-3 8001-35-2

Table 2a. Water Quality Constituents

CONSTITUENT		Doggers and d	California DHS		CAS
CONSTITUENT OR PARAMETER	Units	Recommended Method	Maximum Contaminant Level		Registry Number
ONTANAMETER	Office	Wethod	Contaminant Ecver		Number
EPA 515.3 Method					
Bentazon	μg/L	EPA 515	18	4	25057-89-0
2,4-D	μg/L	EPA 515.1-4	70	4	94-75-7
Dalapon	μg/L	EPA 515.1-4	200	4	75-99-0
Dinoseb	μg/L	EPA 515.1-4	7	4	88-85-7
Pentachlorophenol	μg/L	EPA 515.1-4	1	4	87-86-5
Picloram	μg/L	EPA 515.1-4	500	4	1918-02-1
2,4,5-TP (Silvex)	μg/L	EPA 515.1-4	50	4	93-72-1
PA 524.2 Method (Volatile Organic Chem	icals)				
Benzene	μg/L	EPA 524.2	1	4	71-43-2
Carbon tetrachloride	μg/L	EPA 524.2	0.5	4	56-23-5
1,2-Dibromomethane	μg/L	EPA 524.2	0.05		106-93-4
1,2-Dichlorobenzene	μg/L	EPA 524.2	600	4	95-50-1
1,4-Dichlorobenzene	μg/L	EPA 524.2	5	4	106-46-7
1,1-Dichloroethane	μg/L	EPA 524.2	5	4	75-34-3
1.2-Dichloroethane	μg/L	EPA 524.2	0.5	4	107-06-2
1,1-Dichloroethylene	μg/L	EPA 524.2	6	4	75-35-4
cis-1,2-Dichloroethylene	μg/L	EPA 524.2	6	4	156-59-2
trans-1,2-Dichloroethylene	μg/L	EPA 524.2	10	4	156-60-5
Dichloromethane	μg/L	EPA 524.2	5	4	75-09-2
1,2-Dichloropropane	μg/L	EPA 524.2	5	4	78-87-5
1,3-Dichloropropene	μg/L	EPA 524.2	0.5	4	542-75-6
Ethylbenzene	μg/L	EPA 524.2	300	4	100-41-4
Methyl-tert-butyl ether (MtBE)	μg/L	EPA 524.2	13	4	1634-04-4
Monochlorobenzene	μg/L	EPA 524.2	70	4	108-90-7
Styrene	μg/L	EPA 524.2	100	4	100-42-5
1,1,2,2-Tetrachloroethane	· -	EPA 524.2	100	4	79-34-5
	μg/L		5	4	127-18-4
Tetrachloroethylene (PCE) Toluene	μg/L	EPA 524.2		4	
	μg/L	EPA 524.2	150		108-88-3
1,2,4-Trichlorobenzene	μg/L	EPA 524.2	5	4	120-82-1
1,1,1-Trichloroethane	μg/L	EPA 524.2	200	4	71-55-6
1,1,2-Trichloroethane	μg/L	EPA 524.2	5	4	79-00-5
Trichloroethylene (TCE)	μg/L 	EPA 524.2	5	4	79-01-6
Trichlorofluoromethane	μg/L 	EPA 524.2	150	4	75-69-4
1,1,2-Trichloro-1,2,2-trifluoroethane	μg/L	EPA 524.2	1,200	4	76-13-1
Total Trihalomethanes	ug/L	EPA 524.2	80	10	
Vinyl chloride	μg/L	EPA 524.2	0.5	4	75-01-4
Xylene(s)	μg/L	EPA 524.2	1,750	4	1330-20-7
PA 525.2 Method					
Benzo(a)pyrene	μg/L	EPA 525.2	0.2	4	50-32-8
Di(2-ethylhexyl)adipate	μg/L	EPA 525.2	400	4	103-23-1
Di(2-ethylhexyl)phthalate	μg/L	EPA 525.2	4	4	117-81-7
Molinate	μg/L	EPA 525.2	20	4	2212-67-1
Thiobencarb	μg/L	EPA 525.2	70	4	28249-77-6
EPA 531.1 Method					
Carbofuran	μg/L	EPA 531.1-2	18	4	1563-66-2
Oxamyl	μg/L	EPA 531.1-2	50	4	23135-22-0

Table 2a. Water Quality Constituents

		California DHS		CAS
	Recommended	Maximum		Registry
Units	Method	Contaminant Level		Number
μg/L	EPA 547	700	4	1071-83-6
μg/L	EPA 548.1	100	4	145-73-3
μg/L	EPA 549.2	20	4	85-00-7
μg/L	EPA 1613	0.00003	4	1746-01-6
	μg/L μg/L	Units Method μg/L EPA 547 μg/L EPA 548.1 μg/L EPA 549.2	Units Method Contaminant Level μg/L EPA 547 700 μg/L EPA 548.1 100 μg/L EPA 549.2 20	Units Recommended Method Maximum Contaminant Level μg/L EPA 547 700 4 μg/L EPA 548.1 100 4 μg/L EPA 549.2 20 4

Source Data:

Adapted from Marshack, Jon B. August 2003. A Compilation of Water Quality Goals. Prepared for the California Environmental Protection Agency, Regional Water Quality Control Board.

U.S. Bureau of Reclamation Friant Water Authority Friant Division, California Water Quality Monitoring Requirements

Table 2b. Unregulated Chemicals (CCR § 64450)

			California Departn	nent of	Health Services	CAS
CONSTITUENT		Recommended				Registr
OR PARAMETER	Units	Method	Notification Level		Response Level	Numbe
Boron	mg/L	EPA 200.7	1	9, 17	10	7440-42-8
n-Butylbenzene	μg/L	EPA 524.2	260	17	2,600	104-51-8
sec-Butylbenzene	μg/L	EPA 524.2	260	17	2,600	135-98-8
tert-Butylbenzene	μg/L μg/L	EPA 524.2	260	17	2,600	98-06-6
Carbon disulfide	μg/L	LI A 324.2	160	17	1,600	30-00-0
Chlorate	μg/L	EPA 300.1	0.8	17	8	
2-Chlorotoluene	μg/L μg/L	EPA 524.2	140	17	1,400	95-49-8
4-Chlorotoluene	μg/L	EPA 524.2	140	17	1,400	106-43-4
Dichlorofluoromethane (Freon 12)	μg/L μg/L	EPA 524.2	1,000	9,17	10,000	75-43-4
1.4-Dioxane	μg/L μg/L	SM 8270	3	17	300	123-91-1
Ethylene glycol	μg/L μg/L	SM 8015	1,400	17	14,000	123-91-1
Formaldehyde	μg/L μg/L	SM 6252	100	17	1,000	50-00-0
n-Propylbenzene	μg/L μg/L	31VI 0232	260	17	2,600	50-00-0
горушение НМХ	μg/L μg/L	SM 8330	350		·	0004 44 0
sopropylbenzene	μg/L μg/L	3101 0330	770	17	3,500	2691-41-0
,			1	17	7,700	
Manganese	mg/L			17	5	
Methyl isobutyl ketone	μg/L	EDA 524.2	120 17	17	1,200	04.00.0
Napthalene	μg/L	EPA 524.2		17	170	91-20-3
n-nitrosodiethylamine (NDEA)	μg/L	1625	0.01	17	0.1	
n-nitrosodimethylamine (NDMA)	μg/L	1625	0.01	17	0.2	
n-nitroso-n-propylamine (NDPA)	μg/L	1625	0.01	17	0.5	
Perchlorate	μg/L	EPA 314	6	9, 17	60	13477-36-6
Propachlor	μg/L	EPA 507 or 525	90	17	900	1918-16-7
o-Isopropyltoluene	μg/L	EPA 524.2	770	17	7,700	99-87-6
RDX	μg/L	SM 8330	0.30	17	30	121-82-4
ert-Butyl alcohol (ethanol)	μg/L	EPA 524.2	12	9,17	1,200	75-65-0
I,2,3-Trichloropropane (TCP)	ug/L	EPA 524.2	0.005	9,17	0.5	96-18-4
1,2,4-Trimethylbenzene	μg/L	EPA 524.2	330	17	3,300	95-63-6
1,3,5-Trimethylbenzene	μg/L	EPA 524.2	330	17	3,300	95-63-6
2,4,6-Trinitrotoluene (TNT)	μg/L	SM 8330	1	17	100	
Vanadium	mg/L	EPA 286.1	0.05	9,17	0.5	7440-62-2

Revised: 05/17/2007

U.S. Bureau of Reclamation
Friant Water Authority
Friant Division, California
Water Quality Monitoring Requirements

Notes for Tables 2a and 2b

Title 22. California Code of Regulations, California Safe Drinking Water Act and Related Laws and Regulations. February 2007. http://www.dhs.ca.gov/ps/ddwem/publications/lawbook/PDFs/dwregulations-02-06-07.pdf

- [1] Table 64431-A. Maximum Contaminant Levels, Inorganic Chemicals
- [2] Table 64432-A. Detection Limits for Purpose of Reporting (DLRs) for Regulated Inorganic Chemicals
- [3] Table 644442. Radionuclide Maximum contaminant Levels (MCLs) and Detection Levels for Reporting (DLRs)
- [4] Table 64444-A. Maximum Contaminant Levels Organic Chemicals
- [5] Table 64445.1-A. Detection Limits for Reporting (DLRs) for Regulated Organic Chemicals
- [6] Table 64449-A. Secondary Maximum Contaminant Levels "Consumer Acceptance Levels"
- [7] Table 64449-B. Secondary Maximum Contaminant Levels "Consumer Acceptance Levels"
- [8] § 64449(b)(2)
- [9] Table 64450. Unregulated Chemicals
- [10] Appendix 64481-A. Typical Origins of Contaminants with Primary MCLs
- [11] Table 64533-A. Maximum Contaminant Levels and Detection Limits for Reporting Disinfection Byproducts
- [12] § 64670.(c)
- [13] Table 64678-A. DLRs for Lead and Copper
- [14] § 64678 (d)
- [15] § 64678 (e)
- [16] New Federal standard as of 1/23/2006
- [17] Dept Health Services Drinkig Water Notification Levels (June 2006)

RECLAMATION Managing Water in the West

Table 3. Approved Laboratory List for the Mid-Pacific Region Environmental Monitoring Branch (MP-157)

Basic Laboratory	Address	2218 Railroad Avenue Redding, CA 96001 USA
•	Contact	Nathan Hawley, Melissa Hawley, Ricky Jensen
	<u>P/F</u>	(530) 243-7234 / (530) 243-7494
	Email	nhawley@basiclab.com (QAO), mhawley@basiclab.com (PM), jcady@basiclab.com (quotes),
		poilar@basiclab.com (sample custody), khawley@basiclab.com (sample custody)
	CC Info	nhawley@basiclab.com, jcady@basiclab.com (sample custody)
	Methods	Approved only for inorganic parameters (metals, general chemistry)
DioVin Analytical	Address	685 Stone Road Unit 6 Benicia, CA 94510 USA
BioVir Analytical	Contact	Rick Danielson, Lab Director
Laboratories	P/F	(707) 747-5906 / (707) 747-1751
	Email	red@biovir.com, csj@biovir.com, lb@biovir.com, QAO Jim Truscott jrt@biovir.com
	Methods	Approved for all biological and pathogenic parameters
Block	Address	2451 Estand Way Pleasant Hill, CA 94523 USA
	Contact	David Block
Environmental	P/F	(925) 682-7200 / (925) 686-0399
Services	Email	dblock@blockenviron.com
	Methods	Approved for Toxicity Testing.
California	Address	3249 Fitzgerald Road Rancho Cordova, CA 95742
Laboratory	Contact DE	Raymond Oslowski
Services	<u>P/F</u>	(916) 638-7301 / (916) 638-4510
	Email Mathada	rayo@californialab.com
	Methods	Approved for Chromium VI
Caltest Analytical	Address	1885 North Kelly Road Napa, CA 94558
Laboratory	Contact	Bill Svoboda, Project Manager x29
240014101	<u>P/F</u>	(707) 258-4000 / (707) 226-1001
	<u>Email</u>	bsvoboda@caltestlab.com
	Methods	Approved for all inorganic parameters and bioligical parameters
Columbia	Address	4200 New Haven Road Columbia, MO 65201 USA
Environmental	Contact	Tom May, Research Chemist
	P/F	(573) 876-1858 / (573) 876-1896
Resource Center	Email	tmay@usgs.gov
	Methods	Approved for mercury in biological tissue
Data Chem	Address	960 West LeVoy Drive Salt Lake City, UT 84123-2547 USA
Laboratories	Contact	Bob DiRienzo, Kevin Griffiths-Project Manager, Rand Potter - Project Manager, asbestos
Laboratories	P/F	(801) 266-7700 / (801) 268-9992
	Email	griffiths@datachem.com, Potter@datachem.com Invoicing: (Justin) pate@datachem.com
	Methods	Approved for asbestos, metals, organochlorine pesticides and PCBs in solids
Dept. of Fish &	Address	2005 Nimbus Road Rancho Cordova, CA 95670 USA
Game - WPCL	Contact	David B. Crane
Game - WICL	<u>P/F</u>	(916) 358-2858 / (916) 985-4301
	Email	dcrane@ospr.dfg.ca.gov
	Methods	Approved only for metals analysis in tissue.
Frontier	Address	414 Pontius North Seattle, WA 98109 USA
Geosciences	Contact	Shelly Fank - QA Officer, Matt Gomes-Project Manager
Geosciences	P/F	(206) 622-6960 / (206) 622-6870
	Email	shellyf@frontiergeosciences.com, mattg@frontiergeosciences.com
	Methods	in low level metals analysis.

Funit Cuarrana	Address	853 Corporation Street Santa Paula, CA 93060 USA
Fruit Growers	Contact	David Terz, QA Director
Laboratory	P/F	(805) 392-2024 / (805) 525-4172
	Email	davidt@fglinc.com
	Methods	Approved for all inorganic and organic parameters in drinking water.
Montgomory	Address	750 Royal Oaks Drive Ste. 100 Monrovia, CA 91016 USA
Montgomery	Contact	Allen Glover (project manager), Bradley Cahoon (quotes)
Watson/Harza	P/F	(916) 374-8030, 916-996-5929 (AG-cell) / (916) 374-8061
Laboratories	Email	Allen.Glover@us.mwhglobal.com, Bradley.Cahoon@us.mwhglobal.com
	CC Info	cc. Sam on all communications to Allen. Samer.Momani@us.mwhglobal.com
	Methods	Approved for all inorganic and organic parameters in drinking water
Olson	Address	SDSU: Box 2170, ACS Rm. 133 Brookings, SD 57007 USA
Biochemistry	Contact	Nancy Thiex, Laboratory Director
•	P/F	(605) 688-5466 / (605) 688-6295
Laboratories	Email	Nancy.Thiex@sdstate.edu
	CC Info	For re-analysis: contact Zelda McGinnis-Schlobohm and Nancy Anderson
		Zelda.Schobohm@SDSTATE.EDU, Nancy.Anderson@SDSTATE.EDU
		For analysis questions only: just CC. Nancy Anderson
	Methods	Approved only for low level selenium analysis.
Severn Trent	Address	880 Riverside Parkway West Sacramento, CA 95605 USA
Laboratories	Contact D.T.	Jeremy Sadler
	<u>P/F</u>	(916) 374-4381 / (916) 372-1059
	Email	jsadler@stl-inc.com Approved for all inorganic parameters and hazardous waste organics except for Ammonia as Nitrogen.
	Methods	Ag analysis in sediment, when known quantity is present, request 6010B
		118 analysis in seament, men morn quantity is present, request ours
Sierra Foothill	Address	255 Scottsville Blvd, Jackson, CA 95642
Laboratory, Inc.	Contact	Sandy Nurse (Owner) or Dale Gimble (QA Officer)
	<u>P/F</u>	(209) 223-2800 / (209) 223-2747
	Email Mothoda	sandy@sierralab.com, CC: dale@sierralab.com Approved for all inorganic parameters, microbiological parameters, acute and chronic toxicity.
	Methods	
Twining	Address	2527 Fresno Street Fresno, CA 93721 USA
Laboratories, Inc.	Contact D.T.	Jim Brownfield (QA Officer), Sample Control (for Bottle Orders)
	<u>P/F</u>	(559) 268-7021 / (559) 268-0740
	Email Mothoda	JimB@twining.com cc. to JosephU@twining.com
	Methods	Approved only for general chemistry and boron analysis.
U.S. Geological	Address	Denver Federal Center Building 20, MS 973 Denver, CO 80225 USA
Survey - Denver	Contact	Stephen A. Wilson
-	<u>P/F</u>	(303) 236-2454 / (303) 236-3200
	Email	swilson@usgs.gov
	Methods	Approved only for inorganic parameters in soil .
USBR Technical	Address	Denver Federal Center Building 67, D-8750 Denver, CO 80225-0007 USA
Service Center	Contact	Juli Fahy or Stan Conway
Denver Soils	<u>P/F</u>	(303) 445-2188 / (303) 445-6351
	<u>Email</u>	jfahy@do.usbr.gov
	3.6 42 3	
	Methods	Approved only for general physical analysis in soils.
Western	Methods Address	475 East Greg Street # 119 Sparks, NV 89431 USA
Western Environmental	Address Contact	475 East Greg Street # 119 Sparks, NV 89431 USA Ginger Peppard (Customer Service Manager), Andy Smith (Lab Director), Michelle Kramer
Environmental	Address Contact P/F	475 East Greg Street # 119 Sparks, NV 89431 USA Ginger Peppard (Customer Service Manager), Andy Smith (Lab Director), Michelle Kramer (775) 355-0202 / (775) 355-0817
	Address Contact	475 East Greg Street # 119 Sparks, NV 89431 USA Ginger Peppard (Customer Service Manager), Andy Smith (Lab Director), Michelle Kramer

Revised: 04/16/2007 MP-157

DRAFT ENVIRONMENTAL A	SSESSMENT		
2010 WARREN ACT CONTRACT DISTRICT 770 Appendix C	AND LICENSE FOR I	DELTA LANDS REC	LAMATION
Draft License			
May 2010			

Contract No. 10-LC-20-0258

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF RECLAMATION

Friant-Kern Canal, Central Valley Project

SHORT-TERM LICENSE FOR THE ERECTION, MAINTENANCE, OPERATION AND STORAGE OF TEMPORARY STRUCTURES

THIS LICENSE is given this day of , 2010, in pursuance of the Act of June 7, 1902 (32 Stat. 388) and Acts amendatory thereof or supplementary thereto, by THE UNITED STATES OF AMERICA, acting by and through its Bureau of Reclamation, Department of the Interior, represented by the duly authorized officer executing this License, hereinafter styled the "United States" to:

Delta Lands Reclamation District No. 770 Post Office Box 877 Corcoran, California 93212 (559) 992-5011

hereinafter styled the "Licensee."

RECITALS:

The United States, through the Bureau of Reclamation (Reclamation), acquired certain lands for the right-of-way of the Friant-Kern Canal (FKC) in connection with the Central Valley Project, Fresno and Tulare Counties, California; and

The Friant Water Authority (FWA) is responsible for the operation and maintenance of the FKC; and

The Licensee has had prior authorization for existing temporary pumps and appurtenances for the flood protection of lands (Contract No. 10-WC-20-4063) within its boundaries from floods during periods of high flows (Flood Water) on the Kings, Kaweah, and/or Tule Rivers for the purposes of human safety and/or property damage protection.

Reclamation has determined the requested use, the erection, maintenance, operation, and storage of structures and pumping equipment on the Friant-Kern Canal right-of-way, is not, at this time, incompatible with the purpose for which the land was obtained.

IT IS AGREED:

1. Reclamation does, through the duly authorized officer executing this License, hereby consent to Licensee's request to enter onto lands acquired by the United States for the purpose of the erection, maintenance, operation, and storage of structures and in-place pumping equipment, subject to the terms and conditions herein written, described as:

Fresno County:

Six (6) temporary discharge pipes at the downstream end of the Friant-Kern Canal (FKC) siphon under the Kings River, on the FKC right-of-way:

at the Kings River, Milepost 29.10 (Station 1627+80.00), in Section 35, Township 13 South, Range 23 East, M.D.B.&M., Fresno County, California, as shown on the attached map labeled Exhibit "A," herein incorporated by this reference; and

Tulare County:

Eight (8) water pumps and discharge pipes on the right bank adjacent to the St. Johns River Wasteway, and four (4) water pumps and discharge pipes on the left bank at the downstream end of the Friant-Kern Canal (FKC) siphon under the St. Johns River, on the FKC right-of-way:

at the St. Johns River, Milepost 69.45 (Station 3767+40.00), in Section 1, Township 18 South, Range 26 East, M.D.B.&M., Tulare County, California, as shown on the attached map labeled "Exhibit B," herein incorporated by this reference. The Licensee will not be utilizing the four (4) discharge pumps located at Milepost 69.58 under the terms and conditions of this short-term License, but will be required to maintain those facilities until such time they are utilized in a future long-term License. The Licensee may be required to ensure completion of environmental documentation in a future License relative to the four (4) discharge pumps via Milepost 69.58; and

Seven (7) water pumps and discharge pipes adjacent to the Tule River Wasteway on the FKC right-of-way:

at the Tule River, Milepost 95.67 (Station 5163+11.93), in Sections 29 and 30, Township 21 South, Range 27 East, M.D.B.&M., Tulare County, California, as shown on the attached map labeled Exhibit "C," herein incorporated by this reference.

- 2. This License is personal, revocable, and nontransferable and will become effective on the date hereinabove written and, unless otherwise sooner terminated, will continue until **May 31, 2011**. <u>Upon termination by either party, the aforesaid structure or structures and all accessories will be removed without delay at the expense of the Licensee</u>. The Licensee will leave the site(s) in a condition satisfactory to Reclamation and FWA.
- 3. Installation, operation, maintenance, and removal of the structure(s) shall be conducted in a neat, workmanlike manner in accordance with all applicable Federal, State of California, and local safety and environmental regulations and to the satisfaction of the General Manager, FWA, and the Area Manager, South-Central California Area Office, Bureau of Reclamation. Activities shall be coordinated in advance with Reclamation (contact Operations Division at (559) 487-5257) and FWA (contact Mr. Eric Quinley, Maintenance Manager, or other designated representative at (559) 562-6305).
- 4. Licensee shall maintain all pumping stations, framing, decking and appurtenant equipment and materials in good condition. Failure to correct deficiencies after being advised of them may lead to License revocation. Any maintenance activities on Reclamation lands in addition to those allowed herein shall require notification and an authorized permit from Reclamation or FWA.
- 5. Should silt accumulate in the FKC or channels as a result of the flood water diversion activities as referenced herein, the Licensee shall remove silt accumulation as directed by Reclamation and FWA or reimburse Reclamation or FWA for costs associated with its removal. Licensee shall, to the satisfaction of Reclamation and FWA, take steps to screen debris from water prior to pumping.
- 6. In the erection of the aforesaid structure or structures, the Licensee must comply with the following specifications and conditions:
 - (a) The Licensee will furnish and install a corporation stop on each discharge pipe for use in making pitot tube measurements. The corporation stop will be installed in a straight, level section of pipe. Straightening vanes will be installed ahead of the corporation stop on each discharge pipe. There shall be a minimum of ten (10) pipe diameters of straight, unobstructed pipe ahead of the corporation stop.
 - (b) Flow meters will be installed on each pump discharge pipe. The flow meters will be sufficient to accurately indicate instantaneous flow rates in cubic feet per second and cumulative discharge in acre-feet.
 - (c) Safety fencing shall be provided along FKC where the pump discharge pipes enter the FKC.
 - (d) Provide chain link safety fence around discharge pipes at the canal prism to deter unsafe access to the FKC. A gate shall be installed to accommodate access to the pipe discharge area.

- (e) Provide fencing and/or skirts to prevent trespassers from gaining access to the area underneath the platforms.
- (f) Repair any damage to Reclamation operating road. Areas shall be repaired by excavating to nine inches (9") below grade, backfilling with six inches (6") Class 2 aggregate base, compacting aggregate base, then placing three inches (3") of Type B AC to match existing AC grade.
- (g) The Licensee and its contractors shall comply with requirements of the latest edition (currently the 2009 edition) of the **Reclamation Safety and Health Standards** handbook while conducting any activity on Reclamation land or facilities. A copy can be downloaded from Reclamation's public web site, http://www.usbr.gov/ssle/safety/RSHS/rshs.html.
- 7. This License is subject to the <u>Temporary Contract Between the United States and Delta Lands Reclamation District No. 770 for the Conveyance of Non-Project Water (Contract No. 10-WC-20-4063)</u>. Licensee's flood water diversion activities shall be subject to said Contract with the United States and Agreement with the Friant Water Authority.
- 8. This License is subject to the <u>Agreement to Transfer the Operation, Maintenance and Replacement and Certain Financial and Administrative Activities Related to the Friant-Kern Canal and Associated Works</u>, Contract No. 8-07-20-X0356, dated March 1, 1998 (as amended), referenced herein and made a part hereof.
- 9. Licensee shall comply with Fresno and Tulare County Noise Ordinance regulations and provide Reclamation and FWA with the findings initiated from these criteria. Licensee shall respond to any complaints from adjoining landowners and/or their attorneys regarding noise and take appropriate actions or cease pumping operations.
- 10. Licensee will coordinate with Reclamation and FWA for the implementation of Reclamation's Emergency Contingency Plan for FKC as well as coordination with the California State Office of Emergency Services' "Incidence Command System" (ICS) during times of declared flood emergency.
- 11. Licensee agrees to reimburse Reclamation and/or FWA for costs associated with additional maintenance requirements, related to increased water flow and/or sediment load in the increased water flow in the FKC caused by the Licensee's flood water diversion activities authorized pursuant to Contract No. 10-WC-20-4063.
- 12. This permission given herein will neither constitute nor be construed as any surrender of the jurisdiction and supervision by the United States over the lands described herein.
- 13. The Licensee hereby agrees to indemnify and hold harmless the United States, FWA, their employees, agents, and assigns from any loss of damage and from any liability on account of personal injury, property damage, or claims from personal injury or death arising out of the Licensee's activities under this License.
- 14. Reclamation has waived the value of the right-of-use fee in accordance with 43 CFR 429.26.
- 15. This License is granted subject to the existing rights in favor of the public or third parties for highways, roads, railroads, telegraph, telephone and electrical transmission lines, canals, laterals, ditches, flumes, siphons, and pipelines on, over, and across said land.
- 16. This License may be revoked by Reclamation upon thirty (30) days written notice to the Licensee if:
 - (a) The Licensee's use of the land interferes with existing or proposed facilities, or
 - (b) The land contained in the License is needed for any United States purpose, or
 - (c) The United States disposed of its interest in the land contained in this License, or
 - (d) The Licensee fails to comply with any other terms or conditions of this License and, upon notification of the violation, Licensee fails to adequately cure the violation in a timely manner. Reclamation will have the final determination regarding the adequacy of the cure.

- (e) The Licensee fails to comply with any terms or conditions of the agreement entered into with FWA.
- 17. The Licensee will not:
 - (a) Store any hazardous material on the FKC right-of-way.
 - (b) Use water from the FKC for activities related to the subject project.
 - (c) Leave waste and debris on the FKC right-of-way.
- 18. The Licensee will comply with all applicable water, ground, and air pollution laws and regulations of the United States, the State of California and local authorities. In addition, the Licensee will comply with the following hazardous materials restrictions:
 - (a) The Licensee may not allow contamination or pollution of Federal lands, waters or facilities and for which the Licensee has the responsibility for care, operation, and maintenance by its employees or agents and shall take reasonable precautions to prevent such contamination or pollution by third parties. Substances causing contamination or pollution shall include but are not limited to hazardous materials, thermal pollution, refuse, garbage, sewage effluent, industrial waste, petroleum products, mine tailings, mineral salts, misused pesticides, pesticide containers, or any other pollutants.
 - (b) The Licensee shall comply with all applicable Federal, State, and local laws and regulations, and Reclamation policies and directives and standards, existing or hereafter enacted or promulgated, concerning any hazardous material that will be used, produced, transported, stored, or disposed of on or in Federal lands, waters or facilities.
 - (c) "Hazardous material" means any substance, pollutant, or contaminant listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. § 9601, et seq., and the regulations promulgated pursuant to that Act.
 - (d) Upon discovery of any event which may or does result in contamination or pollution of Federal lands, waters or facilities, the Licensee shall initiate any necessary emergency measures to protect health, safety and the environment and shall report such discovery and full details of the actions taken to the Contracting Officer. Reporting may be within a reasonable time period. A reasonable time period means within twenty-four (24) hours of the time of discovery if it is an emergency or by the first working day if it is a non-emergency. An emergency is any situation that requires immediate action to reduce or avoid endangering public health and safety or the environment.
 - (e) Violation of any of the provisions of this Article, as determined by the Contracting Officer, may constitute grounds for termination of this contract. Such violations require immediate corrective action by the Licensee and shall make the Licensee liable for the cost of full and complete remediation and/or restoration of any Federal resources or facilities that are adversely affected as a result of the violation.
 - (f) The Licensee agrees to include the provisions contained in paragraphs (a) through (e) of this Article in any subcontract or third-party contract it may enter into pursuant to this contract.
 - (g) Reclamation agrees to provide information necessary for the Licensee, using reasonable diligence, to comply with the provisions of this Article.
- 19. <u>PESTICIDE USE</u>. The Licensee shall not permit the use of any pesticides on Federal lands without prior written approval by Reclamation.
 - (a) The Licensee shall submit to Reclamation for approval an Integrated Pest Management Plan (IPMP) thirty (30) days in advance of pesticide application.
 - (b) All pesticides used shall be in accordance with the current registration, label directions, or other directives regulating their use (State Department of Agriculture, Department of Ecology, OSHA, etc.) and with

applicable Reclamation policy and directives and standards. Applicators will meet applicable State training or licensing requirements. Records maintenance shall be in accordance with State requirements and such records shall be furnished to Reclamation not later than five (5) working days after any application of a pesticide.

- (c) Any equipment, tools, and machines used for pesticide application shall be in good repair and suitable for such use. Equipment shall be calibrated prior to the spraying season and as deemed necessary by Reclamation.
- (d) Mixing, disposal, and cleaning shall be done where pesticide residues cannot enter storm drains, sewers, or other non-target areas.
- (e) The Licensee shall initiate any necessary measures for containment and clean up of pesticide spills. Spills shall be reported to the Contracting Officer with full details of the actions taken. Reporting may be within a reasonable time period. A reasonable time period means within twenty-four (24) hours of the spill if it is an emergency or by the first working day if it is a non-emergency. An emergency is any situation that requires immediate action to reduce or avoid endangering public health and safety or the environment.
- (f) Aerial application of pesticides is prohibited without prior written consent by Reclamation's designated representative.
- (g) The Licensee agrees to include the provisions contained in paragraphs (a) through (f) of this Article in any subcontract or third-party contract it may enter into pursuant to this contract.
- 20. <u>CULTURAL RESOURCES PROTECTION</u>. The Licensee shall immediately provide an oral notification to Reclamation's authorized official of the discovery of any and all antiquities or other objects of cultural, historic, or scientific interest on Reclamation lands. The Licensee shall forward a written report of its findings to Reclamation's authorized official within forty-eight (48) hours. Objects under consideration include, but are not limited to, historic or prehistoric ruins, human remains, or artifacts discovered as the result of activities under this easement. The Licensee shall cease activity, stabilize, and protect such discoveries until authorized to proceed by Reclamation's authorized official. Protective and mitigative measures specified by Reclamation's authorized official shall be the responsibility of the Licensee.
- 21. <u>DISCOVERY OF HUMAN REMAINS</u>. The Licensee shall immediately provide an oral notification to Reclamation's authorized official of the discovery of human remains on Reclamation land. The Licensee shall forward a written report of its findings to Reclamation's authorized official within forty-eight (48) hours by certified mail. The Licensee shall cease activity, stabilize, and protect such discoveries until authorized to proceed by the Regional Archaeologist for Reclamation (916-978-5041). Protective and mitigative measures specified by the Regional Archaeologist shall be the responsibility of the Licensee.
- 22. Any activity deemed to be illegal on Federal lands will be cause for immediate termination of the use authorization.
- 23. <u>TERMINATION</u>. This License will terminate and all rights of the Licensee hereunder will cease, and the Licensee will quietly deliver to the United States possession of the premises in like condition as when taken, reasonable wear and damage by the elements excepted:
 - (a) At the expiration of the term as provided by Article 2; or,
 - (b) On date, of any year, upon written notice to the Licensee, served thirty (30) days in advance thereof; or,
- (c) After failure of the Licensee to observe any of the conditions of this License and on the tenth (10th) day following service of written notice on the Licensee of termination because of failure to observe such conditions. The notices provided by this Article will be served by certified mail addressed to the respective post office addresses given in Article 33 and the mailing of any such notice properly enclosed, addressed, stamped, and certified, will be considered service.
 - (d) If this License is terminated under Article (c) above, the United States reserves the right to bar the Licensee from the authorization to use acquired or withdrawn public land on the Central Valley Project for a period of time, as determined by the Area Manager.

- 24. <u>SEVERABILITY</u>. Each provision of this use authorization shall be interpreted in such a manner as to be valid under applicable law, but if any provision of this use authorization shall be deemed or determined by competent authority to be invalid or prohibited hereunder, such provision shall be ineffective and void only to the extent of such invalidity or prohibition, but shall not be deemed ineffective or invalid as to the remainder of such provision or any other remaining provisions, or of the use authorization as a whole.
- 25. All work will be conducted by Licensee or Licensee's contractor, while allowing for the observation of onsite activities by FWA. Reclamation reserves the right for their officers, employees, contractors and representatives, and assigns, to have ingress to and egress from said premises for the purpose of exercising, enforcing, and protecting the rights of Reclamation in and on the premises. The Licensee will provide Reclamation and FWA personnel safe ingress and egress to the FWA. The Licensee will ensure access for Reclamation and FWA operation and maintenance needs during the times of construction and coordinate any closings of access with Reclamation's existing authorized users.
- 26. The Licensee must contact the Underground Service Alert (Telephone (800) 227-2600) at least two (2) working days prior to any excavation work to identify any buried utilities within the proposed excavation area.
- 27. Access to the FKC by the Licensee and their contractor(s) is restricted to the immediate vicinity of that portion of the FKC described in Article 1, above.
- 28. The Licensee and/or its contractor for the duration of contractors' activities will maintain in force, policies of liability insurance, providing limits of not less the \$1,000,000 for each person/occurrence and \$2,000,000 aggregate for bodily injury or death, and not less than \$1,000,000 property damage. Said policies will name United States and FWA as additional insureds (with the ISO CG 2010 endorsement form or equivalent) and will provide that they will not be canceled or reduced in coverage without ten (10) days prior written notice to Reclamation. Prior to commencement of said construction, Licensee will cause to be delivered to Reclamation and FWA a copy of the certificate of insurance reflecting all essential coverage. The endorsement will reference the contract number of this License in the description portion of the endorsement form.
- 29. Damage to Reclamation property, including but not limited to the FKC, service roads, access roads, culvert crossings, siphon barrel, farm bridges, fence gates and posts resulting from the Licensee's activities under this License will be corrected promptly at Licensee's expense to the satisfaction of Reclamation and FWA.
- 30. <u>OFFICIALS NOT TO BENEFIT</u>. No Member of Congress shall be admitted to any share or part of this easement or to any benefit that may arise herefrom, but this restriction shall not be construed to extend to this easement if made with a corporation or company for its general benefit.
- 31. The Licensee warrants that no person or agency has been employed or retained to solicit or secure this License upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee except bona fide employees and bona fide commercial agencies maintained by the Licensee for the purpose of securing business. For breach or violation of this warranty, Reclamation will have the right to revoke this License without liability or in its discretion to require the Licensee to pay the full amount of such commission, percentage, brokerage, or contingency fee to the United States.

32. NOTICES.

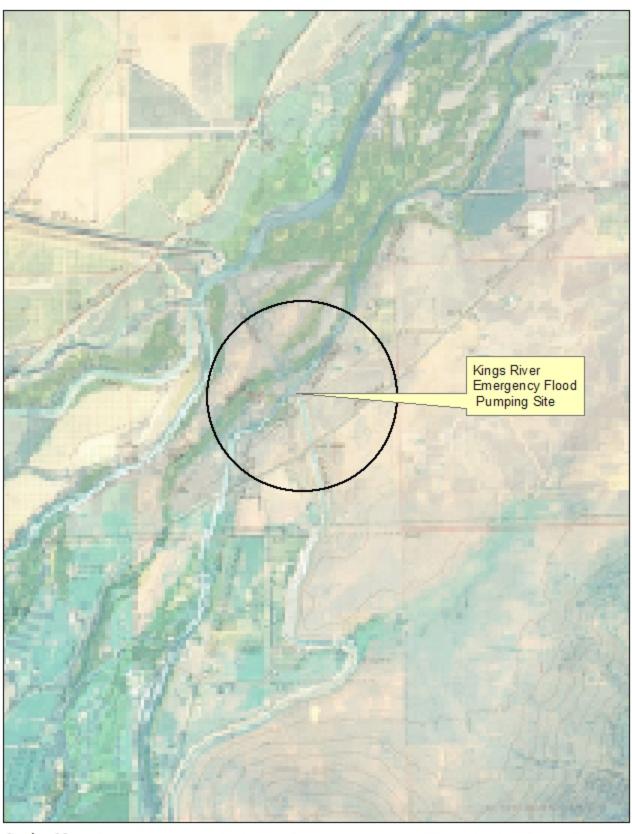
- (a) Any notice, demand, or request required or authorized by this License to be given or made to or upon the United States shall be deemed properly given or made if delivered or mailed postage-prepaid, to the Area Manager, South Central California, Bureau of Reclamation, 1243 N Street, Fresno California 93721-1813.
- (b) Any notice, demand, or request required or authorized by this License to be given or made to or upon Delta Lands Reclamation District No. 770 shall be deemed properly given or made if delivered or mailed postage-prepaid, to Delta Lands Reclamation District No. 770, General Manager, Post Office Box 877, Corcoran, California 93212.
- (c) The designation of the person to or upon whom any notice, demand, or request is to be given or made, or the address of such person may be changed at any time by notice given in the same manner as provided in this Article for other notices.

UNITED STATES OF AMERICA	
Deputy Area Manager South-Central California Area Office Bureau of Reclamation	
ACCEPTED:	
Delta Lands Reclamation District No. 770 and is conditions above.	ts authorized representative, by signature below, agree to the terms and
DELTA LANDS RECLAMATION DISTRICT	NO. 770
Ву	
Title	
Date	
NOTED:	
Friant Water Authority	

IN WITNESS WHEREOF this License is given as of the date of execution written above.

Date

Exhibit "A"



Section 35, Township 13S, Range 23E, MDB&M

Delta Lands Reclamation District 770 Maintenance & Operations of Pumping and Storage Facilities For Flood Purposes Only



Exhibit "B"



Section 1, Township 18S, Range 26E MDB&M Tul are County, California

Delta Lands Reclamation District 770 Maintenance & Operations of Pumping and Storage Facilities For Flood Purposes Only



Exhibit "C"



Sections 29 & 30, Township 21S, Range 27E MDB&M Tulare County, California



Delta Lands Reclamation District 770 Maintenance & Operations of Pumping and Storage Facilities For Flood Purposes Only



DRAFT ENVIRONMENTAL ASSESSMENT	
2010 WARREN ACT CONTRACT AND LICENSE FOR DELTA LANDS RECLAM	IATION
Appendix D	
Friant Division Contractors	
May 2010	

Friant Division Contractors

Arvin-Edison Water Storage District (AEWSD) AEWSD is located in Kern County in the southeasterly portion of the San Joaquin Valley. AEWSD entered into its first long-term renewable contract with Bureau of Reclamation (Reclamation) in 1986 for 40,000 acre-feet (AF) of Class 1 and 311,675 AF of Class 2 water which was renewed in 2001. CVP supplies are for agricultural and municipal and industrial (M&I) purposes. AEWSD manages their CVP supply by using a groundwater reservoir underlying the district to regulate water availability and make supplies more stable. In addition, AEWSD engages in "Article 5 exchanges" of CVP water with Cross Valley (CV) Contractors. Up to 128,300 AF per year (AFY) of CV Contractor's CVP water is delivered to AEWSD. This water is diverted from the Sacramento-San Joaquin River Delta (Delta) through the California Aqueduct (Aqueduct) and to the Cross Valley Canal (CVC). In exchange, the Friant CVP water that would have flowed down the Friant-Kern Canal (FKC) to AEWSD is diverted from the FKC by the CV Contractors. Due to the variances in allocations of Friant CVP water, these exchanges may not balance out each year. However, over the long-term the amounts of water are expected to be equal. AEWSD takes Friant CVP water from a turnout located at the terminus of the FKC. AEWSD has 45 miles of lined canals, 170 miles of pipeline, and three spreading basins to percolate water into the aquifer for storage. Gravity and pressure fed ponds are filled from surface water supplies in "wet" years, while groundwater wells are used to extract stored water in "dry" years. The safe yield of the groundwater supply is 89,900 AF. AEWSD has historically delivered an average of less than 2,000 AFY of non-CVP water to two urban customers, East Niles Community Service District and Sycamore Canyon Golf Course.

In 1997, AEWSD entered into a 25-year agreement with the Metropolitan Water District of Southern California (MWD), in which the AEWSD agreed to bank approximately 250,000 AFY of MWD's State Water Project (SWP) Supply in the groundwater aquifer for later extraction in drought years. AEWSD has completed construction of an Intertie pipeline connecting the terminus of its canal to the Aqueduct to enhance its water banking and exchange program.

Chowchilla Water District (CWD) CWD's long-term CVP contracts for 55,000 AFY of Class 1 and 160,000 AFY of Class 2 was renewed in 2001 for agricultural uses. On average, the district receives 125,000 AFY of CVP water to irrigate all of their irrigated acres. CWD maintains and operates 160 miles of unlined canals and 46 miles of pipe for agricultural water delivery. The primary way that the district gets its water is through the Madera Canal and the Fresno River.

City of Fresno The City of Fresno's long-term CVP contract for 60,000 AFY Class 1 water was renewed in 2005. This water is used for M&I purposes through recharge of the groundwater in and around the city allowing them to withdraw groundwater on demand to serve municipal needs. In 2005, a new surface water treatment plant was built and water is supplied to it via the Enterprise Canal.

City of Lindsay (**Lindsay**) Lindsay is located on the east side of the San Joaquin Valley in Tulare County near the base of the Sierra foothills. In 1958, Lindsay entered into a long-term water service contract with Reclamation for 2,500 AFY of Class 1 water used for M&I

purposes which was renewed in 2005. Lindsay obtains their CVP water from the FKC at the Honolulu Street turnout. Their water treatment plant is at the same location and provides filtration, chemical additions and chlorination. An additional 50 AFY of CVP water is delivered to Lindsay through a contact with the County of Tulare. Lindsay, among others, is in a process to have their portion of the County of Tulare's contract assigned directly to them. This process is expected to be complete sometime in the 2010 Contract Year.

City of Orange Cove The City of Orange Cove renewed their long-term CVP contract for 1,400 AFY of Class 1 water in 2001 which is used for M&I purposes.

County of Madera The county of Madera renewed their long-term CVP contract for 200 AFY in 2001. This contract provides M&I water solely for Hidden Lake Estates. The district is entirely municipal and is not fully built out.

Delano-Earlimart Irrigation District (DEID) DEID is located in Tulare and Kern counties on the eastern side of the San Joaquin Valley, approximately 10 miles from the Sierra foothills. DEID is comprised of 56,474 acres, of which 46,581 are irrigated. DEID receives CVP water diverted from the FKC. Renewed in 2001, DEID's CVP contract is for 108,800 AF Class 1 and 74,500 AF Class 2 supplies for agricultural and M&I purposes. When available, the district also receives 215 Water (surplus CVP water) through annual contracts with Reclamation. DEID delivers surface water to approximately 400 landowners on roughly 56,500 acres of land through a completely piped system consisting of approximately 172 miles of pipeline, 527 irrigation turnouts, and 79 smaller metered deliveries to municipal and industrial water users. Currently, DEID provides 99 percent of its water supply for irrigation purposes and less than one percent (200 AFY) to industrial uses. Farmers within DEID pump groundwater from privately-owned wells when surface water supplies are insufficient to meet their irrigation needs.

Exeter Irrigation District (EID) EID is located in Tulare County on the east side of the San Joaquin Valley, nine miles east of the City of Visalia. In 1950, EID entered into a long-term contract with Reclamation for 10,000 AFY of Class 1 and 19,000 AFY of Class 2 water. In 1953, the Class 1 water supply was increased to 11,500 AFY for agricultural purposes by an amendment to the contract which was renewed in 2001. The City of Exeter is located within EID. However, EID serves only agricultural water. EID maintains two small balancing or regulating reservoirs with a capacity of less than one AF each. Yokohl Creek is an intermittent stream which traverses through the northern portion of the district in a northwesterly direction for approximately 2 miles.

Fresno County Waterworks #18 (FCWW #18) FCWW#18 renewed their long-term CVP contract for 150 AF in 2001. This water supply is used for M&I purposes.

Fresno Irrigation District (FID) A significant improvement in the control and management of the waters of Kings River occurred with the completion of the Pine Flat Dam project by the U.S. Army Corps of Engineers (Corps) in 1954. Although built primarily as a flood control project, Pine Flat Dam provides significant water storage and regulation of irrigation water to the 28 water right entities on Kings River including FID. FID has a contract for 11.9 percent of the 1,000,000 AF capacity of Pine Flat Reservoir. While FID is

entitled to approximately 26 percent of the average Kings River runoff, much of its entitlement occurs at times when it can be used directly for irrigation of crops without the need for regulation at Pine Flat. In a normal year, FID diverts approximately 500,000 AF of water and delivers most of that to agricultural users, although an increasing share of FID's water supply is used for groundwater recharge in the urban area. Depending upon hydrological conditions and Kings River flows, FID diverts water and allocates a proportional share of the water to its customers including the City of Fresno and Clovis. In addition to its entitlement from Kings River, FID has a long-term CVP contract for up to 75,000 AFY of Class 2 supplies used for agricultural purposes. The contract was renewed in 2001.

Between 85 percent and 90 percent of the groundwater supply can be attributed to water imported and distributed by FID. The conversion of agricultural lands to high-density urban uses in the expanding Fresno-Clovis metropolitan area has reduced the area for recharge from surface water. Because all M&I water is obtained by pumping groundwater, a local overdraft has developed in and around the urban area, and this situation has been exacerbated by the drought of the late 1980s and early 1990s. FID has combined forces with the City of Fresno, the City of Clovis, the County of Fresno, and the Fresno Metropolitan Flood Control District in a cooperative effort to develop and implement a comprehensive surface and groundwater management program. The main goal of the program involves using flood control basins for recharge during the summer when the basins are not needed to control urban storm runoff. This program also contains elements designed to protect the quality of groundwater in the area.

Garfield Water District (GWD) GWD is located approximately 4 miles due north of the City of Clovis, California. GWD has a long-term CVP contract for 3,500 AF of Class 1 supplies for agricultural purposes which was renewed in 2001. All water deliveries in GWD are made using piped water and the delivery amounts are metered at the end user.

Gravelly Ford Water District (GFWD) GFWD is located southwest of the City of Madera, California. GFWD renewed their long-term CVP contract for 14,000 AFY of Class 2 water for agricultural purposes in 2001. On average, the district receives just over 6,000 AFY of CVP water. The district receives its water through MID facilities and Cottonwood Creek, which is used as a conveyance mechanism. CVP water is used in conjunction with approximately 10,000 AF of water for four primary crops. Vines cover just over 4,000 acres of land in the district and are the primary crop. Almonds, cotton and alfalfa are also grown in the district, covering roughly 1,100 acres, 1,400 acres and 500 acres respectively. The district operates 15 miles of unlined canals and 5 miles of pipe in order to deliver water to its customers.

International Water District (IWD) IWD has a Class 1 CVP water service contract supply of 1,200 AFY which was renewed in 2001. This water is delivered for agricultural purposes to permanent crops, mainly citrus.

Ivanhoe Irrigation District (IID) IID is located in Tulare County on the east side of the San Joaquin Valley approximately 50 miles southeast of Fresno and 8 miles northeast of Visalia. IID is generally located between the St. John's River on the south and Cottonwood Creek on the north. As early as 1915 the lands began to be developed for agricultural uses.

Water supplies for irrigation in the district were from groundwater pumping, precipitation and surface diversions from runoff on the Kaweah River. IID was formed in 1948 and has acquired private surface water rights through the Wutchumna Water Company. IID owns 7.9 shares of Wutchumna Water stock equaling approximately 3,950 AF of water. In 1949, IID entered into a long-term contact with Reclamation for 7,700 AFY of Class 1 and 7,900 AFY of Class 2 water which was renewed in 2001 for agricultural purposes. On March 1, 2010, IID partially assigned of 7,400 AFY of Class 2 and 1,200 AFY of Class 1 CVP water to Kaweah Delta Water Conservation District. Their remaining CVP allocation is 6,500 AFY of Class 2 and 500 AFY of Class 1.

The district's non-CVP water supplies are diverted from the Kaweah River through the Wutchumna Ditch to the district's diversion facility and are co-mingled with the CVP supply. IID obtains its CVP water supplies through two turnouts on the FKC. The district's distribution system comprises approximately 48 miles of pipeline and three groundwater recharge areas. The three groundwater recharge areas cover approximately 15 acres and are used when surplus water is available. Approximately three miles of a portion of Cottonwood Creek is also used for recharge purposes. IID does not own or operate groundwater extraction facilities.

Kaweah Delta Water Conservation District (KDWCD) KDWCD was formed in 1927, under the provisions of California state law known as the Water Conservation District Act of 1927, for the purpose of conserving and storing waters of the Kaweah River and for conserving and protecting the underground waters of the Kaweah Delta. Later the Water Conservation District Act, as well as the purpose of the KDWCD, was expanded to include power generation and distribution. KDWCD is located in the south central portion of the San Joaquin Valley and lies in both Tulare and Kings Counties. It fully encompasses the growing cities of Visalia, Farmersville and Tulare. The total area of the district is about 337,000 acres with approximately 255,000 acres located in western portion of Tulare County and the balance, or about 82,000 acres, in the northeastern portion of Kings County. KDWCD is comprised of four districts that are entirely or partially within KDWCD boundary. They include: Lakeside Irrigation Water District, Kings County Water District, Corcoran Irrigation District, and Tulare Irrigation District.

District lands are primarily agricultural, although the cities of Visalia and Tulare constitute significant areas of urbanization. Farmersville is the other incorporated area. Smaller unincorporated rural communities include Goshen, Ivanhoe, Waukena, and Guernsey. Numerous public and private entities within the KDWCD's boundaries divert water from the Kaweah River and its distributaries. Nearly all of the lands served with Kaweah River water also use groundwater wells to supply irrigation water, primarily due to the erratic, relatively undependable, nature of flow on the Kaweah River. All M&I water uses within the KDWCD are supplied from groundwater. KDWCD can take delivery of CVP water from the FKC, which passes through the eastern portion of the district.

On March 1, 2010, KDWCD received a partial assignment of 7,400 AFY of Class 2 and 1,200 AFY of Class 1 CVP water from IID for agricultural purposes.

Lewis Creek Water District (LCWD) LCWD is located on the east side of the San Joaquin Valley in Tulare County near the base of the Sierra foothills. LCWD renewed their long-term CVP contract for 1,450 AFY of Class 1 agricultural water supply in 2005. Agricultural industry within the district is built around citrus (oranges), and twelve orange packing houses, provide the major economic base for the area.

Lindmore Irrigation District (LID) LID is located in Tulare County at the base of the Sierra foothills. LID was formed in 1937 and in 1948 entered into a long-term contract with Reclamation for 33,000 AFY of Class 1 and 22,000 AFY of Class 2 water which was renewed in 2001 for agricultural purposes. LID lies over the Kaweah Basin. The safe groundwater yield for LID was calculated in 1987 to be 21,000 AFY. LID operates a conjunctive use program to manage surface and groundwater supplies. LID uses groundwater at the beginning of the growing season to warm the CVP water while filling the district's pipeline system. This reduces maintenance costs and leaks in the concrete irrigation pipes due to contraction of cold water. LID obtains their CVP supplies from four turnouts on the FKC between MP 88.4 and 93.2. LID's conveyance system comprises of 123 miles of pipeline and five reservoirs. The Noel, Montgomery and Brewer reservoirs are earthen-clay lined. These reservoirs are 3, 4.5, and 6.5 AF in size and are used for overflow. In contrast, the 93.2E N and the 93.2-0.1S reservoirs are 5.5 and 2.5 AF in size respectively, and are concrete lined and used for equalizing.

Lindsay-Strathmore Irrigation District (LSID) LSID was formed in 1915. LSID's original imported water supply was from the Kaweah River through the district's ownership of Wutchumna Water Company stock and 39 deep wells. The supplies from the Wutchumna Water Company range from 5,000 to 14,000 AFY. LSID enters into Warren Act contracts with Reclamation to transport this water within the district using CVP facilities. The groundwater supply is limited to 18,000 AFY. In 1948, LSID entered into a long-term contract with Reclamation for 39,000 AFY of Class 1 water. In 1985, the contract amount was amended to 27,500 AFY which was renewed in 2001 and serves only agricultural water. LSID obtains their CVP water supplies from its turnout at MP 85.56 of the FKC. The district's distribution system is approximately 115 miles of pipeline and three balancing reservoirs. The Main reservoir is 80 AF and concrete lined. The High-Level reservoir is 5 AF and concrete lined and the El Mirado reservoir is a 200,000 gallon steel tank. LSID operates five groundwater wells with a normal production of 1,750 gallons per minute. These wells are not utilized if surface water is available due to the high cost of pumping.

No usable groundwater basin underlies the district. LSID lies too far to the east against the foothills to be influenced by either the Kaweah or Tule Rivers. The district does not operate recharge areas or a conjunctive use program. LSID contractually uses the conjunctive use capacity of the Tulare Irrigation District, a common stockholder in the Wutchumna Water Company, by delivering the district's Kaweah River water through the Wutchumna Ditch to the Tulare Irrigation District turnout. Tulare Irrigation District either uses this water for irrigation (in lieu recharge) or direct sinking in their groundwater recharge basins. During "dry" years, Tulare Irrigation District's farmers utilize the groundwater delivered by LSID. Tulare Irrigation District returns surface water to LSID through either the FKC or through the Kaweah River system. LSID regularly transfers water to LID, which borders LSID on the west. Approximately 2,500 AFY is transferred to LID during normal water supply years.

Lower Tule River Irrigation District (LTRID) LTRID's current facilities include approximately 163 miles of unlined earth canals and approximately 47 miles of river channel in Tulare County, California. Groundwater pumping was historically used to meet water demands prior to the creation of LTRID and the importation of supplemental surface water supplies. As a conjunctive use district, water supplies in LTRID include groundwater, water rights on the Tule River, and CVP water under two separate contracts. In 1951, LTRID entered into a long-term renewable contract with Reclamation for 61,200 AFY of Class 1 and 238,000 AFY of Class 2 Friant water for agricultural purposes which was renewed in 2001. In 1975, LTRID entered into a three-way contract with Reclamation and DWR to provide an additional 31,102 AFY of CVP water supply. Under the original three-way contract, CVP water was diverted from the Sacramento-San Joaquin River Delta, conveyed through SWP facilities via the California Aqueduct to the Cross Valley Canal and delivered to AEWSD. Through the Cross Valley Canal Exchange Program, LTRID and AEWSD 'swapped' their Delta and Friant CVP water supplies. Recently, the exchange agreement between AEWSD and LTRID was terminated. LTRID may enter into similar exchange arrangements with other water districts to obtain their CVP water supplies from the Delta; however, proposed exchange arrangements under Article 5 of the long-term renewable contracts are not within the scope of this EA or approval process.

Reduction in allowable storage at Success Reservoir on the Tule River, due to dam seismic stability issues, has significantly reduced the amount of Tule River water captured to wet years that can be stored within the dam for later use during dry years. Although the reduction in storage has not yet affected LTRID's Tule River water supply (approximately 70,000 AFY), the reduction in storage has the potential to significantly impact the amount of surface water that LTRID can bring into the district. Consequently, LTRID has initiated the construction of a new intertie in order to bring additional Tule River water into the district's service area that did not receive it previously.

Madera Irrigation District (MID) MID renewed their long-term CVP contract for 85,000 AFY of Class 1 and 186,000 AFY of Class 2 water in 2001 for agricultural purposes. MID also has 20,000 AFY of pre-1914 water right water from the Soquel-Big Creek. The Big Creek and Soquel diversions provide an annual average supply of 10,000 and 9,700 AF respectively. The Fresno River adjudicated and appropriative average annual supply is approximately 20,000 AF and is inclusive of the Big Creek and Soquel diversions.

MID and surrounding area is within a groundwater deficient area as designated by the 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. Reclamation calculated the safe yield of the portion of the Madera Basin that underlies MID to be 117,000 AFY. 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 dibromochlorophenol (more commonly known as 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 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. MID is also working on the environmental documentation to develop a groundwater bank and store CVP water outside of their service area boundaries.

Orange Cove Irrigation District (OCID) OCID is located in Fresno and Tulare Counties and was formed in 1937. In 1949, OCID entered into a long-term contract with Reclamation for 31,800 AF. The contract was amended in 1989, to 39,200 AFY of Class 1 water for agricultural purposes and renewed in 2001. The district obtains their CVP water supplies from 15 diversion points on the FKC between MP 35.87 to 53.32. OCID's distribution system is 105 miles of pipeline and one regulating reservoir with a capacity of 8 AF. OCID does not supply any M&I water.

A groundwater basin is almost non-existent under OCID. The area immediately east of Smith Mountain and the area in the vicinity of Navelencia contain basin water. The majority of wells are located in this area. The safe yield has been determined to be 28,000 AFY. OCID does not operate any groundwater wells or recharge facilities due to the existing groundwater conditions. OCID provides approximately 1.4 AF per acre. Therefore, the balance of crop needs is made up from precipitation and groundwater pumping. The landowners in OCID manage the groundwater supplies through conjunctive use practices. OCID transfers unused water supplies out to other districts for storage and groundwater banking. OCID is pursuing partners for a long-term transfer program or groundwater banking program to balance water in wet and dry years.

Porterville Irrigation District (PID) PID is located in Tulare County and was formed in 1949. PID entered into a long-term contract with Reclamation for 16,000 AFY of Class 1 and 30,000 FY of Class 2 CVP water which was renewed in 2001 for agricultural purposes only. PID has an entitlement of 10,000 AFY of water supply from the Tule River. PID owns approximately four miles of pipeline that serves 854 acres in one Improvement District and 3.3 miles of open ditch that serves 1,266 acres in a second Improvement District. PID obtains their CVP supplies from six diversion points on the FKC.

In addition to the district-owned facilities, PID has entered into agreements with LTRID and other entities to utilize non-district owned facilities to convey the PID's water. PID also delivers its Tule River water through facilities owned by the Porter Slough Ditch Company, the Hubbs-Miner Ditch Company, the Rhodes-Fine Ditch Company and the Gilliam-McGee Ditch Company. These facilities consist of approximately 13 miles of unlined ditch within PID. The facilities belonging to these companies are operated by PID under long-term agreements with the entities. PID owns one percolation basin. In addition, PID owns a portion of the water conservation space behind Success Dam. This storage space is used to store water rights water owned by ditch companies with which PID has operating agreements.

Saucelito Irrigation District (SID) SID was formed in 1941. Deer Creek, an intermittent stream, crosses the district for about 5 miles from its southern boundary, but there are no district diversions off Deer Creek. Water deliveries began in 1961 for 21,200 AFY Class 1 and 32,800 AFY of Class 2 water for agricultural purposes which was renewed in 2001. SID is also a sub-contractor of Tulare County, a CV contractor, and receives 100 AFY of the County's 5,308 FY of CVP water. SID has five individual water users that have rights in Popular Irrigation Company of 9.5 shares at 55 acre feet per share from Mole Ditch. SID engages in exchanges with other CV contractors. SID obtains its CVP water supplies from four diversion points on the FKC between MP 11.64 and 107.35 and Deer Creek diversion at MP 102.69. The district's distribution system is 55 miles of pipeline with one recharge pond that covers approximately 0.5 acre. Deer Creek also provides groundwater recharge in wet years. SID is another contractor who is in the process of having their portion of the County of Tulare's contract assigned directly to them. This process is expected to be complete sometime in the 2010 Contract Year.

Shafter-Wasco Irrigation District (SWID) SWID was formed in 1937 and is located in Kern County about 20 miles northwest of Bakersfield. The district entered into a long-term contract with Reclamation in 1955 for 50,000 AFY of Class 1 and 39,600 AFY of Class 2 water which was renewed in 2001 for agricultural purposes only. The district does not have any other long-term surface water supplies. SWID obtains its CVP water supplies from two turnouts on the FKC at MP 134.4 and 137.2. The district's distribution system is 0.3 miles of lined canals and 117 miles of pipeline. SWID does not own or operate any water storage facilities or groundwater extraction facilities. Landowners must provide wells to meet irrigation demands when SWID does not have adequate surface water supplies available. SWID has a history of transferring small amounts of water to neighboring districts.

Southern San Joaquin Municipal Utility District (SSJMUD) SSJMUD was formed in 1935 and is located in Kern County, approximately 75 miles southeast of Fresno and 30 miles northwest of Bakersfield. The district entered into a long-term contract with Reclamation in 1945 for 97,000 AFY of Class 1 and 50,000 AFY of Class 2 water which was renewed in 2001 for agricultural purposes. The district does not have other long-term surface water supplies. SSJMUD obtains its CVP water supplies from nine diversion points on the FKC between MP 119.6 and 130.4. The district's distribution system is 158 miles of pipeline. SSJMUD operates 11 regulating reservoirs that provide groundwater recharge. Poso Creek and other smaller foothill drainages also provide recharge to the groundwater. The district does not own and operate groundwater extraction facilities. Landowners must rely on well water to irrigate during times when SSJMUD does not have surface water supplies available to meet irrigation demands. SSJMUD does not typically transfer water in or out.

Stone Corral Irrigation District (SCID) SCID was formed in 1948. In 1950, SCID entered into a long-term contract with Reclamation for 7,700 AFY of Class 1 water for agricultural purposes which was renewed in 2001. In 1991, the contract was amended to 10,000 AFY of Class 1 water. SCID receives a small amount of water through exchange arrangements with CV Contractors. This amount is 950 AFY of CVP water. The safe yield for the groundwater supply in SCID is approximately 3,200 AF. SCID obtains the CVP water from the FKC at MP 57.90, 59.33, 60.90 and 62.68. SCID's conveyance system is 27 miles of pipeline. The main crops are citrus, cotton, deciduous and subtropical fruit trees.

Tea Pot Dome Water District (TPDWD) TPDWD was formed in 1954 and is located in southeastern Tulare County, approximately three miles south of Porterville. TPDWD relies primarily on CVP contract water supplies for irrigation. In 1958, TPDWD entered into a long-term contract with Reclamation for 7,500 AFY of Class 1 water for agricultural purposes which was renewed in 2001. TPDWD does not have any other long-term surface water supplies. The district does not own or operate groundwater recharge or extraction facilities. Landowners pump small amounts of groundwater. TPDWD receives its CVP water supplies from the FKC. The district's distribution system is 20 miles of pipeline.

Terra Bella Irrigation District (TBID) TBID was formed in 1915 and is located in Tulare County about 75 miles southeast of Fresno and about eight miles south of Porterville. Deer Creek flows westerly and passes through the northern portion of the district. Fountain Spring Gulch flows in a northwest direction, traversing a portion of the district. TBID provides CVP and groundwater for domestic purposes and to the town of Terra Bella. IN 1950, TBID entered into a long-term CVP contract for 29,000 AFY of Class 1 water for agricultural and M&I purposes which was renewed in 2001. TBID receives its CVP water supplies from the FKC at MP 103.64, MP 102.69 and Deer Creek to a percolation pond. The district's distribution system is 152 miles of pipeline. The district does not have any other long-term surface water supplies.

The district's deep well system is barely adequate to support small winter demands. Historically, there were a total of 83 wells drilled over the years in the district. Currently, TBID owns and operates 10 wells. Recently, TBID has lost the use of three wells due to chemical contamination. TBID's groundwater supply has been significantly depleted. There are no significant grower or landowner wells. The district uses three regulating reservoirs during the irrigation season and for storage in the winter. Station 1 has a capacity of 0.185 million gallons, Station 2 has 0.212 million gallons and Station 3 has a 1.880 million gallon capacity. TBID has developed groundwater banking arrangements with other districts. Groundwater banking arrangements have enabled TBID, a groundwater deficient district, to produce crops during drought years. In years when surplus amounts of water are available, TBID transfers water to other districts for direct use, resale, or percolation through recharge basins. The district and LTRID have a long history of water exchanges. TBID transfers water to LTRID and, in turn, transfers water to TBID in dry years.

Tulare Irrigation District (TID) TID was formed in 1889 and is located in western Tulare County on the eastside of the San Joaquin Valley. TID provides only agricultural water supplies and does not service the city of Tulare. Water for Tulare is extracted from the ground and furnished through City-owned facilities. TID entered into a long-term contract with Reclamation in 1952 for 30,000 AFY of Class 1 and 141,000 AFY of Class 2 water which was renewed in 2001. The district has pre-1914 water rights on the Kaweah River for approximately 50,000 AFY of water. The district-owned Kaweah River water rights are 1) Crocker Cut on the Lower Kaweah Branch, 2) St. Johns Canal (TID) on the St. Johns Branch and 3) Crossmore Cut (Packwood Creek) on the St. Johns Branch. Water is also made available through share holdings in the following Kaweah River agencies: 1) Tulare Irrigation Company on both the Lower Kaweah Branch and the St. Johns Branch, 2) Evans Ditch Company on both the Lower Kaweah Branch and the St. Johns Branch, 3) Wutchumna Water

Company on the Kaweah River, 4) Persian Ditch Company, and 5) Consolidated Peoples Ditch Company. Groundwater recharge occurs from percolation in the canals and natural channels, and treated M&I effluent. TID has 12 groundwater recharge areas covering a total of 1,110 acres. The district does not operate extraction wells. TID has an existing agreement for LSID to store groundwater and surface water supplies. TID obtains their CVP water supplies from its turnout which is located approximately 14 miles northeast of the district's service area. The water is conveyed in the district's Main Canal. Diversions into this Main Canal include water from the Kaweah and St. John's River. The Packwood Creek diversion system begins at the terminus of the Lower Kaweah River approximately 10 miles northeast of TID. The district's distribution system includes 300 miles of unlined canals, 0.25 mile of lined canal and 30 miles of pipeline.

DRAFT ENVIRONMENTAL ASSESSMENT
2010 WARREN ACT CONTRACT AND LICENSE FOR DELTA LANDS RECLAMATION DISTRICT 770
Appendix E Environmental Documents
May 2010

Healer, Rain L

From: Barnes, Amy J

Sent: Monday, April 26, 2010 9:05 AM

To: Healer, Rain L

Cc: MPR Cultural Resources Section

Subject: EA 09-177 2010 Warren Act Contract and License for RD770 (10-SCAO-208)

Tracking #10-SCAO-208

Project: EA 09-177 2010 Warren Act Contract and License for RD770

Location: Kings County

The activities associated with Reclamation executing a one-year Warren Act contract and issuing a one-year license to Reclamation District 770 (RD770) to convey non-CVP water in Reclamation facilities and use pumping facilities on Reclamation land will have no potential to affect historic properties. Reclamation proposes to execute a 12-month contract with RD770 to convey non-CVP water pumped from the Kings, St John's (Kaweah), and Tule Rivers through the FKC for diversion by Friant Division contractors and/or for discharge into the Kern River. The non-CVP water will be introduced through existing turnouts on the FKC at Milepost (MP) 29.10 for the Kings River, at MP 69.45 for the St. John's River, and at MP 95.67 for the Tule River. Transferring non-CVP water will not require modifications to the FKC. Pumping activities will involve installing, operating, and maintaining semi-permanent pumping plants used to move excess water from the Kings, St John's (Kaweah), and Tule Rivers into the FKC. The pumping plants consist of permanent pump footings and existing discharge pipes that were constructed, and are maintained, by RD770 within the FKC right-of-way. The license will allow RD770 to continue using this infrastructure to install and operate temporary portable pump when there is a need to pump water.

As the proposed action has no potential to affect historic properties pursuant to 36 CFR Part 800.3(a)(1), no additional consideration under Section 106 of the National Historic Preservation Act is required.

Thank you for the opportunity to review the proposed action. Please place a copy of this concurrence with the EA administrative record. Please also include the changes to the following EA sections.

3.5.1 Affected Environment

The Central Valley Project, one of the Nation's major water conservation developments, extends from the Cascade Range in the north to the semi-arid but fertile plains along the Kern River in the south. The Friant-Kern Canal (FKC) is part of Reclamation's Friant Division of the Central Valley Project (CVP). Friant Dam is located on the San Joaquin River, 25 miles northeast of Fresno, California. Completed in 1942, the dam is a concrete gravity structure, 319 feet high, with a crest length of 3,488 feet. Construction of the canal began in 1945 and was completed in 1951. The FKC carries water over 151.8 miles in a southerly direction from Millerton Lake to the Kern River, four miles west of Bakersfield. The water is used for supplemental and new irrigation supplies in Fresno, Tulare, and Kern Counties.

Reclamation is in the process of nominating the CVP to the National Register of Historic Places (NRHP). As part of the CVP, the FKC has been found eligible for inclusion in the NRHP under Criterion A for its association with irrigation and agricultural development of California.

3.5.2 Environmental Consequences

3.5.2.1 No Action

Under the No Action Alternative, there are no impacts to cultural resources since there would be no change in operations and no ground disturbance. Conditions related to cultural resources would remain the same as existing conditions.

3.5.2.2 Proposed Action

The proposed action is administrative in nature and is the type of activity that has no potential to affect historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1). There will be no modification of water conveyance facilities and no activities that will result in ground disturbance. Because there is no potential to affect historic properties, no cultural resources will be impacted as a result of implementing proposed action.

4.2 National Historic Preservation Act (16 USC § 470 et seq.)

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

Amy J. Barnes Archaeologist U.S. Bureau of Reclamation Mid-Pacific Region, MP-153 2800 Cottage Way Sacramento, CA 95825 916-978-5047 abarnes@usbr.gov

Healer, Rain L

From: Rivera, Patricia L

Sent: Monday, April 26, 2010 8:13 AM

To: Healer, Rain L

Subject: RE: 2010 Short-term Warren Act Contract with RD770

Rain,

I reviewed the proposed action to enter into a 12-month contract with Delta Lands Reclamation District 770 (RD770) to utilize otherwise unused capacity in the Friant-Kern Canal (FKC) to convey Non-Central Valley Project (Non-CVP) water pumped from the Kings, St John's (a channel of the Kaweah river) and Tule Rivers from June 1, 2010 through May 31, 2011 in the FKC for diversion by Friant Division contractors and/or for discharge into the Kern River. The Non-CVP water is Pre-1914 appropriative water rights water from each of the respective rivers and would be introduced into the FKC from Milepost (MP) 29.10 for the Kings River, MP 69.45 for the St. John's River, and MP 95.67 for the Tule River. The maximum amount of Non-CVP water from the three rivers to be conveyed in the FKC between June 1, 2010 and May 31, 2011 is 250,000 AF.

Non-CVP water would be introduced only when: 1) there is excess capacity in the FKC, as determined by Reclamation in coordination with the Friant Water Authority; 2) it meets the applicable water quality standards (see Appendix A); 3) it meets the U.S. Army Corps of Engineers flood control criteria; and 4) the discharge of water into the Kern River is coordinated with Kings, St. John's (Kaweah), Tule and Kern River Watermasters as applicable. Non-CVP water would be introduced to the FKC through existing turnouts without modification to the FKC.

Once introduced into the FKC, the Non-CVP water would be conveyed for diversion on behalf of RD770 to Friant Division Contractors possessing repayment, long-term water service, or assignment contract(s) with Reclamation (see Table 2-1) and/or the remainder would be conveyed to an existing gate at the terminus of the FKC for discharge into the Kern River.

Table 1 Friant Division Contractors

Fresno Irrigation District	Kaweah Delta-Water	Orange Cove Irrigation
	Conservation District	District
Fresno County Waterworks	Madera Irrigation District	Porterville Irrigation
#18		District
City of Orange Cove	Lewis Creek Irrigation District	Saucelito Irrigation
		District
Arvin-Edison Water	Garfield Water District	Shafter-Wasco Irrigation
Storage District		District
Delano-Earlimart Irrigation	Lindmore Irrigation District	Southern San Joaquin
District		Municipal Utility District
Chowchilla Water District	Gravelly Ford Water District	Stone Corral Irrigation
		District
County of Madera	Lindsay-Strathmore Irrigation	Tea Pot Dome Water
	District	District
City of Fresno	International Water District	Terra Bella Irrigation
		District
Exeter Irrigation District	Lower Tule River Irrigation	Tulare Irrigation District

	District	
City of Lindsay	Ivanhoe Irrigation District	

Reclamation also proposes to issue a temporary license for access to Reclamation lands from June 1, 2010 through May 31, 2011. The license would allow RD770 to access federal land and erect, operate and maintain the pumps when they determine there is a need to pump. It also allows for the continued existence of the existing pump footings and other permanent infrastructure on federal lands. The pumping facilities are owned and operated by the RD770. The size and number of the pumps to be installed on the existing infrastructure and total pumping capacity at each station are listed in Table 2 below.

Table 2 Facilities Operated by RD770 for Pumping Water into the FKC

River System	Discharge Pumps	Total Capacity (cfs)
Kings River	6	600
St. Johns River	8	800
Tule River	7	700
Total	25	2,100

note: cfs = cubic feet per second

The proposed action does not have a potential to affect Indian Trust Assets. The nearest ITA is Santa Rosa Rancheria approximately 13 miles North of the project location.

Patricia



United States Department of the Interior FISH AND WILDLIFE SERVICE

Sacramento Fish and Wildlife Office 2800 Cottage Way, Room W-2605 Sacramento, California 95825



April 30, 2010

Document Number: 100430050058

Rain Healer Bureau of Reclamation 1243 N Street Fresno, CA 93721

Subject: Not specified

Dear: Ms. Healer

We are sending this official species list in response to your April 30, 2010 request for information about endangered and threatened species. The list covers the California counties and/or U.S. Geological Survey $7\frac{1}{2}$ minute quad or quads you requested.

Our database was developed primarily to assist Federal agencies that are consulting with us. Therefore, our lists include all of the sensitive species that have been found in a certain area and also ones that may be affected by projects in the area. For example, a fish may be on the list for a quad if it lives somewhere downstream from that quad. Birds are included even if they only migrate through an area. In other words, we include all of the species we want people to consider when they do something that affects the environment.

Please read Important Information About Your Species List (below). It explains how we made the list and describes your responsibilities under the Endangered Species Act.

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be July 29, 2010.

Please contact us if your project may affect endangered or threatened species or if you have any questions about the attached list or your responsibilities under the Endangered Species Act. A list of Endangered Species Program contacts can be found at www.fws.gov/sacramento/es/branches.htm.

Endangered Species Division



U.S. Fish & Wildlife Service Sacramento Fish & Wildlife Office

Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 100430050058

Database Last Updated: April 29, 2010

Quad Lists

Listed Species

Invertebrates

Branchinecta conservatio

Conservancy fairy shrimp (E)

Branchinecta lynchi

Critical habitat, vernal pool fairy shrimp (X)

vernal pool fairy shrimp (T)

Desmocerus californicus dimorphus

valley elderberry longhorn beetle (T)

Lepidurus packardi

Critical habitat, vernal pool tadpole shrimp (X)

vernal pool tadpole shrimp (E)

Fish

Hypomesus transpacificus

delta smelt (T)

Amphibians

Ambystoma californiense

California tiger salamander, central population (T)

Critical habitat, CA tiger salamander, central population (X)

Rana draytonii

California red-legged frog (T)

Reptiles

Gambelia (=Crotaphytus) sila

blunt-nosed leopard lizard (E)

Thamnophis gigas

giant garter snake (T)

Birds

Gymnogyps californianus

California condor (E)

Mammals

Dipodomys ingens

giant kangaroo rat (E)

Dipodomys nitratoides exilis

Fresno kangaroo rat (E)

Dipodomys nitratoides nitratoides

Tipton kangaroo rat (E)

Vulpes macrotis mutica

San Joaquin kit fox (E)

Plants

Caulanthus californicus

California jewelflower (E)

Chamaesyce hooveri

Critical habitat, Hoover's spurge (X)

Hoover's spurge (T)

Clarkia springvillensis

Springville clarkia (T)

Orcuttia inaequalis

Critical habitat, San Joaquin Valley Orcutt grass (X)

San Joaquin Valley Orcutt grass (T)

Pseudobahia peirsonii

San Joaquin adobe sunburst (T)

Sidalcea keckii

Critical habitat, Keck's checker-mallow (X)

Keck's checker-mallow (=checkerbloom) (E)

Tuctoria greenei

Greene's tuctoria (=Orcutt grass) (E)

Candidate Species

Amphibians

Rana muscosa

mountain yellow-legged frog (C)

Quads Containing Listed, Proposed or Candidate Species:

CAIRNS CORNER (310B)

WOODVILLE (310C)

PORTERVILLE (310D)

TULARE (311A)

TAYLOR WEIR (311C)

TIPTON (311D)

EL RICO RANCH (312C)

CORCORAN (312D)

STRATFORD (313A)

STRATFORD SE (313D)

WOODLAKE (333A)

IVANHOE (333B)

EXETER (333C)

MONSON (334A)

TRAVER (334B)

VISALIA (334D)

BURRIS PARK (335A)

LATON (335B)

RIVERDALE (336A)

BURREL (336B)

VANGUARD (336C)

LEMOORE (336D)

WAHTOKE (356B)

REEDLEY (356C)

SANGER (357A)

SELMA (357D)

PIEDRA (377C)

County Lists

No county species lists requested.

Key:

- (E) Endangered Listed as being in danger of extinction.
- (T) Threatened Listed as likely to become endangered within the foreseeable future.
- (P) Proposed Officially proposed in the Federal Register for listing as endangered or threatened.

(NMFS) Species under the Jurisdiction of the <u>National Oceanic & Atmospheric Administration Fisheries Service</u>. Consult with them directly about these species.

Critical Habitat - Area essential to the conservation of a species.

- (PX) Proposed Critical Habitat The species is already listed. Critical habitat is being proposed for it.
- (C) Candidate Candidate to become a proposed species.
- (V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
- (X) Critical Habitat designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the <u>Guidelines for Conducting and Reporting</u>
<u>Botanical Inventories</u>. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal <u>consultation</u> with the Service.
 - During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.
- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.
 - Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be July 29, 2010.