BOARD OF DIRECTORS MEETING | Agenda

FEBRUARY 27, 2020
8:30AM (Closed Session) 10:00 AM (Open Session)
SCE ENERGY EDUCATION CENTER
4175 S LASPINA ST, TULARE, CA 93274

At the discretion of the Board of Directors, all items appearing on this agenda, whether or not expressly listed for action may be subject to action by the Board. The order of agenda items is subject to change.

1. CALL TO ORDER/ROLL CALL – (TANTAU)
2. APPROVAL OF THE AGENDA – (TANTAU)
3. PUBLIC COMMENT ON CLOSED SESSION ITEMS – (DAVIS)
4. ADJOURN TO CLOSED SESSION

CLOSED SESSION ITEMS (90 MIN)

5. CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION
   (Government Code section 54956.9(d)(1))
   NRDC v. Murillo, U.S. District Court, Eastern District of California (Sacramento Division), Case No. 88-cv-01658-JAM-GGH.

6. CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
   (Government Code section 54956.9(d)(2))
   Significant Exposure to Litigation: Three potential matters.

7. CONFERENCE WITH LEGAL COUNSEL - INITIATION OF LITIGATION
   (Government Code section 54956.9(d)(4))
   Initiation of Litigation: Two potential cases.

8. CONFERENCE WITH REAL PROPERTY NEGOTIATORS
   Property: Friant-Kern Canal facilities and right-of-way
   Agency negotiator: CEO, COO, General Counsel
   Negotiating parties: United States (Bureau of Reclamation)
   Under negotiation: OM&R Transfer Agreement (price and terms of payment)

9. RECONVENE INTO OPEN SESSION (START AT 10:00 AM)
   Announce reportable action taken during closed session.

10. PUBLIC COMMENT / PUBLIC PRESENTATIONS – (TANTAU)
    Public comment is welcome at this time on any matter within the jurisdiction of the Board that is not on the agenda. Under the State’s open meeting law - the Brown Act - no action may be taken on any item not on the agenda. Public comment on items on the agenda will be allowed at the time the Board considers the item.
11. **CONSENT CALENDAR – (TANTAU)**

The following routine matters will be acted upon by one vote, unless a Board Member requests separate consideration of the item.

   A. Approval of the Minutes – Board of Directors meeting of January 16, 2020. (Tantau)
   B. Ratify the bills for January 2020, approve February 2020 bills, and accept the Cash Activity Reports January 2020. (Willard)

12. **ACTION ITEMS (30 MINUTES)**

   A. FWA Governance — Consideration of: (1) Recording in the Minutes the Positions of Non-FWA Member O&M Contractors on Agenda Items; and (2) Re-extending Trial Membership Offers to Non-FWA Member O&M Contractors on such Terms and Conditions as may be Established in the Trial Membership Agreement. (Phillips/Davis)

   B. Ratify Approval of Master Professional Services Agreement with MBK Engineers and Task Orders 1 & 2 for Monthly Tracking of Water Project Operations and On-Call Water Supply Strategic Assessments. (DeFlitch/Davis)

   C. Approval of Temporary Agreements for Conveyance of Water (Restoration Flows) with Patterson ID and Banta-Carbona ID and Form of Repayment Agreement with Friant Contractors for Recapture of Restoration Flows. (DeFlitch/Davis)

13. **GENERAL UPDATES & REPORTS (3 HOURS)**

   A. Friant-Kern Canal Capacity Correction Project Update. (20 minutes)
      i. FKC Middle Reach Capacity Correction Project Technical Update. (DeFlitch/Davis) (5 minutes)
      ii. FKC Middle Reach Capacity Correction Project Financial Update (DeFlitch/Phillips/Davis) (20 minutes)
         i. Federal Appropriations
         ii. Self-Financing Strategies

   B. Review Draft OM&R Transfer Agreement for FKC and Associated Works (Davis) (5 minutes)

   C. FKC Title Transfer Study (Bezdek) (30 minutes)

   D. Central Valley Project Improvement Act Credit/Offset True-up Update (Phillips/Bezdek) (15 minutes)

   E. Update on San Luis Delta-Mendota Water Authority O&M Water Rates & Reserves for Water Year 2020 (Willard) (10 minutes)

   F. CVP Cost Allocation Presentation (DeFlitch/Taylor) (20 Minutes)

   G. San Joaquin Valley Blueprint Update (Ewell) (10 minutes)
      i. Economic Impact Study Results and Roll-Out
      ii. Project implementation strategy
1. MBK Work
2. Investor Strategy
   iii. Governor’s Water Resilience Portfolio Update
H. External Affairs Activities. (Biering/Amaral) (15 minutes)
I. Water Operations Update (Phillips, DeFlitch, Biering, Reclamation) (15 minutes)
   i. 2020 ASO Flights and Current Snowpack/Storage
   ii. Friant Supply Spreadsheet
   iii. Delta/CVP Supply Spreadsheet
J. Temperance Flat Reservoir Project Update. (15 minutes)
   i. Update on MOU Group Technical Modeling (Stantec)
   ii. Update on JPA activities (Fukuda)
K. Update on Ad Hoc Water Quality Committee Activities (DeFlitch/Buck-Macleod) (5 minutes)
L. O&M Report (DeFlitch) (5 minutes)

14. ADJOURNMENT

Public Participation Information
Agenda reports and other disclosable public records related to each Open Session agenda item are available on FWA's website under "Calendar" at Friantwater.org and at FWA's main office, 854 N. Harvard Ave., Lindsay, CA 93247, during regular business hours. Under the Americans with Disabilities Act, if you require a disability-related modification or accommodation to participate in this meeting, including auxiliary aides or services, please contact Toni Marie at 559-562-6305 at least 48 hours prior to the meeting.
1. CALL TO ORDER/ROLL CALL

Chairman Tantau called the meeting to order.

ROLL CALL

Chief Executive Officer, Jason R. Phillips noted that a quorum of the Board of Directors was present.

ATTENDANCE:

Directors Present:

- Edwin Camp Arvin-Edison W.S.D. (AEWSD)
- Brock Buche City of Fresno
- George Porter Fresno I.D. (FID)
- Loren Booth Hills Valley I.D. (HVID)
- Chris Tantau Kaweah Delta W.C.D. (KDWCD)
- Michael Brownfield Lindmore I.D. (LID)
- Cliff Loeffler Lindsay-Strathmore I.D. (LSID)
- Tom Barcellos Lower-Tule River I.D. (LTID)
- Carl Janzen Madera I.D.
- Harvey Bailey Orange Cove I.D. (OCID)
- Eric Borba Porterville I.D. (PID)
- Steven G. Kisling Saucelito I.D. (SID)
- Matthew Leider Teapot Dome W.D. (TDID)
- Edwin Wheaton Terra Bella I.D. (TBID)
- Rick Borges Tulare I.D. (TID)

Director(s) Absent: Kole Upton, Chowchilla W.D.; Kent H. Stephens, Kern-Tulare W.D.

2. APPROVAL OF THE AGENDA

The Board approved the agenda as presented.

M/S/C – Motion by Director Carl Janzen, seconded by Director Loeffler, to approve the agenda as presented. The motion carried. (Roll Call Vote: Ayes – AESWD, CofF, FID, HVID, KDWCD, LID, LSID, LTID, MID, OCID, PID, SID, TDID, TBID, TID; Nays – 0; Absent – CWD,KTWD)

3. PUBLIC COMMENT ON CLOSED SESSION ITEMS

There was no public comment on closed session items.
4. ADJOURN TO CLOSED SESSION

CLOSED SESSION ITEMS

5. CONFERENCE WITH LEGAL COUNSEL - EXISTING LITIGATION
   (Government Code section 54956.9(d)(1))
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   Under negotiation: OM&R Transfer Agreement (price and terms of payment)

9. PUBLIC EMPLOYEE PERFORMANCE EVALUATION
   (Government Code section 54957)
   Title: Chief Executive Officer

10. RECONVENE INTO OPEN SESSION (START AT 10:00 AM)
    There was no reportable action taken during closed session.

11. PUBLIC COMMENT / PUBLIC PRESENTATIONS
    At the December 16, 2019 meeting, Chairman Tantau had announced that Director Bailey would be stepping down after 25 years, as the Orange Cove Irrigation District Friant representative. He recognized today as being the last board meeting of his 25-year tenure and thanked him for his years of service. Director David Brown will replace Director Bailey for Orange Cove I.D.
12. **CONSENT CALENDAR**

The following routine matters were acted upon by one vote, unless a Board Member requested separate consideration of the item.

A. Approval of the Minutes – Board of Directors meeting of December 13, 2019.

B. Ratify the bills for December 2019 and accept the Cash Activity Reports.

The Board approved the minutes and bills as presented.

**M/S/C** – Motion by Director Loeffler, seconded by Director Brownfield, to approve the December 13, 2019 minutes as presented. The motion carried. (Roll Call Vote: Ayes – AESWD, Coff, FID, HVID, KDWCD, LID, LSID, LTID, MID, OCID, PID, SID, TDID, TBID, TID; Nays – 0; Absent – CWD,KTWD)

13. **ACTION ITEMS**

A. Adopt Resolution No. 2020-01 – Support for Johnny Amaral as an ACWA Board Member for Regions 6 & 7 – The Board considered and approved Johnny Amaral to serve as an ACWA Board Director for Regions 6 & 7.

**M/S/C** – Motion by Director Borges, seconded by Director Bailey, to adopt Resolution No. 2020-01 – Approve Johnny Amaral to serve as an ACWA Board Director for Regions 6 & 7. The motion carried. (Roll Call Vote: Ayes – AESWD, Coff, FID, HVID, KDWCD, LID, LSID, LTID, MID, OCID, PID, SID, TDID, TBID, TID; Nays – 0; Absent – CWD,KTWD)

B. Appointment of Doug DeFlitch and Johnny Amaral as alternate representatives of FWA to the San Joaquin Valley Water Infrastructure Authority – Jason Phillips, CEO, serves as a Board Director for the San Joaquin Valley Water Infrastructure Authority. With the departure of the Director of Water Policy, Jeff Payne, the Board approved the appointment of Doug DeFlitch and Johnny Amaral as alternate representatives of FWA.

**M/S/C** – Motion by Director Camp, seconded by Director Bailey, to approve the appointment of Doug DeFlitch and Johnny Amaral as alternate representatives of FWA on the San Joaquin Valley Water Infrastructure Authority. The motion carried. (Roll Call Vote: Ayes – AESWD, Coff, FID, HVID, KDWCD, LID, LSID, LTID, MID, OCID, PID, SID, TDID, TBID, TID; Nays – 0; Absent – CWD,KTWD)

14. **GENERAL UPDATES & REPORTS**

A. Board Retreat Recap – The Annual Board Retreat was held at The Cliffs in Pismo Beach, CA from Monday, November 18 to Wednesday, November 20th; a detailed summary report is included in the board packet. CEO Phillips recapped each of the retreat sessions:

Sessions 1 & 2 – Participants discussed the Water Blueprint for the San Joaquin Valley (“the Blueprint”). The Blueprint continues to grow, with additional agencies joining in the effort to attain long-term sustainability in the San Joaquin Valley. FWA will continue to maintain an active role in the Blueprint effort and will strive to strike a balance between internal (agriculture community, local policymakers) and external (environmental NGOs, disadvantaged communities, state policymakers) communication related to Blueprint efforts.
Session 3 – FKC Middle Reach Capacity Correction–Self-Financing – Participants discussed options for self-financing the Friant-Kern Canal Middle Reach Capacity Correction Project that included capital self-financing considerations as well as outside funding availability; construction efforts; and preferred path.

Session 4 – FKC Capacity Correction – Middle Reach Project Overview and Funding – The project team is moving forward with a schedule that would have construction ready to begin in 2020.

Session 5 – Participants discussed FWA governance, particularly related to parameters of non-FWA districts inclusion and how to achieve that through potential revision of the O&M membership and outreach. A path in which to move forward will be further discussed at a future meeting. In addition, participants discussed the need to identify a larger meeting facility and the benefits of adopting paperless meetings.

Session 6 – Participants discussed a potential Title Transfer with the Bureau of Reclamation for the Friant-Kern Canal and related facilities; they also discussed internal due diligence and whether Title Transfer should continue to be pursued.

B. Friant-Kern Canal Capacity Correction Project Update.

   i. FKC Middle Reach Capacity Correction Project Technical Update. (DeFlitch/Davis)

      COO DeFlitch and General Counsel Davis covered the Project progress as outlined in the agenda report. The key highlight was approval of the Feasibility Report by the Department of Interior.

   ii. FKC Middle Reach Capacity Correction Project Financial Update (DeFlitch/Phillips)

      i. Federal Appropriations

      ii. Other Financing approaches

      CEO Phillips provided an update on WIIN Act funding and potential federal appropriations noting that Senator Feinstein remains a strong supporter of the FKC Project.

C. Review Draft OM&R Transfer Agreement for FKC and Associated Works – Included in the board packet is the draft Transfer Agreement renewal that incorporates the new Reclamation mandated standard terms, as modified by FWA, San Luis Delta-Mendota Water Authority, and the Tehama-Colusa Canal Authority. General Counsel Davis summarized the key changes to the Agreement and requested that any comments and feedback should be submitted to FWA staff.

D. FKC Title Transfer Study –Special Counsel John Bezdek is working with Dennis Keller and consultant Brian Person to finalize the Title Transfer Study. The report will be presented in February. After which, FWA will need to determine if it wants to enter into a Memorandum of Understanding with Reclamation.

E. Central Valley Project Improvement Act Credit/Offset True-up Update – GAC Biering thanked the 80+ Friant Division directors, district staff, and farmers who attended the Reclamation workshop in Visalia on January 6. FWA will submit a comment letter with specific recommendations for how the True-up should be handled. The submission deadline has been extended to February 14.
F. San Joaquin Valley Blueprint Update – CEA Amaral reported that the highly-anticipated socio-economic impact report is close to being released. The purpose of the report is to educate and inform policymakers on the state of surface water deliveries and water imbalance. Also, the draft Water Resilience Portfolio was circulated the first week of January and is currently being reviewed by the Blueprint. Several sections provide some optimism and others raise some concern. The Blueprint will look to provide comments by the February 14 deadline and will reiterate the need for the Blueprint and real solutions to the crisis before us as highlighted by the Economic Report.

G. External Affairs Activities – GAC Biering and CEA Amaral gave an update on Federal and State Legislative and communications activities as summarized in the agenda report. They also reported that CEO Phillips has been called to testify on behalf of Friant Water Authority at the Natural Resources Committee, Water Oceans and Wildlife Subcommittee hearing on January 28 in Washington, D.C. In addition, CEO Phillips will be hosting two panel discussion at the Water Users’ Conference in Reno.

H. Water Operations Update – GAC Biering provided an ASO program update as outlined in the agenda report. She also reported that state-level funding is being explored and ASO flights are being scheduled for the end of the month. Beginning in February, monthly water allocation reports will be distributed by Ron Milligan at MBK.

I. FWA Staffing – CEO Phillips announced the hiring of Ian Buck-Macleod as Water Resources Manager. Macleod comes to FWA from Stantec Consulting and will be based in the Sacramento office.

J. O&M Report – COO DeFlitch provided an update on current O&M Activities as provided in the packet.

15. ADJOURNMENT

The meeting adjourned at 1:43 pm.

__________________________________________
Jason R. Phillips, Chief Executive Officer  
Friant Water Authority

__________________________________________
Mia Swenson, Recording Secretary  
Friant Water Authority
### OTHERS IN ATTENDANCE:

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
</tr>
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<tbody>
<tr>
<td>Jeevan Muhar</td>
<td>Arvin-Edison W.S.D.</td>
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<tr>
<td>Steve Collup</td>
<td>Arvin-Edison W.S.D.</td>
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<td>William R. Stretch</td>
<td>Fresno I.D.</td>
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<td>Josh Pitigliano</td>
<td>Lower-Tule River I.D.</td>
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<td>Mark Larsen</td>
<td>Kaweah-Delta W.C.D.</td>
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<td>Steve Dalke</td>
<td>Kern-Tulare W.D.</td>
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<td>Craig Wallace</td>
<td>Lindsay-Strathmore I.D.</td>
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<td>Eric Limas</td>
<td>Delano-Earlimart I.D., Tea Pot Dome W.D.</td>
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<td>Fergus Morrissey</td>
<td>Orange Cove I.D.</td>
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<td>Sean Geivet</td>
<td>Porterville I.D., Saucelito I.D., Terra Bella I.D.</td>
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<td>Matt Kidder</td>
<td>Lower-Tule River I.D.</td>
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<td>Art Ramirez</td>
<td>Stone Corral I.D.</td>
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<td>Tom Weddle</td>
<td>Ivanhoe I.D. / Exeter I.D.</td>
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<td>Brandon Tomlinson</td>
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<td>Don Davis</td>
<td>FWA General Counsel</td>
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<td>Jason Phillips</td>
<td>FWA</td>
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<tr>
<td>Doug DeFlitch</td>
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<td>Don Willard</td>
<td>FWA</td>
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<tr>
<td>Vivian Garcia</td>
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<td>Chris Hickernell</td>
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<td>Alex Biering</td>
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<td>Johnny Amaral</td>
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<td>Taylor Faria</td>
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<td>Mia Swenson</td>
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<td>John Bezdek</td>
<td>WPLG</td>
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<td>Johnny Gailey</td>
<td>Delta View Water Association</td>
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<td>Edward T. Henry</td>
<td>MKGSA ADV CMTE</td>
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<td>Michael Peters</td>
<td>Kaweah Pump</td>
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<td>Don A. Wright</td>
<td>Water Wrights</td>
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<tr>
<td>Aubrey Mauritson</td>
<td>Ruddell Stanton Bixler Mauritson &amp; Evans LLP</td>
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<td>Scott K. Kuney</td>
<td>Young Wooldridge</td>
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DATE: February 27, 2020
TO: Board of Directors
FROM: Finance Committee, Don Willard, CFO
SUBJECT: Ratify the payment of bills for EOM January 2020, approve bills for February 2020 and accept Cash Activity Reports for January 2020

SUMMARY:
The Finance Committee met on January 27, 2020 and reviewed the bills paid for EOM January 2020 and met again on February 24, 2020 and reviewed the bills to be paid for February 2020 and the Cash Activity Reports for January 2020. There was a quorum at each of the meetings.

FINANCE COMMITTEE ACTION:
The Finance Committee acted to recommend that the Board of Directors ratify the payment of the EOM January 2020 bills, in the amount of $1,364,548.63.

The Committee also acted to recommend that Board of Directors approve payment of the February 2020 bills in the amount of $2,553,672.95 and accept the Cash Activity Reports for January 2020.

RECOMMENDED ACTION:
The Finance Committee recommends ratification of the payment of the EOM January 2020 bills in the amount of $1,364,548.63, approval of the February bills in the amount of $2,553,672.95 and acceptance of the January 2020 Cash Activity Reports.

SUGGESTED MOTION:
The Board of Directors ratify the payment of the EOM January 2020 payments in the amount of $1,364,548.63, approve payment of the February 2020 bills for $2,553,672.95 and accept the January 2020 Cash Activity Reports.

BUDGET IMPACT:
$2,727,677.50 chargeable to the FY 2020 O&M Budget; $184,121.18 chargeable to the FY 2020 GM Budget.

$23,996.63 from Temperance Flat Funds.

$772,366.27 wire to SLDMA for November / December 2019.

$210,060.00 – Patterson Irrigation District – Recapture Water
ATTACHMENTS:

Friant Water Authority Expenditures – EOM January 2020
Friant Water Authority Expenditures – February 2020
Friant Water Authority January 2020 Cash Activity Reports
### FRIANT WATER AUTHORITY EXPENDITURES TO BE RATIFIED/APPROVED

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<td>738.45</td>
<td>Repair parts for pickups</td>
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<td>BANK OF AMERICA</td>
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<td>Welding supplies for Lindsay</td>
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<td>CONSTAR SUPPLY</td>
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<td>FRONTIER</td>
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<td>958.00</td>
<td>Lindsay Plug Circuit</td>
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<td>Telephone services-Long distance</td>
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<td>Hardware for all yards</td>
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### FRIANT WATER AUTHORITY EXPENDITURES TO BE RATIFIED/APPROVED

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<th>GM FUND</th>
<th>TOTAL</th>
<th>DESCRIPTION</th>
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**BILLS PAID FEBRUARY 10, 2020**

<table>
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<tr>
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<tr>
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<tr>
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<tr>
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<tr>
<td>AUTO ZONE, INC.</td>
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<tr>
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<tr>
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<td>COMMUTER INDUSTRIES</td>
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**BILLS TO BE PAID FEBRUARY 27, 2020**

<table>
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<tr>
<th>Payee</th>
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<tbody>
<tr>
<td>99 STEEL SPECIALTIES</td>
<td>28.14</td>
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<tr>
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<tr>
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<tr>
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<td>CLF WAREHOUSE, INC.</td>
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<td>PAYEE</td>
<td>O&amp;M FUND</td>
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<td>PAYEE</td>
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<td>ZOOM IMAGING SOLUTIONS, INC.</td>
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BILLS TO BE PAID FEBRUARY 27, 2020

| Total previously paid | 35,658.19 | 7,286.90 | 42,945.09 |
| Grand total to be approved | 1,391,227.39 | 155,215.97 | 1,546,443.36 |
| Total from Pump Back Grant | 42,108.06 |
| Total from WIIN and SJRRP Grant | 965,121.53 |
| Total from Temperance Flat MOU | - |
| Grand Total | $2,553,672.95 |
## Friant Water Authority Expenditures to Be Ratified/Approved

### Grants

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<thead>
<tr>
<th>Payee</th>
<th>Pump Back</th>
<th>Winn/SJRRP</th>
<th>Temperance Flat</th>
<th>Total</th>
<th>Description</th>
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<td>$ 92.57</td>
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**Bills Paid February 10, 2020**

<table>
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<tr>
<th>Payee</th>
<th>Pump Back</th>
<th>Winn/SJRRP</th>
<th>Temperance Flat</th>
<th>Total</th>
</tr>
</thead>
<tbody>
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**Bills to Be Paid February 27, 2020**

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<tr>
<th>Payee</th>
<th>Pump Back</th>
<th>Winn/SJRRP</th>
<th>Temperance Flat</th>
<th>Total</th>
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<tbody>
<tr>
<td></td>
<td>$ 42,108.06</td>
<td>$ 965,028.96</td>
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<td>$ 1,007,137.02</td>
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**Grand Totals**

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<td>$ 1,007,229.59</td>
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## CASH ACTIVITY BALANCE

**MONTH ENDING JANUARY 31, 2020**

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<th></th>
<th>Beginning Balance</th>
<th>Increases</th>
<th>Decreases</th>
<th>Ending Balance</th>
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<td><strong>Total</strong></td>
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<td><strong>$(2,715,381)</strong></td>
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## BANK ACTIVITY BALANCE

**MONTH ENDING JANUARY 31, 2020**

<table>
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<tr>
<th></th>
<th>Beginning Balance</th>
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<th>Ending Balance</th>
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**NOTE:** Cash on deposit with LAIF represents the consolidation of available balances held by all FWA funds. Most Current Interest Rate: For month ended January 31, 2020, effective yield, 1.967%

Total LAIF fund as of January 31, 2020: $28,443,466,317.27

The Authority's investments are in compliance with its Statement of Investment Policy dated July 22, 2004. Management believes it is fully able to meet its expenditure requirements for the next six months.
## CASH ACTIVITY REPORT
### MONTH ENDING JANUARY 31, 2020

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<th>Petty Cash</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASH BALANCE DECEMBER 31, 2019</strong></td>
<td>$ 7,786,316</td>
<td>$ -</td>
<td>$ 801</td>
</tr>
</tbody>
</table>

**Increases:**
- District O&M receipts 1,803,139
- SLDMWA receipts 385,317
- Interest from Bank of Sierra 177
- Miscellaneous deposits 15,582
- Other Funds: Administration Allocation 4,246
- Payroll deposits - 391,998

**Total Increases** 2,208,460 391,998 - 2,600,458

**Decreases:**
- O&M Expenditures 219,270
- Pump Back Project Expenditures 9,439
- Subsidence Project Expenditures 956,280
- Wire to SLDMWA (WY2019) 571,790
- PID-Recapture of restoration flows 174,555
- Bank charges 50
- Payroll Cash Outlays 391,998

**Total Decreases** 2,323,382 391,998 - 2,715,381

**CASH BALANCE BEFORE INTERFUND ACTIVITY** 7,671,393 - 801 7,672,194

**Interfund transfer from O&M** -

**CASH BALANCE JANUARY 31, 2020** $ 7,671,393 $ - $ 801 7,672,194
FRIANT WATER AUTHORITY  
GENERAL MEMBERS FUND  
CASH ACTIVITY REPORT  
MONTH ENDING JANUARY 31, 2020  

CASH BALANCE DECEMBER 31, 2019 $ 200,838

<table>
<thead>
<tr>
<th>Increases:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Member Assessments</td>
<td>502,469</td>
</tr>
</tbody>
</table>

Total Cash Receipts $ 502,469

<table>
<thead>
<tr>
<th>Decreases:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Conference Calls - service</td>
<td>1,181</td>
</tr>
<tr>
<td>Consulting</td>
<td>18,716</td>
</tr>
<tr>
<td>Meetings</td>
<td>11,855</td>
</tr>
<tr>
<td>Professional Services</td>
<td>5,347</td>
</tr>
<tr>
<td>Rent &amp; Facility Expense</td>
<td>7,228</td>
</tr>
<tr>
<td>Annual Newsletter Subscription</td>
<td>1,200</td>
</tr>
<tr>
<td>Other Payroll Benefits</td>
<td>8,770</td>
</tr>
</tbody>
</table>

**Reimburse O&M:**
- Current Month Payroll & Benefits 122,255
- Current Month Payroll & Benefits to O&M (22,925)
- Administration Allocation 4,246

Less Total Cash Disbursements $ 157,872

CASH BALANCE BEFORE INTERFUNDF ACTIVITY $ 545,435

Interfund transfer from O&M $ -

CASH BALANCE JANUARY 31, 2020 $ 545,435
CASH BALANCE DECEMBER 31, 2019 $ 697,368

Increases:
No increases -

Total Cash Receipts

Decreases:
No decreases

Less Total Cash Disbursements

CASH BALANCE JANUARY 31, 2020 $ 697,368

In-Kind Contribution (See Note) $ 100,000

Staff
J. Payne 39,004
S. Ottemoeller 191
Consultants -
Burke Williams 43,050
Bill Luce Consulting 2,719
Other costs 6,559

Note: All FWA spending Expensed
Refund will be proportioned

In-Kind Contribution thru: JANUARY 31, 2020 $ 91,522

In-Kind Contribution balance $ 8,478
<table>
<thead>
<tr>
<th>Cash Activity Report</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CASH BALANCE DECEMBER 31, 2019</strong></td>
<td>$ 8,513,469</td>
</tr>
<tr>
<td>Increases:</td>
<td></td>
</tr>
<tr>
<td>Transfer from checking</td>
<td>$ -</td>
</tr>
<tr>
<td>Interest earned</td>
<td>$ -</td>
</tr>
<tr>
<td><strong>Total Increases</strong></td>
<td>$ -</td>
</tr>
<tr>
<td>Decreases:</td>
<td></td>
</tr>
<tr>
<td>Transfer to checking</td>
<td>$ 400,000</td>
</tr>
<tr>
<td><strong>CASH BALANCE JANUARY 31, 2020</strong></td>
<td>$ 8,113,469</td>
</tr>
<tr>
<td>Balance ascribed to:</td>
<td></td>
</tr>
<tr>
<td>O&amp;M Fund</td>
<td>$ 6,982,403</td>
</tr>
<tr>
<td>General Member Fund &amp; Temp Flat</td>
<td>$ 1,131,066</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>$ 8,113,469</td>
</tr>
</tbody>
</table>

**NOTE:** Cash on deposit with LAIF represents the consolidation of available balances held by all FWA funds. Most Current Interest Rate: For month ended January 31, 2020, effective yield, 1.967%

Total LAIF fund as of January 31, 2020: $28,443,466,317.27

The Authority's investments are in compliance with its Statement of Investment Policy dated July 22, 2004. Management believes it is fully able to meet its expenditure requirements for the next six months.
## CASH RECONCILIATION-ESTIMATED
### SEPTEMBER 30, 2019

<table>
<thead>
<tr>
<th></th>
<th>O&amp;M</th>
<th>SLDMWA</th>
<th>General Membership</th>
<th>Temperance Flat MOU</th>
<th>Temperance Flat Resevoir</th>
<th>Grand Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>CASH BALANCE SEPTEMBER 30, 2019</td>
<td>$3,773,688</td>
<td>$2,706,854</td>
<td>$205,631</td>
<td>$697,368</td>
<td>$0</td>
<td>$7,383,542</td>
</tr>
<tr>
<td>Conveyance Fee Reserve</td>
<td>(3,000,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Cost Reserve</td>
<td>(1,112,714)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance Reserve</td>
<td>(100,000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restricted Use Funds</td>
<td>(697,368)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018 Refund to Members (estimate)</td>
<td>(1,444,044)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FY 2019 Interest Earned</td>
<td>(32,631)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accounts Receivable</td>
<td>211,131</td>
<td>325,777</td>
<td>7,975</td>
<td></td>
<td></td>
<td>544,884</td>
</tr>
<tr>
<td>Accounts Payables</td>
<td>(1,791,453)</td>
<td>(108,656)</td>
<td></td>
<td></td>
<td></td>
<td>(1,900,109)</td>
</tr>
<tr>
<td>Subsidence Grant Monies Due</td>
<td>780,200</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>780,200</td>
</tr>
<tr>
<td>FY2020 Deferrals</td>
<td>(1,254,452)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(1,254,452)</td>
</tr>
<tr>
<td></td>
<td>($937,644)</td>
<td>$0</td>
<td>$104,950</td>
<td>$0</td>
<td>$0</td>
<td>($832,693)</td>
</tr>
</tbody>
</table>

Note: before FY2019 refund
## FWA Revenue Presentation

**FY 2019 - 2020**

**Budget year:** 33.3% **Completed**

<table>
<thead>
<tr>
<th>Operations &amp; Maintenance</th>
<th>FY 2020 Budget</th>
<th>01/31/2020 Year to Date</th>
<th>Budget Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest Income</td>
<td>106,000</td>
<td>23,913</td>
<td>82,087</td>
</tr>
<tr>
<td>Miscellaneous Income</td>
<td>-</td>
<td>6,678</td>
<td>(6,678)</td>
</tr>
<tr>
<td>Water Sales Revenue</td>
<td>-</td>
<td>90,530</td>
<td>(90,530)</td>
</tr>
<tr>
<td>Conveyance Fees</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Federal Grant Revenue</td>
<td>-</td>
<td>653,954</td>
<td>(653,954)</td>
</tr>
<tr>
<td>O &amp; M Revenue</td>
<td>15,053,429</td>
<td>6,272,260</td>
<td>8,781,169</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>15,159,429</td>
<td>7,047,336</td>
<td>8,112,093</td>
</tr>
<tr>
<td><strong>Expenses</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Operations</td>
<td>2,100,521</td>
<td>512,689</td>
<td>1,587,833</td>
</tr>
<tr>
<td>Total Maintenance</td>
<td>10,456,130</td>
<td>3,615,007</td>
<td>6,841,123</td>
</tr>
<tr>
<td>Total Administration</td>
<td>2,496,778</td>
<td>660,399</td>
<td>1,836,379</td>
</tr>
<tr>
<td><strong>Total O&amp;M Expenses</strong></td>
<td>15,053,429</td>
<td>4,788,095</td>
<td>10,265,334</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Member</th>
<th>FY 2020 Budget</th>
<th>01/31/2020 Year to Date</th>
<th>FY 2020 Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest Income</td>
<td>-</td>
<td>5,780</td>
<td>(5,780)</td>
</tr>
<tr>
<td>GM Revenue</td>
<td>2,114,000</td>
<td>1,057,000</td>
<td>1,057,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Associate Dues</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td>2,114,000</td>
<td>1,062,780</td>
<td>1,051,220</td>
</tr>
<tr>
<td><strong>Total GM Expenses</strong></td>
<td>2,114,000</td>
<td>655,566</td>
<td>1,458,434</td>
</tr>
</tbody>
</table>
## FWA Budget Presentation

**FY 2019 - 2020**

**Budget Year: 33.3% Completed**

### Operations & Maintenance

<table>
<thead>
<tr>
<th>Operations Dept</th>
<th>FY 2020 Budget</th>
<th>01/31/2020 Year to Date</th>
<th>Budget Remaining</th>
<th>Budget Spent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Salaries/Pay</td>
<td>941,076</td>
<td>279,013</td>
<td>662,063</td>
<td>29.6%</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>434,192</td>
<td>159,484</td>
<td>274,709</td>
<td>36.7%</td>
</tr>
<tr>
<td>Supplies &amp; Services</td>
<td>725,253</td>
<td>74,192</td>
<td>651,061</td>
<td>10.2%</td>
</tr>
<tr>
<td><strong>Total Operations</strong></td>
<td><strong>2,100,521</strong></td>
<td><strong>512,689</strong></td>
<td><strong>1,587,833</strong></td>
<td><strong>24.4%</strong></td>
</tr>
</tbody>
</table>

### Maintenance Dept

<table>
<thead>
<tr>
<th>Operations Dept</th>
<th>FY 2020 Budget</th>
<th>01/31/2020 Year to Date</th>
<th>Budget Remaining</th>
<th>Budget Spent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Salaries/Pay</td>
<td>2,081,633</td>
<td>715,031</td>
<td>1,366,602</td>
<td>34.3%</td>
</tr>
<tr>
<td>Employee Benefits</td>
<td>994,805</td>
<td>398,358</td>
<td>596,447</td>
<td>40.0%</td>
</tr>
<tr>
<td>Supplies &amp; Services</td>
<td>7,379,692</td>
<td>2,501,618</td>
<td>4,878,074</td>
<td>33.9%</td>
</tr>
<tr>
<td><strong>Total Maintenance</strong></td>
<td><strong>10,456,130</strong></td>
<td><strong>3,615,007</strong></td>
<td><strong>6,841,123</strong></td>
<td><strong>34.6%</strong></td>
</tr>
</tbody>
</table>

### Administration Allocation to O&M

<table>
<thead>
<tr>
<th>Operations Dept</th>
<th>FY 2020 Budget</th>
<th>01/31/2020 Year to Date</th>
<th>Budget Remaining</th>
<th>Budget Spent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admin Allocation to O&amp;M</td>
<td>2,132,339</td>
<td>652,531</td>
<td>1,479,808</td>
<td>30.6%</td>
</tr>
<tr>
<td>Administration Fixed Assets not allocated</td>
<td>364,439</td>
<td>7,868</td>
<td>356,571</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>Total Operations &amp; Maintenance</strong></td>
<td><strong>15,053,429</strong></td>
<td><strong>4,788,095</strong></td>
<td><strong>10,265,334</strong></td>
<td><strong>31.8%</strong></td>
</tr>
</tbody>
</table>

### General Member

<table>
<thead>
<tr>
<th>General Member</th>
<th>FY 2020 Budget</th>
<th>01/31/2020 Year to Date</th>
<th>FY 2020 Remaining</th>
<th>Budget spent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee Salaries/Pay with Benefits</td>
<td>736,000</td>
<td>288,335</td>
<td>447,665</td>
<td>39.2%</td>
</tr>
<tr>
<td>Other supplies and services</td>
<td>295,500</td>
<td>115,188</td>
<td>180,312</td>
<td>39.0%</td>
</tr>
<tr>
<td>Admin Allocation to GM</td>
<td>210,000</td>
<td>47,802</td>
<td>162,198</td>
<td>22.8%</td>
</tr>
<tr>
<td>General Counsel</td>
<td>10,000</td>
<td>5,379</td>
<td>4,621</td>
<td>53.8%</td>
</tr>
<tr>
<td>Outside Legal Consultants</td>
<td>309,500</td>
<td>74,648</td>
<td>234,852</td>
<td>24.1%</td>
</tr>
<tr>
<td>Other Consultants</td>
<td>553,000</td>
<td>124,214</td>
<td>428,786</td>
<td>22.5%</td>
</tr>
<tr>
<td><strong>Total General Member</strong></td>
<td><strong>2,114,000</strong></td>
<td><strong>655,566</strong></td>
<td><strong>1,458,434</strong></td>
<td><strong>31.0%</strong></td>
</tr>
</tbody>
</table>
Friant Water Authority
Budget vs Actual Expenses
YTD - 01/31/2020

Budget year:

33.3%
Total

Annual
Budget
MAINTENANCE
Vehicle & Equipment Service
Maintenance Supervision
Right-of-Way Management
Weed & Pest Control
Implem Biol. Opinion
Road Maintenance
Yard & Building Maintenance
Structure & Gate Maintenance
Cleaning Right-of-Way
Bargate & Guardrail Maint
Embankment Maintenance
Bridge Maintenance
Miscellaneous Maintenance
Concrete Lining Maintenance
Drainditch & Channel Maint.
Fence Maintenance
Mudjacking
Painting
Sump Pump Maintenance
Cross Drainage Structure Mtce
Rip-Rapping
USBR Pump Back Project
FKC Subsidence
FKC Capacity Correction
GSA Engagement
Operations Supervision
Water supply coordination & monitoring
Water Quality
FKC Title Transfer
Legal Expense - Direct
Safety & First Aid Training
Payroll Preparation
Meetings (General)
Meetings (Board of Directors)
Meetings (Sub Committee)
Meetings (Staff)
Education & Training
Miscellaneous Administrative
Procurement
Inventory & Property Mgt.
Employee Benefit (Holiday)
Employee Benefit (Sick Pay)
Employee Benefit (Vacation)
Employee Benefit (Jury Duty)
Travel
Personnel Administration
Retirement, Health Ins, PR Taxes
Utilities
Telephone Expense
Dues & Subscriptions
Budget Preparation
Vehicle & Equipment Acquisition
Services for outside contracts
TOTAL EXPENSES: MAINTENANCE

Completed

$

736,462
328,514
23,012
675,694
42,634
203,791
265,821
103,524
44,874
53,951
62,517
74,129
20,216
8,614
26,553
38,046
14,464
56,021
1,907
13,873
6,566
147,483
5,000,000
120,000
41,923
13,383
669,831
6,140
82,419
2,393
23,306
9,844
6,562
14,573
60,695
8,856
10,398
64,313
103,987
8,610
10,186
826,505
77,181
12,911
21,385
12,308
299,756
10,456,130

YTD
Actual
$

Projected
Remaining

% 0f Bud

176,173
100,634
18,260
279,473
891
30,587
63,501
88,401
8,398
16,280
28,943
11,811
4,815
2,478
10,456
2,451
3,302
102,416
2,029,888
43,589
22,476
13,500
1,915
1,622
22,653
4,271
6,192
204
35,487
12,624
2,961
11,734
8,464
7,855
1,838
35,186
35,908
40,403
1,200
3,056
285,661
23,601
4,481
8,802
165

23.9%
30.6%
79.3%
41.4%
2.1%
15.0%
23.9%
85.4%
18.7%
30.2%
46.3%
15.9%
23.8%
0.0%
9.3%
27.5%
16.9%
5.9%
0.0%
0.0%
0.0%
69.4%
40.6%
0.0%
18.7%
32.2%
14.3%
0.0%
3.4%
69.6%
7.5%
8.5%
152.3%
128.2%
45.1%
80.5%
13.9%
0.0%
20.8%
0.0%
54.7%
0.0%
38.9%
0.0%
35.5%
0.0%
34.6%
30.6%
34.7%
0.0%
0.0%
2.9%
0.0%

3,615,007

34.6%

$

560,288
227,881
4,752
396,221
41,742
173,204
202,320
15,123
36,476
37,671
33,574
62,318
15,401
8,614
24,076
27,590
12,014
52,719
1,907
13,873
6,566
45,067
2,970,111
(43,589)
97,524
28,423
11,468
(1,622)
647,177
1,869
76,227
2,189
(12,182)
(2,780)
3,601
2,839
52,231
(7,855)
7,018
10,398
29,127
(35,908)
63,584
(1,200)
5,554
10,186
540,844
53,581
8,430
21,385
12,308
290,954
(165)
6,841,123

Labor
YTD
Actual

Budget
$

226,556
328,514
23,012
265,773
52,807
132,160
72,692
44,874
36,791
50,590
36,266
4,952
6,106
26,553
30,586
12,986
45,761
1,907
13,873
6,566
22,483
186,064
41,923
13,383
70,981
41,445
2,393
12,031
9,844
6,562
13,036
32,115
8,856
10,398
64,313
103,987
10,186
12,308
2,081,633

$

Projected
Remaining

47,366
100,634
17,236
85,491
22,892
24,770
81,698
5,563
12,096
27,924
10,390
1,799
2,478
8,255
2,451
2,331
7,049
43,081
3,567
13,500
966
6,819
1,950
204
34,246
9,169
2,956
11,620
6,307
7,855
1,838
35,186
34,969
39,174
1,200
-

20.9%
30.6%
74.9%
32.2%
0.0%
43.4%
18.7%
112.4%
12.4%
32.9%
55.2%
28.6%
36.3%
0.0%
9.3%
27.0%
18.9%
5.1%
0.0%
0.0%
0.0%
31.4%
23.2%
0.0%
0.0%
32.2%
0.0%
0.0%
9.6%
0.0%
4.7%
8.5%
284.7%
93.1%
45.0%
89.1%
19.6%
0.0%
20.8%
0.0%
54.7%
0.0%
37.7%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%
0.0%

715,031

34.3%

$

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5,775
180,282
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25,876
3,153
6,106
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13,873
6,566
15,434
142,983
(3,567)
28,423
13,383
(966)
64,162
39,495
2,189
(22,216)
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1,416
25,808
(7,855)
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(34,969)
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(1,200)
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Budget
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YTD
Actual

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37,863
15,264
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7,459
1,478
10,261
125,000
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120,000
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1,538
28,581
8,610
826,505
77,181
12,911
21,385
299,756
-

$ 128,807
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3,015
2,200
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656
15,834
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1,241
3,454
5
114
2,157
939
1,229
3,056
285,661
23,601
4,481
8,802
165

25.3%
0.0%
0.0%
47.3%
2.1%
5.1%
29.0%
21.7%
0.0%
24.4%
8.5%
3.8%
19.8%
0.0%
0.0%
29.5%
0.0%
9.5%
0.0%
0.0%
0.0%
76.3%
41.3%
0.0%
18.7%
0.0%
0.0%
0.0%
2.6%
69.6%
10.4%
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11.0%
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0.0%
7.4%
7.5%
0.0%
0.0%
0.0%
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0.0%
0.0%
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35.5%
0.0%
34.6%
30.6%
34.7%
0.0%
0.0%
2.9%
0.0%

8,374,497

2,899,976

34.6%

Page 11.B.20

Projected
Remaining
$

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(1,023)
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41,742
143,289
94,930
24,129
(2,835)
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12,248
2,508
5,259
1,478
9,290
29,633
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(40,023)
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(1,915)
(656)
583,016
1,869
36,732
10,034
(3,454)
(5)
1,423
26,423
(939)
(1,229)
5,554
540,844
53,581
8,430
21,385
290,954
(165)
5,474,521


**Budget Year: 33.3% Completed**

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**TOTAL EXPENSES: WATER OPERATIONS**

$2,100,521 $512,689 $1,587,833 $941,076 $279,013 $29.6% $662,063 $1,159,446 $233,676 $20.2% $925,770
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### General Membership Summary

- **Outside Legal Consultants**: 309,500
- **Other Consultants**: 74,648
- **234,852**
- **24%**

### Other Supplies & Services

- **General Counsel**: 10,000
- **Staff Payroll & Benefits**: 736,000
- **447,665**
- **39%**

### Admin Allocation

- **210,000**: 47,802
- **162,198**: 23%
DATE: February 27, 2020

TO: Board of Directors

FROM: Jason Phillips

PREPARED BY: Donald M. Davis, General Counsel

SUBJECT: Approval of Master Professional Services Agreement with MBK Engineers and Task Orders 1 & 2 for Monthly Tracking of Water Project Operations and On-Call Water Supply Strategic Assessments

SUMMARY:
Staff has prepared and executed a Master Professional Services Agreement (MPSA) with MBK Engineers, one of California’s most respected engineering and consulting services firms in the areas of water rights and water resource planning. MBK’s staff of professional engineers are highly experienced and well qualified to perform analyses in hydrology, hydraulics, planning, and operations. The MPSA will allow FWA to request services from MBK as needed. Each specific project will be assigned a Task Order and corresponding budget. The initial Task Orders are for monthly tracking of water project operations and on-call water supply strategic assessments.

RECOMMENDED ACTION:
The Executive Committee recommended to the Board of Directors the ratification of the approval of a Master Professional Services Agreement with MBK Engineers and Task Orders No. 1 and 2 under such Agreement.

SUGGESTED MOTION:
I move that the Board of Directors the ratification of the approval of a Master Professional Services Agreement with MBK Engineers and Task Orders No. 1 and 2 under such Agreement.

DISCUSSION:
Understanding and monitoring water project operations and associated water supply issues is critical to FWA. FWA had historically been contracting these services out to Stantec, which was overseen by the Director of Water Policy, who left last month leading to the hiring of a Water Resources Manager (Ian Buck-Macleod). Coupled with the staffing change, FWA has since decreased the contract with Stantec for monitoring of operations and has selected MBK Engineers to fill this role. They have extensive knowledge and familiarity not only with overall CVP operations, but also with the Friant Division. Walter Bourez and Ron Milligan are the key MBK representatives for these initial Task Orders. Walter Bourez is a Principal at MBK Engineers, where he has worked for two decades. Bourez specializes in Technical Modeling. Ron Milligan recently joined MBK Engineers after retiring as the Central Valley Operations (CVO) operations manager at the United States Bureau of Reclamation.
Task Order No. 1 involves weekly tracking and reporting on current water project operations, including a general assessment of CVP allocations and overall risk to annual supplies.

Task Order No. 2 is designed to allow for specific strategic assessments, as needed.

**BUDGET IMPACT:**

The net change in the FY 2020 budget is a reduction of ~$25K as a result of:

- Departure of the Director of Water Policy and hiring of the Water Resources Manager +$38K
- The modification to the Stantec MSA to reduce certain services +$39K
- The addition of the MBK Task Order No.1 -$52K.

**ATTACHMENTS:**

1. Master Professional Services Agreement
2. Task Order No. 1 (Tracking & Reporting on Water Operations)
3. Task Order No. 2 (On-Call Strategic Assessments)
FRIANT WATER AUTHORITY

MASTER PROFESSIONAL SERVICES AGREEMENT

With

MBK Engineers

Effective Date: January 22, 2020
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</table>

**EXHIBITS**

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MASTER PROFESSIONAL SERVICES AGREEMENT

This PROFESSIONAL SERVICES AGREEMENT ("Agreement") is effective as of January 22, 2020 ("Effective Date"), and is between the Friant Water Authority, a California joint powers authority ("Friant") and MBK Engineers, a California corporation ("Consultant").

Section 1. Term of Agreement.

Subject to the provisions of Section 20 ("Termination of Agreement"), the term of this Agreement will be for a period commencing on the Effective Date and will terminate upon the completion of Consultant’s services.

Section 2. Scope and Performance of Services.

2.1 Consultant agrees to perform the services set forth in Exhibit A ("Scope of Services"), which is made a part of this Agreement, including all services set forth in each applicable “Task Order” pursuant to Exhibit A. The parties agree that each Task Order incorporates the terms and conditions of this Agreement and that upon execution by the parties, a Task Order will be deemed incorporated into this Agreement. In case of any conflict among the terms and conditions in this Agreement and a fully executed Task Order, the terms and conditions of this Agreement will control.

2.2 Consultant will furnish all of the labor, technical, administrative, professional and other personnel, all supplies and materials, equipment, printing, vehicles, transportation, office space and facilities, and all tests, testing and analyses, calculations, and all other means, except as otherwise expressly specified in this Agreement, necessary to perform the services required of Consultant under this Agreement.

2.3 Consultant’s designated representative(s) who are authorized to act on its behalf and to make all decisions in connection with the performance of services under this Agreement are listed in Exhibit B ("Key Personnel & Compensation"), which is made a part of this Agreement, or in an individual Task Order. Consultant must make every reasonable effort to maintain the stability and continuity of Consultant’s key personnel and subcontractors, if any, listed in Exhibit B or in an individual Task Order to perform the services required under this Agreement. Consultant must notify Friant and obtain Friant’s written approval with respect of any changes in key personnel prior to the performance of any services by replacement personnel.

2.5 Consultant must obtain Friant’s prior written approval before utilizing any subcontractors to perform any services under this Agreement. This written approval must include the identity of the subcontractor and the terms of compensation.

2.6 Consultant represents that it has the qualifications, experience and facilities necessary to properly perform the services required under this Agreement in a thorough, competent and professional manner. Consultant will at all times faithfully, competently and to the best of its ability, experience and talent, perform all services described in this Agreement. In meeting its obligations under this Agreement, Consultant must employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing services similar to those required of Consultant under this Agreement. Friant may inspect and accept or reject any of Consultant’s work under this Agreement, either during performance or when completed. Acceptance of any of Consultant’s work by Friant will not constitute a waiver of any of the
provisions of this Agreement. The Consultant must maintain any work site on Friant property in a safe condition, free of hazards to persons and property resulting from Consultant’s services and operations.

2.9 The parties expressly agree that time is of the essence in the performance of this Agreement.

Section 3. Additional Services and Changes in Services.

3.1 Consultant will not be compensated for any services rendered in connection with its performance of this Agreement that are in addition to or outside of those set forth in the each Task Order or otherwise required by this Agreement, unless such additional services are authorized in advance and in writing by Friant.

3.2 If Consultant believes that additional services are needed to complete the services in a Task Order, Consultant will provide Friant with written notification describing the proposed additional services, the reasons for such services, and a detailed proposal regarding cost.

3.3 Friant may order changes to the services under a Task Order, consisting of additions, deletions, or other revisions, and the compensation to be paid Consultant will be adjusted accordingly. All such changes must be authorized in writing, and executed by Consultant and Friant. The cost or credit to Friant resulting from changes in the services will be determined by the written agreement between the parties.

Section 4. Familiarity with Services and Site.

4.1 By executing this Agreement, Consultant represents that Consultant:

(a) has thoroughly investigated and considered the services to be performed;

(b) has carefully considered how the services should be performed;

(c) understands the facilities, difficulties, and restrictions attending performance of the services under this Agreement; and

(d) possesses all licenses required under local, state or federal law to perform the services contemplated by this Agreement, and will maintain all required licenses during the performance of this Agreement.

4.2 If services involve work upon any site, Consultant has or will investigate the site and is or will be fully acquainted with the conditions there existing, before commencing its services. Should Consultant discover any latent or unknown conditions that may materially affect the performance of services, Consultant will immediately inform Friant of such fact and will not proceed except at Consultant’s own risk until written instructions are received from Friant.

Section 5. Compensation and Payment.

5.1 Subject to any limitations set forth in this Agreement, Friant agrees to pay Consultant the amounts specified in each applicable Task Order. The total compensation, including reimbursement for actual expenses, may not exceed the amount set forth in Exhibit B, unless additional compensation is approved in writing by Friant.
5.2 The use of subconsultants will be considered a direct expense and not a reimbursable expense, and such costs must be included in the approved budgeted amount for each Task Order.

5.3 Each month during the term of this Agreement, Consultant must furnish Friant with an original invoice for all services performed and expenses incurred during the preceding month in accordance with the fee schedule set forth in Exhibit B. The invoice must detail charges by the following categories, as applicable: labor (by subcategory), reimbursable costs, subcontractor contracts and miscellaneous expenses. The invoice must list, as applicable, the hours worked and hourly rates for each personnel category, the tasks performed, the percentage of the task completed during the billing period, the cumulative percentage completed for each task, and the total cost of the services. If applicable, the invoice must also provide a budget summary including the total amounts previously invoiced and paid, the current invoice amount and the budget remaining.

5.4 Friant will review each invoice submitted by Consultant to determine whether the work performed and expenses incurred are in compliance with this Agreement. In the event that no charges or expenses are disputed, the invoice will be approved and paid. In the event any charges or expenses are disputed by Friant, the invoice will be returned by Friant to Consultant for correction and resubmission.

5.5 Except as to any charges for work performed or expenses incurred by Consultant that are disputed by Friant, Friant will cause Consultant to be paid within 30 days of receipt of Consultant’s invoice.

5.6 Payment to Consultant for services performed under this Agreement may not be deemed to waive any defects in the services performed by Consultant, even if such defects were known to Friant at the time of payment.

Section 6. Required Documentation Prior to Performance

6.1 Consultant may not perform any services under this Agreement until:
   (a) Consultant furnishes proof of insurance as required under Exhibit C;
   (b) Consultant provides Friant with a Taxpayer Identification Number;
   (c) Friant gives Consultant a written notice to proceed.

6.2 Friant will have no obligation to pay for any services rendered by Consultant in advance of receiving written authorization to proceed, and Consultant acknowledges that any such services are at Consultant’s own risk.

Section 7. Time of Performance; Excusable Delays; Extensions

7.1 Consultant must adhere to all schedules and deadlines set forth in this Agreement and in each Task Order, subject to the exercise of the generally accepted standard of care for performance of such services.

7.2 Consultant will not be liable for damages, including liquidated damages, if any, caused by delay in performance or failure to perform due to causes beyond the control of Consultant. Such causes include, but are not limited to, acts of God, acts of terrorism, acts of federal, state or...
local governments, acts of Friant, court orders, fires, floods, epidemics, strikes, embargoes, and unusually severe weather.

7.3 If Consultant is delayed by any cause beyond Consultant’s control, Friant may grant, but is not required to, a time extension for the completion of services. If delay occurs, Consultant must notify Friant within 48 hours, in writing, of the cause and the extent of the delay and how such delay interferes with Consultant’s performance of services.

Section 8. **Cooperation by Friant**.

All public information, data, reports, records, and maps (“information and data”) as are existing and available to Friant as public records, and which are necessary for carrying out the services will be furnished to Consultant in every reasonable way to facilitate, without undue delay, the services to be performed under this Agreement.

Section 9. **Project Documents**.

9.1 Upon full payment of all monies owed to Consultant under this Agreement, all original computer programs, data, designs, drawings, files, maps, memoranda, models, notes, photographs, reports, studies, surveys and other documents (collectively, “**Project Documents**”) prepared, developed or discovered by Consultant in the course of providing services under this Agreement will become the sole property of Friant and may be used, reused or otherwise disposed of by Friant without the permission of Consultant. Consultant will take such steps as are necessary to perfect or protect the ownership interest of Friant in such Project Documents. Upon completion, expiration or termination of this Agreement or upon request by Friant, Consultant must turn over to Friant all such original Project Documents in its possession; provided, however, that Consultant may retain copies of Project Documents. Friant acknowledges and agrees that use of Consultant’s completed work product, for purposes other than identified in this Agreement, or use of incomplete work product, is at Friant’s own risk. If necessary, Consultant agrees to execute all appropriate documents to assign to Friant the copyright or intellectual property rights to the Project Documents created pursuant to this Agreement.

9.2 Except as necessary for the performance of services under this Agreement, no Project Documents prepared under this Agreement, will be released by Consultant to any other person or entity without Friant’s prior written approval.

Section 10. **Confidential Information; Release of Information**.

10.1 All information gained or work product produced by Consultant in performance of this Agreement will be considered confidential, unless such information is in the public domain or already known to Consultant. Consultant may not release or disclose any such information or work product to persons or entities other than Friant without prior written authorization from Friant, except as may be required by law.

10.2 Consultant, its officers, employees, or agents, may not, without prior written authorization from Friant or unless requested by Friant’s general counsel or attorneys, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the services performed under this Agreement. Response to a subpoena or court order will not be considered “voluntary” provided Consultant gives Friant notice of such court order or subpoena.
10.3 If Consultant, or any officer, employee, or agent of Consultant, provides any information or work product (including Project Documents) in violation of this Agreement, then Friant will have the right to reimbursement and indemnity from Consultant for any damages, costs and fees, including attorney’s fees, to the extent caused by or incurred as a result of Consultant’s conduct.

10.4 Unless specifically precluded by the terms of an applicable order, Consultant must promptly notify Friant should Consultant, its officers, employees, or agents be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the services performed under this Agreement. Friant retains the right, but has no obligation, to represent Consultant or be present at any deposition, hearing or similar proceeding. Consultant agrees to cooperate fully with Friant and to provide Friant with the opportunity to review any response to discovery requests provided by Consultant. However, this right to review any such response does not imply or mean the right by Friant to control, direct, or rewrite such response.

10.5 All media and press releases, including graphic display information, must be approved and distributed solely by Friant, unless otherwise agreed to in writing by Friant. All media interviews regarding the performance of services under this Agreement are prohibited unless expressly authorized by Friant.


11.1 Consultant must maintain all documents and records demonstrating or relating to Consultant’s performance of services under this Agreement, including ledgers, books of account, invoices, vouchers, canceled checks, or other documents or records evidencing or relating to work, services, expenditures and disbursements charged to Friant under this Agreement. All financial documents or records must be maintained in accordance with generally accepted accounting principles and all other documents must be sufficiently complete and detailed so as to permit an accurate evaluation of the services provided by Consultant under this Agreement. All such documents or records must be maintained for at least three years following the final payment under this Agreement.

11.2 Any and all records or documents required to be maintained by this section must be made available for inspection, audit and copying, at any time during regular business hours, upon written request by Friant or its designated representative. Copies of such documents or records must be provided directly to Friant for inspection, audit and copying when it is practical to do so; otherwise, unless an alternative is mutually agreed upon, such documents and records must be made available at Consultant’s address indicated for receipt of notices in this Agreement.

11.3 Where Friant has reason to believe that any of the documents or records required to be maintained by this section may be lost or discarded due to dissolution or termination of Consultant’s business, Friant may, by written request, require that custody of such documents or records be given to a person or entity mutually agreed upon and that such documents and records thereafter be maintained by such person or entity at Consultant’s expense. Access to such documents and records must be granted to Friant, as well as to its successors-in-interest and authorized representatives.

12.1 Consultant is and will at all times remain a wholly independent contractor and not an officer or employee of Friant. Consultant has no authority to bind Friant in any manner, or to incur any obligation, debt or liability of any kind on behalf of or against Friant, whether by contract or otherwise, unless such authority is expressly conferred under this Agreement or is otherwise expressly conferred in writing by Friant.

12.2 The personnel performing the services under this Agreement on behalf of Consultant will at all times be under Consultant’s exclusive direction and control. Neither Friant, nor any elected or appointed boards, officers, officials, employees or agents of Friant, will have control over the conduct of Consultant or any of Consultant’s officers, employees or agents, except as provided in this Agreement. Consultant agrees that it will not at any time or in any manner represent that Consultant or any of Consultant’s officers, employees or agents are in any manner officials, officers, or employees of Friant.

12.3 Neither Consultant, nor any of Consultant’s officers, employees or agents, will obtain any rights to retirement, health care or any other benefits which may otherwise accrue to Friant’s employees. Consultant expressly waives any claim to any such rights or benefits.

Section 13. Compliance with Applicable Laws.

13.1 In General. Consultant must use the standard of care in its profession to keep itself informed of and comply with all federal, state and local laws, statutes, codes, ordinances, regulations and rules in effect during the term of this Agreement that apply to the services performed by Consultant.

13.2 Professional Licenses and Approvals. Consultant agrees that it will, at its sole cost and expense, obtain and maintain in effect at all times during the term of this Agreement any licenses, permits, insurance and approvals that are legally required for Consultant to practice its profession.

13.3 Employment Laws. Consultant agrees to comply with all applicable federal and state employment laws including those that relate to minimum hours and wages, occupational health and safety, and workers compensation insurance. Consultant further represents that it is an equal opportunity employer and in performing services under this Agreement agrees to comply with all applicable federal and state laws governing equal opportunity employment, and further agrees that it will not discriminate in the employment of persons to perform services under this Agreement on the basis of the race, religious creed, color, national origin, ancestry, physical disability, mental disability, medical condition, genetic information, marital status, sex, gender, gender identity, gender expression, age, or sexual orientation of any such person, except as may be permitted by California Government Code section 12940.

Section 14. Unauthorized Aliens.

Consultant agrees to comply with all of the applicable provisions of the Federal Immigration and Nationality Act (8 U.S.C. § 1101 et seq.), as it may be amended, and further agrees not to employ unauthorized aliens as defined under the Act. Should Consultant employ any unauthorized aliens for the performance of any work or services covered by this Agreement, and should any liability or sanctions be imposed against Friant for the use of unauthorized aliens, Consultant agrees to reimburse Friant for the amount of all such liabilities or sanctions imposed, together with any and all related costs, including attorneys’ fees, incurred by Friant.
Section 15. Conflicts of Interest; Anti-Corruption Practices.

15.1 Consultant covenants that neither Consultant, nor any officer, principal or employee of its firm, has or will acquire any interest, directly or indirectly, that would conflict in any manner with the interests of Friant or that would in any way hinder Consultant's performance of services under this Agreement. Consultant's attention is directed to the conflict of interest rules applicable to governmental decision-making contained in the Political Reform Act (California Government Code Section 87100 and following) and its implementing regulations (California Code of Regulations, Title 2, Section 18700 and following), and California Government Code section 1090.

15.2 Consultant covenants that neither Consultant, nor any officer, principal or employee of its firm will make, participate in the making, or in any way attempt to use the position of Consultant to influence any decision of Friant in which Consultant knows or has reason to know that Consultant, or any officer, principal or employee of Consultant has any of the financial interests listed in Government Code section 87103.

15.3 If Consultant discovers that it has employed a person with a direct or indirect interest that would conflict with its performance of this Agreement, Consultant must promptly disclose the relationship to Friant and take such action as Friant may direct to remedy the conflict.

15.4 Friant understands and acknowledges that Consultant is, as of the Effective Date, independently involved in the performance of non-related services for other governmental agencies and private parties. Consultant represents that, except as otherwise disclosed to Friant, it is unaware of any stated position of Friant relative to these projects. Any future position of Friant on these projects will not be considered a conflict of interest for purposes of this section.

15.5 Consultant represents and warrants that Consultant, its subcontractor(s) and their respective employees providing services pursuant to the Agreement are (a) in good standing; (b) have not been previously convicted, or debarred for fraudulent or corrupt activities; (c) will not participate in fraudulent or corrupt activities, and (d) will take steps to ensure that its employees and subcontractor(s) employees do not participate in any fraudulent or corrupt activities. Consultant acknowledges and agrees further that it has a duty to and will report to Friant any information or incidents about possible fraudulent or corrupt activities Consultant may discover, and will cooperate in any fraud or corruption investigation conducted, with respect to Consultant's service provided pursuant to this Agreement.

Section 16. Indemnification.

16.1 The parties agree that Friant should, to the fullest extent permitted by law, be indemnified, and held harmless from Services Claims and Operations Claims (each defined below) related to the performance by Consultant of this Agreement as provided in this section. Accordingly, the provisions of this section are intended by the parties to be interpreted and construed to provide Friant with the fullest protection possible under the law. Consultant acknowledges that Friant would not enter into this Agreement in the absence of Consultant's commitment to indemnify, and hold harmless Friant as set forth in this section.

16.2 For the purposes of this section, “Friant” includes Friant’s officers, officials, and employees, and “Consultant” includes Consultant’s officers, officials, employees, agents and subcontractors and any other persons for whom Consultant is legally responsible.
16.3 With respect to the performance of professional services under this Agreement where the law establishes a professional standard of care for such services, Consultant agrees to indemnify, and hold harmless Friant from and against all liabilities, damages, losses, and costs, including but not limited to reimbursement of reasonable attorney's fees and all other reasonable external costs of defense, to the extent caused by the negligence, recklessness, or willful misconduct of Consultant (collectively, “Services Claims”).

16.4 With respect to the acts and operations of Consultant under this Agreement other than the performance of professional services, Consultant agrees to defend, indemnify, and hold harmless Friant from and against any and all claims, liabilities, damages, losses, and costs, including but not limited to reasonable attorney's fees and all other costs of defense, to the extent caused, in whole or in part, by the negligence, recklessness, or willful misconduct of Consultant, and excepting only those claims, damages, liabilities, losses, and costs caused by Friant's sole negligence or willful misconduct (collectively, “Operations Claims”).

16.5 Consultant must notify Friant within five days of receipt of notice of any Operations Claims or Services Claims made or legal action initiated that arises out of or pertains to Consultant’s performance of services under this Agreement.

16.6 Consultant's duty to defend Operations Claims is a separate and distinct obligation from Consultant’s duty to indemnify Friant for any Services Claims. Consultant is obligated to defend Friant in all legal, equitable, administrative, or special proceedings, with counsel approved by Friant, immediately upon tender to Consultant of an Operations Claim in any form or at any stage of an action or proceeding, whether or not liability is established.

16.7 Consultant agrees that settlement of any Operations or Services Claim against Friant requires the consent of Friant. Friant agrees that its consent will not be unreasonably withheld provided that Consultant is financially able (based on demonstrated assets including insurance) to fulfill its obligation to indemnify Friant for the costs of any such settlement as required under this Agreement.

16.8 The insurance required to be maintained by Consultant under this Agreement is intended to ensure Consultant’s obligations under this section, but the limits of such insurance do not limit the liability of Consultant.

16.9 Consultant agrees to obtain executed indemnity agreements with provisions identical to those set forth in this section from each subcontractor or any other person or entity involved by, for, with or on behalf of Consultant in the performance of this Agreement. If Consultant fails to obtain such indemnity obligations from others as required, Consultant will be fully responsible for all obligations under this section. Friant’s failure to monitor compliance with this requirement imposes no additional obligations on Friant and will in no way act as a waiver of any rights under this Agreement.

16.10 The parties acknowledge and agree that design professionals are required to defend and indemnify the Friant only to the extent permitted by Civil Code section 2782.8, which limits claims to those that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the design professional. The term "design professional," is defined in Section 2782.8, and includes licensed architects, licensed landscape architects, registered professional engineers, professional land surveyors and the business entities that offer such services in accordance with the applicable provisions of the Business and Professions Code. The parties further acknowledge and agree that the provisions of this Section 16 are to be interpreted and applied to the fullest extent permitted by Civil Code section 2782.8.
16.11 The provisions of this section will survive the expiration or earlier termination of this Agreement in accordance with the applicable provisions of Exhibit C ("Insurance").

Section 17. Insurance

Consultant agrees to obtain and maintain in full force and effect during the term of this Agreement the insurance coverages listed in Exhibit C ("Insurance"), which is made a part of this Agreement. All insurance policies are subject to approval by Friant as to form and content. These requirements are subject to amendment or waiver if so approved in writing by Friant.

Section 18. Assignment

The expertise and experience of Consultant are material considerations for this Agreement. Friant has an interest in the qualifications of and capability of the persons and entities that will fulfill the duties and obligations imposed upon Consultant under this Agreement. In recognition of that interest, Consultant may not assign or transfer this Agreement or any portion of this Agreement or the performance of any of Consultant’s duties or obligations under this Agreement without the prior written consent of Friant, which may be withheld in Friant’s sole discretion. Any attempted assignment will be null and void, and will constitute a material breach of this Agreement entitling Friant to any and all remedies at law or in equity, including summary termination of this Agreement.

Section 19. Default; Limitations on Liability

19.1 In the event that Consultant is in default under the terms of this Agreement, Friant will have no obligation or duty to continue compensating Consultant for any services performed after Friant provides written notice to Consultant of such default.

19.2 Consultant agrees that no Friant official, officer, employee or agent will be personally liable to Consultant in the event of any default or breach of Friant, or for any amount which may become due to Consultant, or for any obligations directly or indirectly incurred under this Agreement.

19.3 Friant’s liability under this Agreement is limited to payment of Consultant in accordance with the terms of this Agreement and excludes any liability whatsoever for consequential or indirect damages even if such damages are foreseeable.

Section 20. Termination of Agreement

20.1 Friant may terminate this Agreement, with or without cause, at any time by written notice of termination to Consultant. In the event such notice is given, Consultant must cease immediately all work and services in progress.

20.2 Consultant may terminate this Agreement at any time upon 30 days’ prior written notice of termination to Friant.

20.3 Upon termination of this Agreement by either Consultant or Friant, all property belonging to Friant that is in Consultant’s possession must be returned to Friant. Consultant must promptly deliver to Friant a final invoice for all outstanding services performed and expenses incurred by Consultant as of the date of termination. Compensation for work in progress not based on an hourly rate will be prorated based on the percentage of work completed as of the date of termination.
20.4 Consultant acknowledges Friant’s rights to terminate this Agreement as provided in this section, and hereby waive any and all claims for damages that might otherwise arise from Friant’s termination of this Agreement.

Section 21. Notices

21.1 All written notices required or permitted to be given under this Agreement will be deemed made when received by the other party at its respective address as follows:

To Friant:  
Friant Water Authority  
854 N. Harvard Ave.  
Lindsay, CA 93247  
Attention: Douglas DeFlitch  
(Tel.) 559-562-6305  
(Fax) 559-562-3496  
(Email) ddeflitch@friantwater.org

To Consultant:  
MBK Engineers  
455 University Avenue, Suite 100  
Sacramento, CA  95825-6579  
Attention: Walter Bourez  
(Tel.) 916-456-4400  
(Fax) 916-456-0253  
(Cell) 916-873-7762  
(Email) Bourez@mbkengineers.com

21.2 Notice will be deemed effective on the date personally delivered or electronically transmitted by facsimile. If the notice is mailed, notice will be deemed given three days after deposit of the same in the custody of the United States Postal Service, postage prepaid, for first class delivery, or upon delivery if using a major courier service with tracking capabilities.

21.3 Any party may change its notice information by giving notice to the other party in compliance with this section.

Section 22. General Provisions

22.1 Authority to Execute; Counterparts. Each party represents and warrants that all necessary action has been taken by such party to authorize the undersigned to execute this Agreement and to bind it to the performance of its obligations hereunder. This Agreement may be executed in several counterparts, each of which will constitute one and the same instrument and will become binding upon the parties when at least one copy has been signed by both parties.

22.2 Entire Agreement. This Agreement, including the attached Exhibits A through C, is the entire, complete, final and exclusive expression of the parties with respect to the matters addressed in this Agreement and supersedes all other agreements or understandings, whether oral or written, between Consultant and Friant prior to the execution of this Agreement.
22.3 **Binding Effect.** This Agreement is binding upon the heirs, executors, administrators, successors and assigns of the parties.

22.4 **Modification of Agreement.** No amendment to or modification of this Agreement or any Task Order will be valid unless made in writing and approved by Consultant and by the Friant Board of Directors or Friant CEO or COO, as applicable. The parties agree that this requirement for written modifications cannot be waived and that any attempted waiver will be void.

22.5 **Electronic Signatures.** This Agreement and any amendment or Task Order will be considered executed when the signature page of a party is delivered by electronic transmission. Such electronic signatures will have the same effect as an original signature.

22.6 **Waiver.** Waiver by any party to this Agreement of any term, condition, or covenant of this Agreement will not constitute a waiver of any other term, condition, or covenant. Waiver by any party of any breach of the provisions of this Agreement will not constitute a waiver of any other provision, or a waiver of any subsequent breach or violation of any provision of this Agreement. Acceptance by Friant of any services by Consultant will not constitute a waiver of any of the provisions of this Agreement.

22.7 **Interpretation.** This Agreement will be interpreted, construed and governed according to the laws of the State of California. Each party has had the opportunity to review this Agreement with legal counsel. The Agreement will be construed simply, as a whole, and in accordance with its fair meaning. It will not be interpreted strictly for or against either party.

22.8 **Severability.** If any term, condition or covenant of this Agreement is declared or determined by any court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement will not be affected and the Agreement will be read and construed without the invalid, void or unenforceable provision.

22.9 **Venue.** In the event of litigation between the parties, venue in will be exclusively in a state court in the County of Tulare, California.

22.10 **Audit.** Consultant acknowledges and agrees that under Government Code section 8546.7, this Agreement is subject to the examination and audit of the California State Auditor, at the request of Friant or as part of any audit of Friant, for a period of three years after final payment under this Agreement.

[Signatures on the following page.]
THE UNDERSIGNED AUTHORIZED REPRESENTATIVES OF the parties hereby execute this Agreement as follows:

FRIANT WATER AUTHORITY

[Signature]

Douglas DeFlitch, Chief Operating Officer

[Signature]

Don Willard, Chief Financial Officer

APPROVED AS TO FORM:

[Signature]

Donald M. Davis, General Counsel

CONSULTANT:

MBK Engineers, a California corporation

By [Signature]

Name: Walter W. Bourez
Title: Principal Engineer

By

Name:
Title:
EXHIBIT A

SCOPE OF SERVICES

The services performed under this Agreement will consist of the individual projects defined by Task Orders entered into by the parties during the term of this Agreement. Each Task Order will be numbered sequentially and will be similar in format to the attached Exhibit A-1, entitled “Task Order Format.” Each Task Order will specifically define the scope of services for each specific project or task on which Friant desires to retain Consultant’s services. Each Task Order will also specify (1) the date on which the work covered by the Task Order is to begin; (2) the date on which the work covered by the Task Order is to be completed; (3) the maximum charges that Friant can expect to pay to Consultant for Consultant’s services pursuant to such Task Order; and (4) the names of the persons who will be Friant’s and Consultants’ respective principal representatives for the management and performance of the specific services covered by the Task Order.

The specific services covered by each separate Task Order will be undertaken by Consultant only upon receipt of a Task Order signed by an authorized representative of Friant and accepted by an authorized representative of Consultant.

Consultant will commence performing the services specified by each Task Order on the commencement date specified in the Task Order, and will complete such services within the time and monetary limitations specified in the Task Order. If Consultant, in the course of performing its services under any given Task Order, determines it will be unable to complete the services within the time schedule or authorized limit of charges specified in the Task Order, it will promptly so notify Friant of such determination. Within 14 calendar days of such notification, Friant will inform Consultant as to how Friant chooses to proceed.
EXHIBIT A-1

TASK ORDER FORMAT

FRIANT WATER AUTHORITY

MASTER PROFESSIONAL SERVICE AGREEMENT DATED ____________, 20__

Task Order No.: ______________
Date: ______________

Friant Water Authority
854 N. Harvard Ave.
Lindsay, CA 93247
Attn:

DESCRIPTION OF SERVICES:

KEY PERSONNEL:

NOT TO EXCEED COST;

FEE SCHEDULE:

DATE TO COMMENCE SERVICES:

ESTIMATED COMPLETION DATE:

FRIANT’S REPRESENTATIVE:

CONSULTANT’S REPRESENTATIVE: ________________________________

ACCEPTED:     ACCEPTED:
CONSULTANT     FRIANT WATER AUTHORITY

By: ___________________________ By: __________________________
Title: ___________________________ Title: __________________________
EXHIBIT B

KEY PERSONNEL & COMPENSATION

1. Consultant’s designated representative(s) who are authorized to act on its behalf and to make all decisions in connection with the performance of services under this Agreement are: Walter Bourez and Ron Milligan. Additional Consultant representatives may be designated on each applicable Task Order.

2. Key personnel will be identified on each Task Order.

3. Total compensation under this Agreement, including reimbursement for actual expenses, may not exceed the amount budgeted under each Task Order.

FEE SCHEDULE

(See Fee Schedule attached to each Task Order)
EXHIBIT C

INSURANCE

1. **Required Insurance.** Before commencing any services, Consultant must procure and maintain in full force and effect during the term of this Agreement the following types of insurance with at least the minimum coverage listed and subject to the applicable additional requirements set forth below:

<table>
<thead>
<tr>
<th>Type of Insurance</th>
<th>Limits (combined single)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial General Liability</td>
<td>$2,000,000</td>
</tr>
<tr>
<td>Business Automobile Liability</td>
<td>$1,000,000</td>
</tr>
<tr>
<td>Workers’ Compensation</td>
<td>Statutory Requirements</td>
</tr>
<tr>
<td>Professional Liability</td>
<td>$2,000,000</td>
</tr>
</tbody>
</table>

2. **Insurance Rating.** All insurance required to be maintained by Consultant must be issued by companies licensed by or admitted to conduct insurance business in the State of California by the California Department of Insurance and have a rating of A- or better and Financial Size Category Class VII or better by the latest edition of A.M. Best’s Key Rating Guide, unless otherwise approved by the Friant’s legal counsel.

3. **Commercial General Liability Insurance.** The commercial general liability insurance must meet or exceed the requirements of Insurance Services Office (ISO) form CG 00 01, and must be in an amount not less than $2,000,000 per occurrence for bodily injury, personal injury, and property damage. The policy must include contractual liability that has not been amended. The insurance must be on an "occurrence" not a "claims made" basis. There must be no cross-liability exclusion for claims or suits by one insured against another. The insurance must include a waiver of subrogation applicable to the insurance or self-insurance, a primary and non-contributory endorsement, and an additional insured endorsement, all in favor of the Friant, its officers, agents, employees and volunteers.

4. **Business Automobile Insurance.** The business automobile insurance coverage must be at least as broad as ISO Business Auto Coverage form CA 00 01, covering bodily injury and property damage for all activities of the Consultant arising out of or in connection with the services to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $1,000,000 combined single limit for each accident. Such insurance must include both a waiver of subrogation applicable to the insurance or self-insurance, and a primary and non-contributory endorsement, both in favor of the Friant, its officers, agents, employees and volunteers.

5. **Workers’ Compensation.** Consultant must maintain workers’ compensation insurance (statutory limits) and employer's liability insurance (with limits of at least $1,000,000). Such insurance must include a waiver of subrogation endorsement in favor of Friant, its officers, agents, employees and volunteers.

6. **Professional Liability (Errors & Omissions) Insurance.** The professional liability insurance must cover the services to be performed under this Agreement and must be in an amount not less than $2,000,000. The coverage must be provided on a “claims made” basis. Consultant must maintain continuous coverage through a period not less than three years after the completion of the services required under this Agreement.

7. **Additional Insureds.** Each Commercial General Liability Insurance policy and Business Auto Insurance policy must provide that the Friant, its officials, officers, employees, and agents are "additional insureds" under the terms of the policy, and must provide that an act or omission of one the insureds will not reduce or avoid coverage to the other insureds.
8. **Umbrella or Excess Liability Insurance.** If an excess or umbrella liability policy is used to meet minimum limit requirements, the insurance must provide coverage at least as broad as specified for the underlying coverages. Any such coverage provided under an umbrella or excess liability policy must include a “drop-down provision” requiring the policy to respond in the event that any primary insurance that would otherwise have applied proves to be uncollectable in whole or in part for any reason. Coverage must be provided on a “pay-on-behalf” basis. There may be no cross-liability exclusion precluding coverage for claims or suits by one insured against another. The policy must “follow form” to the underlying primary policy. Coverage must be applicable to all insureds under the primary policies. The scope of coverage provided is subject to approval of Friant following receipt of the required proof of insurance. Limits are subject to review, but in no event may be less than $4,000,000 per occurrence and aggregate.

9. **Deductibles and Self-Insured Retention.** Any deductibles or self-insured retentions applicable to the insurance policies required under this Agreement must be declared to and approved by Friant. In no event may any required insurance policy have a deductible, self-insured retention or other similar policy provision in excess of $50,000 without prior written approval by Friant in its sole discretion. At the option of Friant, either the insurer will reduce or eliminate such deductibles or self-insured retentions with respect to the Friant’s additional insureds or Consultant will procure a bond guaranteeing payment of any losses, damages, expenses, costs or settlements up to the amount of such deductibles or self-insured retentions.

10. **Certificates of Insurance and Endorsements; Notice of Termination or Changes to Policies.** Prior to commencing any services under this Agreement, Consultant must file with the Friant certificates of insurance and endorsements evidencing the existence of all insurance required by this Agreement, along with such other evidence of insurance as may reasonably be required by Friant. These certificates of insurance and endorsements must be in a form approved by the Friant’s legal counsel. Consultant must maintain current certificates and endorsements on file with Friant during the term of this Agreement reflecting the existence of all required insurance. Each of the certificates must expressly provide that no material change in the policy, or termination or cancellation of the required coverage, will be effective except upon 30 days’ prior written notice to Friant by certified mail, return receipt requested. The delivery to Friant of any certificates of insurance or endorsements that do not comply with the requirements of this Agreement will not waive the Friant’s right to require compliance. In the event that Consultant’s policies are materially changed, Consultant must provide the Friant with at least 30 days’ prior written notice of the applicable changes.

11. **Failure to Maintain Required Insurance.** If Consultant, for any reason, fails to have in place at all times during the term of this Agreement all of the required insurance coverage, the Friant may, but is not obligated to, obtain such coverage at Consultant’s expense and deduct the cost from the sums due Consultant. Alternatively, Friant may terminate the Agreement.

12. **Effect of Coverage.** The existence of the required insurance coverage under this Agreement will not be deemed to satisfy or limit Consultant’s indemnity obligations under this Agreement. Consultant acknowledges that the insurance coverage and policy limits set forth in this Agreement constitute the minimum coverage and policy limits required. Should any coverage carried by the Consultant or any subcontractor of any tier have limits of liability that exceed the limits or have broader coverage than required in this Agreement, those higher limits and that broader coverage are deemed to apply for the benefit of any person or organization included as an additional insured and those limits and broader coverage will become the required minimum limits and insurance coverage in all sections of this Agreement. Any insurance proceeds available to Friant in excess of the limits and coverages required by this Agreement, and which is applicable to a given loss, must be made available to Friant to compensate it for such losses.
13. **Right to Revise Insurance Specifications.** Friant reserves the right to change the amounts and types of insurance required by giving Consultant at least 90 days’ advance written notice of such change. If such change results in substantial additional cost to Consultant, the parties may renegotiate Consultant’s compensation.

14. **Timely Notice of Claims.** Consultant must give Friant prompt notice of claims made of lawsuits initiated that arise out of or result from Consultant’s performance under this Agreement, and that involve or may involve coverage under any of the required liability insurance policies.

15. **Subcontractor Insurance.** Should the Consultant subcontract out any of the work or services required under this Agreement, it must include all subcontractors as insured’s under its policies or maintain separate certificates and endorsements for each subcontractor. As an alternative, the Contractor may require all subcontractors to provide at their own expense evidence of all the required coverages listed in this Exhibit C. If this option is exercised, both Friant and Consultant must be named as additional insured under the subcontractor’s general liability policy. All coverages for subcontractors will be subject to all the requirements of this Exhibit C. Friant reserves the right to perform an insurance audit during the term of this Agreement to verify compliance with requirements.
FRIANT WATER AUTHORITY
MASTER PROFESSIONAL SERVICE AGREEMENT DATED January 22, 2020

Task Order No.: 1
Date: 1/22/2020

Friant Water Authority
854 N. Harvard Ave.
Lindsay, CA 93247
Attn: Douglas DeFlitch

DESCRIPTION OF SERVICES:
See Attached Exhibit A
(Weekly Tracking of Water Project Operations)

KEY PERSONNEL:
Walter Bourez, Lee Bergfeld, Ron Milligan, Shankar Parvathinathan, Dan Easton, Wes Walker

NOT TO EXCEED COST:
$6500/month

FEE SCHEDULE:
See Attached Exhibit A – MBK 2020 Schedule of Fees

DATE TO COMMENCE SERVICES: January 22, 2020

ESTIMATED COMPLETION DATE: On-going.

FRIANT’S REPRESENTATIVE: Douglas DeFlitch, COO & Ian Buck-Macleod

CONSULTANT’S REPRESENTATIVE: Walter Bourez & Ron Milligan

ACCEPTED:
MBK Engineers

By: Walter W. Bourez III
Title: Principal Engineer

ACCEPTED:
FRIANT WATER AUTHORITY

By:
Title: COO
TASK ORDER NO. 1
EXHIBIT A

Consultant will provide the following services:

MBK Engineers will perform weekly tracking of current water project operations with a fixed monthly budget during the Friant fiscal year (ending September 30).

Weekly tracking of current water project operations
Effort under this task will include tracking changes and trends in water operations and will identify key factors driving operations that may affect water allocations. The factors considered will include hydrologic conditions, regulatory triggers and policy decisions.

Briefing documents will be prepared that include periodic data assessments and updates on CVP and SWP operations, including Friant Division operations and San Joaquin River Settlement flows. These briefings will include a general assessment of CVP allocations and the overall risk to annual supplies for San Joaquin River Exchange Contractors (SJRECs), Friant Division contractors and Cross Valley Contractors (CVCs). Briefings may include weekly near-term outlooks, monthly data summaries, or seasonal reviews (Fall, Winter-Early Spring, Late Spring-Summer).

The following data will be tracked under this effort:
- Precipitation Forecasts
- River Flows
- Snow Pack and Runoff Forecasts
- Reservoir Storage Levels
- Potential Flood Operations
- In-Basin Usage
- Delta Conditions
- Fish Monitoring and Salvage
- Water supply forecasts

Tracking will include the following regulatory requirements, operations agreements and fishery actions:
- Weekly Operations Calls with CVO
- Review of monthly CVP operations forecasts
- COA Accounting, including new addendum terms
- Delta Pumping Levels and Sharing
- Fishery Coordination Team Recommendations
- Cross Valley Canal supply from the Delta
- Federal/State Agency Coordination Team Decisions
- Sacramento River Temperature Task Group
- Biological Opinion Actions
- State Board Actions
- Allocation Announcements

Weekly briefing will vary in detail depending on issues that may affect the Friant Division or Exchange Contractor water supplies. It is expected that briefings during spring months, when forecasts of CVP water supply allocations are being made, will contain greater detail while other times of the year briefings will contain less detail. Briefings will be in the form of emails to a designated Friant manager and follow up phone conversations or meetings will occur as needed.

The level of effort to prepare the Weekly Outlooks and Monthly Summaries will vary depending on the degree of effort devoted to tracking changing conditions and data, and the time devoted to staying abreast of pending agency-level decisions and regulatory triggers.
FRIANT WATER AUTHORITY

MASTER PROFESSIONAL SERVICE AGREEMENT DATED January 22, 2020

Task Order No.: 2
Date: 1/22/2020

Friant Water Authority
854 N. Harvard Ave.
Lindsay, CA 93247
Attn: Douglas DeFlitch

DESCRIPTION OF SERVICES: See Attached Exhibit A (As-Needed Strategic Assessments)

KEY PERSONNEL: Walter Bourez, Lee Bergfeld, Ron Milligan, Shankar Parvathinathan, Dan Easton, Wes Walker

NOT TO EXCEED COST: Time & Materials to be determined per assignment

FEE SCHEDULE: See Attached Exhibit A

DATE TO COMMENCE SERVICES: January 22, 2020

ESTIMATED COMPLETION DATE: On-going

FRIANT'S REPRESENTATIVE: Douglas DeFlitch, COO & Ian Buck-Macleod

CONSULTANT'S REPRESENTATIVE: Walter Bourez & Ron Milligan

ACCEPTED:
MBK Engineers
By: ___________________________
Walter W. Bourez III
Title: Principal Engineer

ACCEPTED:
FRIANT WATER AUTHORITY
By: ___________________________
Title: COO
Consultant will provide the following services:

As-Needed Strategic Assessments

Preparation of focused assessments on specific issues, as needed. May include attendance at additional meetings and coordination with other water operators and modelers, as appropriate. All work performed under Task 2 will be under specific direction of the Friant management team. MBK will provide rough cost estimate for each work effort requested by the Friant.

Potential assessments could include the following:

- Detailed Evaluation of Monthly Allocation Forecasts across multiple scenarios
- Evaluation of San Joaquin River Settlement Flow Schedules and Accounting of Recovered Water across multiple scenarios
- Focused Risk Analysis of supply to SJRECS, Friant Division contractors and CVCs across multiple scenarios
- Comprehensive Evaluation of COA Addendum on overall annual operations
- Evaluation of Seasonal Water Costs of new Biological Opinions
SUMMARY:
Since 2016, FWA has entered into one-year Conveyance Agreements with Patterson Irrigation District (PID) and Banta-Carbona Irrigation District (BCID) for the recapture and conveyance of Restoration Flows that were released past Sack Dam. A total of 56,496 AF has been recaptured pursuant to the 2016-2019 agreements (832 AF, 18,325 AF, 37,339 AF and 10,500 AF (estimated) in 2016, 2017 and 2018, and 2019 respectively. The reduced recapture in 2019 was due to two key factors: no water could be recaptured during flood flow releases that lasted through mid-July 2019 and BCID did not convey any water due to modifications to its conveyance system. Similar circumstances exist in 2020 whereby Restoration Flows are expected to be released past Sack Dam during the entire 2019 water year. The proposed action would approve new one-year Conveyance Agreements to continue recapture in the lower San Joaquin River.

The mechanism for determining which Friant Division districts will have access to, and bear the responsibility of paying the costs for, the recaptured Restoration Flows is a Repayment Agreement between FWA and the agencies electing to participate and commit to pay the associated costs for such water. The form of such agreement for the 2020 Water Year (identical to the 2019 Water Year version except for details of environmental compliance) is also submitted for Board approval.

BCID and PID Boards of directors have both approved the proposed Conveyance Agreements, including the conveyance rate of $135/AF, subject to some minor modifications. The attached Conveyance Agreements and Repayment Agreement include FWA staff and General Counsel recommended terms and conditions.

Environmental Compliance – Reclamation initially prepared an Environmental Assessment dated July 28, 2016 that addressed the recapture of Restoration Flows at PID and BCID diversion facilities on the San Joaquin River. The Environmental Assessment resulted in a Finding of No Significant Impact (“FONSI”) issued on July 29, 2016. The Recirculation Water was covered in the Recirculation of Recaptured Water Year 2013-2017 SJRRP Flows Environmental Assessment (“Recirculation EA”) which, along with its corresponding Recirculation FONSI, is dated April 2013. Reclamation has determined that at this time none of the conditions underlying the Recirculation EA has changed, and therefore it is relying upon the existing Recirculation EA. In addition, Reclamation expects to issue a new FONSI for recapture by the end of February 2020 for the “2020 Recirculation of Recaptured San Joaquin River Restoration Flows at Patterson Irrigation District and/or Banta-Carbona Irrigation District.”
In addition, in the 2013 Order, the State Water Resources Control Board found that Water Code section 1729 exempts temporary changes involving a transfer of water from the requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000, et seq.). And in its 2019 Order, the State Water Resources Control Board determined, in accordance with Water Code section 1727, that the proposed temporary change would not unreasonably affect fish, wildlife, or other instream beneficial uses. There is currently a petition pending before the State Board for another one year temporary transfer for 2020, and it is expected that the determination will be the same.

As such, the Board may exercise its independent judgment and also determine that the approval of the Temporary Conveyance Agreements and related Repayment Agreement are also exempt from CEQA under Water Code section 1729, as well as the CEQA Guidelines, California Code of Regulations, Title 14, Chapter 3, Section 15060(c)(2) (the activity will not result in a direct or reasonably foreseeable indirect physical change in the environment); and Section 15061(b)(3), because the activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment.

**RECOMMENDED ACTION:**

It is recommended that the Board authorize the COO enter into the Conveyance Agreements with Banta-Carbona and Patterson Irrigation Districts, substantially in conformance with the attached draft agreements. Once the Conveyance Agreements are finalized, FWA may enter into the 2020 Repayment Agreement with participating districts.

**SUGGESTED MOTION:**

A motion that the Board of Directors authorize the COO to (a) execute the new Conveyance Agreements with Banta-Carbona and Patterson Irrigation Districts consistent with the proposed forms of agreement; and (b) execute the 2020 Repayment Agreement.

**BUDGET IMPACT:**

There is no direct impact on the General Member budget. Payments to the conveying districts are made from the O&M Fund and reimbursed by the participating districts within thirty days of being invoiced.

**ATTACHMENTS:**

1. Draft Conveyance Agreement with Banta-Carbona Irrigation District
2. Draft Conveyance Agreement with Patterson Irrigation District
3. Draft 2020 Repayment Agreement
TEMPORARY AGREEMENT FOR CONVEYANCE OF WATER
(San Joaquin River Restoration Flows)

THIS AGREEMENT FOR CONVEYANCE OF WATER ("Agreement") is effective as of March 1, 2020, and is between the Banta-Carbona Irrigation District, a California irrigation district ("BCID") and the Friant Water Authority, a California joint powers authority ("Friant") with reference to the following facts:

A. This Agreement is entered into concurrently by Friant with that certain "REPAYMENT AGREEMENT FOR RECAPTURE OF RESTORATION FLOWS IN LOWER SAN JOAQUIN RIVER (Water Year 2020) between Friant and certain Friant Division long-term contractors ("Repayment Agreement"), the recitals of which are hereby incorporated by reference, including all defined terms.

B. BCID owns facilities capable of diverting water from the San Joaquin River channel and conveying it to the Delta-Mendota Canal (the "DMC").

C. Friant anticipates that it will need conveyance services to recover San Joaquin River Restoration Flows ("SJRRF") during the 2020 water year from the San Joaquin River to the DMC so that the SJRRF can be physically delivered to Friant via south-of-Delta Central Valley Project facilities including, but not limited to, the DMC, O'Neill Pumping Plant, O'Neill Forebay, San Luis Reservoir and San Luis Canal, as well as State Water Project facilities and other third party conveyance facilities, as necessary to deliver water to the Friant service area.

D. BCID is willing or provide such conveyance of SJRRF from the San Joaquin River channel to the DMC on the terms set forth in this Agreement.

THEREFORE, the parties agree as follows:

1. Recitals. The recitals and facts set forth above are true and correct and are incorporated herein by this reference

2. Term. This Agreement is effective upon the date first written above and will terminate on February 29, 2021 ("Term").

3. Conveyance. Subject to the provisions of this Agreement, during the Term, BCID will convey up to 48,000 acre feet of SJRRF for the benefit of Friant or its designees through BCID’s facilities and deliver such SJRRF into the DMC ("Conveyance Goal"). While the Conveyance Goal will be distributed over the 12 month period of the Term, the amount Conveyed in any one month of the Term will not exceed 6,000 acre-feet. For purposes of this Agreement, “Convey,” “Conveyed,” or “Conveyance” of SJRRF includes diversion of that water from the San Joaquin River as well as the conveyance and delivery thereof via BCID facilities into the DMC at MP 20.42-L1RW. No SJRRF will be stored in BCID facilities under this Agreement.

4. Construction. Friant acknowledges that BCID may construct improvements to its water conveyance facilities that may require the facilities to be shut down. As a result, the Conveyance Goal may not be met during the Term due to construction. BCID agrees to undertake reasonable efforts to Convey the full Conveyance Goal annually despite such constraints, but will not be in violation of this Agreement if it is unable to do so.

5. Acquisition of SJRRF. Friant is solely responsible for the actions and costs required to permit SJRRF to be Conveyed by BCID pursuant to this Agreement. Friant is also solely responsible for causing SJRRF to arrive at BCID’s diversion facilities on the San Joaquin River and for any and all costs and arrangements required in order for that water to thereafter be placed into and Conveyed through the DMC.
6. **Priorities.** BCID’s obligations to use its facilities for the Conveyance of SJRRF under this Agreement will at all times be subordinate in priority to: (1) BCID’s use of those facilities, and (2) any disclosed pre-existing written agreements or pre-approved arrangements for water delivery to third parties as noted in Exhibit A. Subject to the foregoing, BCID may utilize its facilities for arrangements with other parties, provided that BCID will not voluntarily engage in any subsequent activities or enter into any other arrangements that would interfere with its ability to perform under this Agreement or that would grant other parties a right to utilize BCID’s facilities senior or equal to Friant’s rights under this Agreement.

7. **Scheduling.**

   a. BCID and Friant will work cooperatively to schedule the Conveyance of SJRRF by BCID under this Agreement. Friant understands that there may be times when capacity to Convey SJRRF will be unavailable or unknown in advance. The parties acknowledge that it may not be feasible for Friant and its designees to identify or predict specific quantities of SJRFF available at BCID’s diversion facilities on the San Joaquin River during periods when Conveyance capacity is available for SJRRF in BCID’s facilities. Friant will make reasonable efforts to provide notice to BCID regarding the amount of SJRFF expected to be available at BCID’s diversion facilities on the San Joaquin River during available Conveyance periods, but Friant will not be in default under this Agreement to the extent such SJRRF are not so available. Friant will be liable for unused capacity reserved for Conveyance of SJRFF pursuant to Section 12 unless it provides notice at least 20 days in advance of the first day of any month that the previously reserved capacity is no longer needed; provided, however, that should Friant fail to provide the requisite advance notice that it no longer needs the previously specified capacity for a particular month, it will only be obligated to pay for the reserved but unused capacity that is greater than 10% of the amount reserved.

   b. At least 60 days before the first day of each month during the Term, Friant will submit, or cause to be submitted, a schedule of SJRFF anticipated to be available at the BCID diversion facilities, and BCID will use reasonable efforts to Convey the maximum amount of available SJRFF, subject to its diversion capacity and applicable priorities described in this Agreement. If Friant does not provide the notice required by this subsection, BCID will not be required to provide any Conveyance under this Agreement in that month, and will be free to utilize its available capacity in that month to provide wheeling services to others. Friant and BCID will work cooperatively each month to reconcile the amount of SJRFF water available for Conveyance, the amount of SJRFF diverted, and the amount of SJRFF discharged into the DMC for the purpose of reporting to United States Bureau of Reclamation (“Reclamation”) and the San Luis and Delta-Mendota Water Authority (“SLDMWA”).

8. **Constraints on Facilities.** BCID’s obligations under this Agreement are subject and subordinate to the following conditions:

   a. the terms and conditions of the Approvals (as defined below);

   b. applicable federal and state laws now in existence or adopted during the Term of this Agreement, and as modified from time to time, affecting BCID’s rights or obligations or ability to divert from the San Joaquin River; or

   c. low flow in the San Joaquin River or other adverse hydrologic conditions that make it impossible or impracticable for BCID to pump SJRFF from the San Joaquin River, which conditions shall be deemed a force majeure governed by Section 10.

9. **Regulatory Requirements Beyond a Party’s Control.** SJRFF to be Conveyed under this Agreement may be reduced due to failure of facilities; intervening acts, including litigation and stream adjudication brought by third parties, or actions of any state or federal agency exercising jurisdiction or
claiming an interest and/or right to reduce and/or modify operations of BCID or other relevant facilities;
and any action, legislation, ruling or determination adverse to a party affecting the Agreement and
beyond the reasonable control of such party. An affected party will make a good faith effort to oppose
such reductions, but the affected party will not be liable for reductions of supply due to such causes.

10. Force Majeure. If by reason of force majeure (defined below) either party is rendered
unable wholly or in part to carry out its obligations under this Agreement, then such party will give notice
and full particulars of such force majeure in writing to the other party within a reasonable time after
occurrence of the event or cause relied on, and such party’s obligation, so far as it is affected by such
force majeure, shall be suspended during the continuance of the inability then claimed, but for no longer
period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch.
The term “Force Majeure” means, but is not limited to, an event not the fault of, and beyond the
reasonable control of, either party which makes it impossible or impracticable for that party to perform
obligations imposed on it by this Agreement, by virtue of its effect on physical facilities and their
operation or employees essential to such performance. Force Majeure Events include but are not limited
to (1) an “act of God” such as an earthquake, flood, earth movement, lighting, fire, storms, washouts,
droughts, landslides, or similar catastrophic event, (2) an act of the public enemy, terrorism, sabotage,
vandalism, contamination, civil disturbance of similar event, (3) a strike, work stoppage, lockout, civil or
industrial disturbance or similar event, (4) delays in construction caused by negligence or breach of
contract by a third party or inability to obtain essential materials after diligent and timely efforts, (5)
breakage or accidents to machinery, buildings, equipment, pipelines or canals, partial or entire failure
of water supply, or (6) an order or regulation issued by a federal or state regulatory agency or a judgment or
order entered by a federal or state court.

11. Curtailment of Conveyance. BCID has the right to temporarily discontinue or reduce
Conveyances under this Agreement (1) as reasonably required to perform scheduled routine or
emergency maintenance, and (2) as needed to perform any system modification. BCID will give Friant
reasonable notice in advance of such temporary discontinuance or reduction, except in case of
emergency, in which case no notice need be given. Any repairs, maintenance, replacement, or other
work that will necessitate taking all or a portion of the Conveyance system out of operation will, to the
extent practical, be undertaken between November and February, inclusive. Upon resumption of service
after such reduction or curtailment, BCID will attempt to convey the quantity of SJR Restoration Flows
that would have been furnished hereunder in the absence of such discontinuance or reduction.

12. Conveyance Fee. As payment for Conveyance of SJRRF under this Agreement, Friant will
pay BCID a total fee of One Hundred Thirty-Five Dollars ($135.00) per acre foot of SJRRF so conveyed,
measured by BCID upon turnout at the DMC, payable within thirty (30) days after the last day of the
calendar month during which such SJRRF are Conveyed. Such fee includes without limitation all
administrative, operations, maintenance, Conveyance, energy and other costs incurred or imposed by
BCID for conveying SJRRF under this Agreement. By the tenth (10th) day of each calendar month, BCID
will provide Friant with an invoice indicating the amount of SJRRF Conveyed under this Agreement
during the immediately preceding calendar month. Except as otherwise provided in this Agreement,
should Friant provide notice pursuant to Section 7 that it intends to Convey water under this Agreement
in any given month, and such water is available for Conveyance to BCID, Friant will be required to make
payment to BCID pursuant to this Agreement to the extent the capacity requested is not used by Friant in
that month unless otherwise utilized in that month by BCID to Convey other water.

13. Losses. No losses will be imposed by BCID on SJRRF Conveyed under this Agreement.

14. Approvals. The parties acknowledge that, in order for SJRRF to be acquired by Friant
and Conveyed by BCID, certain regulatory approvals and consents (the “Approvals”) may be required,
including without limitation (i) approvals by the California State Water Resources Control Board and (ii)
approvals and issuance of a conveyance agreement by the United States Department of the Interior
and/or San Luis and Delta Mendota Water Authority, as appropriate, for Conveyance of SJRRF water in the DMC. The parties will diligently and cooperatively pursue all Approvals and will each dedicate at no charge to the other such staff as is reasonably necessary to obtain them. The out of pocket expenses for obtaining the Approvals will be borne by Friant. Each party will execute such other documents as may be necessary in order to permit the Conveyance of SJRRF under this Agreement. Receipt of all Approvals is a condition precedent to the parties’ obligations hereunder other than the parties’ obligations hereunder other than the parties’ obligations under this Section 14 and Section 16.

15. No Transfer or Assignment. This Agreement may not be assigned in whole or in part by Friant without the prior written consent of the BCID, which may be withheld by BCID’s sole and absolute discretion. Notwithstanding the foregoing, Friant may permit other designated agencies to utilize all or any portion of the BCID Conveyance capacity made available to Friant under this Agreement by providing written notice to BCID that it has so designated such other agency(ies). Friant will remain liable for all payments and obligations required of Friant under this Agreement notwithstanding such designation, and all water Conveyed by BCID hereunder for Friant’ designees will be deemed Conveyed for Friant hereunder.

16. Environmental Compliance. Compliance with the California Environmental Quality Act (“CEQA”) and all other applicable environmental laws with respect to the actions contemplated by this Agreement is a condition precedent to the parties’ obligations hereunder other than the parties’ obligations under this Section 16 and Section 14. The parties acknowledge and agree that to their best knowledge, compliance with CEQA has been satisfied based on the actions described in the recitals to the Repayment Agreement. Nevertheless, if additional CEQA review and compliance is determined to be required, each party agrees to promptly prepare all appropriate environmental documents, if any are required, for it to undertake the actions contemplated in this Agreement and will dedicate at no charge to the other such staff as is reasonably necessary in connection therewith. The parties will cooperate to diligently complete, or cause the completion of, all environmental review required in order to implement this Agreement, and will use reasonable efforts to reduce any overlap in analyzing, mitigating, or studying environmental impacts associated with the actions proposed in this Agreement. All out of pocket costs of compliance with CEQA and other environmental laws will be borne by Friant. Notwithstanding any other provision of this Agreement, no action will be taken to effect the actions contemplated by this Agreement, and no other action will be taken that irrevocably commits any material resources of any party, until all required environmental review is completed and all parties have independently made all findings required by CEQA and other applicable environmental laws. If, upon completion of such environmental review, a party finds one or more significant, unmitigated environmental impacts resulting from the actions contemplated by this Agreement and cannot make a finding that the benefits of the proposed project outweigh the impact or impacts, or that the impacts can be mitigated to a level below significance, then this Agreement will terminate without further obligation or liability of any party. Neither the execution of this Agreement, nor any steps taken to implement this Agreement, will be taken into account in determining whether mitigating or avoiding any significant impact is feasible. Nothing in this Agreement pre-commits either party to any project approval.

17. Attorneys’ Fees. In the event of any action between BCID and Friant seeking enforcement or interpretation of any of the provisions of this Agreement, the prevailing party in such action will be awarded, in addition to damages, its reasonable costs and expenses, including without limitation actual out of pocket costs and attorneys’ fees, all as ordered by the court. In the event a third party challenges this Agreement, whether judicially or otherwise, BCID and Friant will assist one another without cost in connection with such challenge by providing information and witnesses as reasonably requested. Any costs of defending any such challenge, including out-of-pocket costs and attorneys’ fees, will be borne by Friant except to the extent such challenge results from the gross negligence or willful misconduct of BCID; provided, that BCID will have the exclusive right to choose counsel and control such defense after consulting with Friant with respect to BCID’s choice of counsel and defense strategy.
18. **Representations and Warranties.** BCID and Friant each represent and warrant to the other that (i) it has the authority to enter into this Agreement and to perform as set forth herein without any court approval or consents from third parties except the Approvals, (ii) the execution of this Agreement and performance of its obligations hereunder will not violate any agreement, option, covenant, condition, obligation, court order or undertaking affecting it, nor to the best of its knowledge will it violate any law, ordinance, statute, order or regulation, and (iii) to the best of its knowledge, there is no suit, action or arbitration, or legal, administrative, or other proceeding that affects the ability of such party to perform hereunder.

19. **Water Quality.** BCID makes no warranty or representations as to the quality or fitness for use of SJRRF Conveyed to Friant; provided, that BCID will not voluntarily or knowingly cause the deposit or discharge of any substance into water being Conveyed for Friant that would preclude the ability to discharge such water into the DMC. Friant will be responsible for all necessary measures at its own expense for the testing, treatment, and other steps required for the intended uses of the SJRRF.

20. **Regulatory and Litigation Costs.** Friant will defend its own interests, and will defend, indemnify and hold harmless, BCID in any litigation or regulatory action challenging the validity of the SJRRF or Friant’s ability to transfer or Convey said water. The parties will each defend their own interests in litigation or regulatory action involving this Agreement, including environmental compliance and use of the BCID Facilities.

21. **Indemnification.** Each party agrees to protect, defend, indemnify, and hold harmless the other party, its officers, agents, servants, employees, and consultants from and against any and all losses, claims, liens, demands and causes of action of every kind and character on account of personal injuries or death or damages to property and, without limitation by enumeration, all other claims or demands of every character occurring or in any way incident to, connected with, or arising directly or indirectly out of the performance or non-performance by the indemnifying party hereunder.

22. **Specific Performance.** The parties acknowledge that Conveyance of SJRRF is unique and of substantial value Friant, and that the failure of BCID to perform under this Agreement may not be readily compensable in monetary damages. Therefore, in addition to any other remedies available to Friant at law or in equity, in the event of a breach or threatened breach of this Agreement by BCID, Friant will be entitled to specific performance of this Agreement. Further, BCID acknowledges that Friant will make substantial investments in SJRFF in reliance on this Agreement that could be lost if BCID fails to perform hereunder.

23. **Measurement.** Necessary measurement of water to permit compliance with this Agreement will be taken by BCID by recording measuring devices selected, installed and maintained by BCID and subject to inspection at all times by Friant. BCID will maintain records of the quantities of water measured by such devices and will make such records available to Friant upon request.

24. **Notices.** All notices under this Agreement will be effective (i) when personally delivered to BCID or Friant, as the case may be, (ii) when sent by electronic mail on a business day between the hours of 8 a.m. and 5 p.m. (with written confirmation of transmission) to BCID or Friant, as the case may be, at the numbers set forth below, or (iii) three business days after deposit in the United States mail, registered or certified, postage fully prepaid and addressed to the respective parties as follows:

To BCID: 3514 West Lehman Road Tracy, CA 95304-9336 Attention: General Manager Email: bcid@inreach.com Telephone No.: (209) 835-4670
or such other address as the parties may from time to time designate in writing. As a matter of convenience, however, communications between BCID and Friant will, to the extent feasible, be conducted orally by telephone or in person, and/or through the parties’ respective counsel, with such communications to be confirmed and made effective in writing as set forth above; provided, no such oral notice or communication will be effective unless so confirmed in writing.

25. **Further Action.** The parties agree to perform all further acts, and to execute, acknowledge, and deliver any documents that may be reasonably necessary, appropriate or desirable to carry out the purposes of this Agreement. BCID and Friant acknowledge that the actions contemplated by this Agreement will require regular consultation and coordination and the parties will in good faith engage in all such consultation and coordination necessary or appropriate to facilitate the arrangements contemplated by this Agreement.

26. **Third Party Beneficiaries.** This Agreement does not create, and will not be construed to create, any rights enforceable by any person, partnership, corporation, joint venture, limited liability company or other form of organization or association of any kind that is not a party to this Agreement.

27. **Binding Effect.** This Agreement is binding upon and enforceable against each of the parties. This Agreement will be governed by and construed in accordance with the laws of the State of California and may be signed in any number of counterparts. Facsimile and electronic signatures will be binding.

28. **Interpretation.** This Agreement will be interpreted as if it had been jointly drafted by both parties. Therefore, the normal rule of construction that ambiguities are construed against the drafted is hereby waived.

29. **Waiver.** Any waiver of the provisions of this Agreement by the party entitled to the benefits thereof as to any instance must be in writing and will in no event be deemed a waiver of the same provision with respect to any other instance or a waiver of any other provision of this Agreement.

30. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof. All prior agreements with respect to that subject matter, whether verbal, written or implied, are hereby superseded in their entirety by this Agreement and are of no further force or effect. Amendments to this Agreement will be effective only if in writing, and then only when signed by the authorized representatives of the respective parties.

31. **Severability.** If any provision of this Agreement is determined by a court of competent jurisdiction to be void or unenforceable, that provision will be deemed automatically reformed to be enforceable to the maximum extent legally permissible, and the balance of this Agreement will be unaffected.

[Signatures on the following page.]
IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

BANTA-CARBONA IRRIGATION DISTRICT

By: ____________________________
    David Weisenberger, General Manager

FRIANT WATER AUTHORITY

By: ____________________________
    Douglas DeFlitch, Chief Operating Officer
EXHIBIT A
PRE-EXISTING COMMITMENTS FOR USE OF CONVEYANCE CAPACITY

1. Warren Act 14-WC-20-4545 for 6,000 AF of BCID’s pre-1914 Water Rights water, expiring on 12/31/2019

2. Warren Act 14-WC-20-4787 for 10,000 AF of BCID’s pre-1914 Water Rights water, expiring on 8/31/2020
TEMPORARY AGREEMENT FOR CONVEYANCE OF WATER
(San Joaquin River Restoration Flows)

THIS AGREEMENT FOR CONVEYANCE OF WATER ("Agreement") is effective as of March 1, 2020, and is between the Patterson Irrigation District, a California irrigation district ("PID") and the Friant Water Authority, a California joint powers authority ("Friant") with reference to the following facts:

A. This Agreement is entered into concurrently by Friant with that certain “REPAYMENT AGREEMENT FOR RECAPTURE OF RESTORATION FLOWS IN LOWER SAN JOAQUIN RIVER (Water Year 2020) between Friant and certain Friant Division long-term contractors ("Repayment Agreement"), the recitals of which are hereby incorporated by reference, including all defined terms.

B. PID owns facilities capable of diverting water from the San Joaquin River channel and conveying it to the Delta-Mendota Canal (the "DMC").

C. Friant anticipates that it will need conveyance services to recover San Joaquin River Restoration Flows ("SJRRF") during the 2020 water year from the San Joaquin River to the DMC so that the SJRRF can be physically delivered to Friant via south-of-Delta Central Valley Project facilities including, but not limited to, the DMC, O’Neill Pumping Plant, O’Neill Forebay, San Luis Reservoir and San Luis Canal, as well as State Water Project facilities and other third party conveyance facilities, as necessary to deliver water to the Friant service area.

D. PID is willing or provide such conveyance of SJRRF from the San Joaquin River channel to the DMC on the terms set forth in this Agreement.

THEREFORE, the parties agree as follows:

1. Recitals. The recitals and facts set forth above are true and correct and are incorporated herein by this reference.

2. Term. This Agreement is effective upon the date first written above and will terminate on February 28, 2021 ("Term").

3. Conveyance. Subject to the provisions of this Agreement, during the Term, PID will convey up to 29,000 acre feet of SJRRF for the benefit of Friant or its designees through PID’s facilities and deliver such SJRRF into the DMC ("Conveyance Goal"). While the Conveyance Goal will be distributed over the 12 month period of the Term, the amount Conveyed in any one month of the Term will not exceed 29,000 acre-feet. For purposes of this Agreement, “Convey,” “Conveyed,” or “Conveyance” of SJRRF includes diversion of that water from the San Joaquin River as well as the conveyance and delivery thereof via PID facilities into the DMC at MP 42.53-L1RW. No SJRRF will be stored in PID facilities under this Agreement.

4. Construction. Friant acknowledges that PID may construct improvements to its water conveyance facilities that may require the facilities to be shut down. As a result, the Conveyance Goal may not be met during the Term due to construction. PID agrees to undertake reasonable efforts to Convey the full Conveyance Goal annually despite such constraints, but will not be in violation of this Agreement if it is unable to do so.

5. Acquisition of SJRRF. Friant is solely responsible for the actions and costs required to permit SJRRF to be Conveyed by PID pursuant to this Agreement. Friant is also solely responsible for causing SJRRF to arrive at PID’s diversion facilities on the San Joaquin River and for any and all costs and arrangements required in order for that water to thereafter be placed into and Conveyed through the DMC.
6. **Priorities.** PID’s obligations to use its facilities for the Conveyance of SJRRF under this Agreement will at all times be subordinate in priority to: (1) PID’s use of those facilities, and (2) any disclosed pre-existing written agreements or pre-approved arrangements for water delivery to third parties as noted in Exhibit A. Subject to the foregoing, PID may utilize its facilities for arrangements with other parties, provided that PID will not voluntarily engage in any subsequent activities or enter into any arrangements that would interfere with its ability to perform under this Agreement or that would grant other parties a right to utilize PID’s facilities senior or equal to Friant’s rights under this Agreement.

7. **Scheduling.**

   a. PID and Friant will work cooperatively to schedule the Conveyance of SJRRF by PID under this Agreement. Friant understands that there may be times when capacity to Convey SJRRF will be unavailable or unknown in advance. The parties acknowledge that it may not be feasible for Friant and its designees to identify or predict specific quantities of SJRRF available at PID’s diversion facilities on the San Joaquin River during periods when Conveyance capacity is available for SJRRF in PID’s facilities. Friant will make reasonable efforts to provide notice to PID regarding the amount of SJRRF expected to be available at PID’s diversion facilities on the San Joaquin River during available Conveyance periods, but Friant will not be in default under this Agreement to the extent such SJRRF are not so available. Friant will be liable for unused capacity reserved for Conveyance of SJRRF pursuant to Section 12 unless it provides notice at least 20 days in advance of the first day of any month that the previously reserved capacity is no longer needed; provided, however, that should Friant fail to provide the requisite advance notice that it no longer needs the previously specified capacity for a particular month, it will only be obligated to pay for the reserved but unused capacity that is greater than 10% of the amount reserved.

   b. At least 60 days before the first day of each month during the Term, Friant will submit, or cause to be submitted, a schedule of SJRRF anticipated to be available at the PID diversion facilities, and PID will use reasonable efforts to Convey the maximum amount of available SJRRF, subject to its diversion capacity and applicable priorities described in this Agreement. If Friant does not provide the notice required by this subsection, PID will not be required to provide any Conveyance under this Agreement in that month, and will be free to utilize its available capacity in that month to provide wheeling services to others. Friant and PID will work cooperatively each month to reconcile the amount of SJRRF water available for Conveyance, the amount of SJRRF diverted, and the amount of SJRRF discharged into the DMC for the purpose of reporting to United States Bureau of Reclamation (“Reclamation”) and the San Luis and Delta-Mendota Water Authority (“SLDMWA”).

8. **Constraints on Facilities.** PID’s obligations under this Agreement are subject and subordinate to the following conditions:

   a. the terms and conditions of the Approvals (as defined below);

   b. applicable federal and state laws now in existence or adopted during the Term of this Agreement, and as modified from time to time, affecting PID’s rights or obligations or ability to divert from the San Joaquin River; or

   c. low flow in the San Joaquin River or other adverse hydrologic conditions that make it impossible or impracticable for PID to pump SJRRF from the San Joaquin River, which conditions shall be deemed a force majeure governed by Section 10.

9. **Regulatory Requirements Beyond a Party’s Control.** SJRRF to be Conveyed under this Agreement may be reduced due to failure of facilities; intervening acts, including litigation and stream adjudication brought by third parties, or actions of any state or federal agency exercising jurisdiction or claiming an interest and/or right to reduce and/or modify operations of PID or other relevant facilities; and
any action, legislation, ruling or determination adverse to a party affecting the Agreement and beyond the reasonable control of such party. An affected party will make a good faith effort to oppose such reductions, but the affected party will not be liable for reductions of supply due to such causes.

10. **Force Majeure.** If by reason of force majeure (defined below) either party is rendered unable wholly or in part to carry out its obligations under this Agreement, then such party will give notice and full particulars of such force majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied on, and such party’s obligation, so far as it is affected by such force majeure, shall be suspended during the continuance of the inability then claimed, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term “**Force Majeure**” means, but is not limited to, an event not the fault of, and beyond the reasonable control of, either party which makes it impossible or impracticable for that party to perform obligations imposed on it by this Agreement, by virtue of its effect on physical facilities and their operation or employees essential to such performance. Force Majeure Events include but are not limited to (1) an “act of God” such as an earthquake, flood, earth movement, lightning, fire, storms, washouts, droughts, landslides, or similar catastrophic event, (2) an act of the public enemy, terrorism, sabotage, vandalism, contamination, civil disturbance of similar event, (3) a strike, work stoppage, lockout, civil or industrial disturbance or similar event, (4) delays in construction caused by negligence or breach of contract by a third party or inability to obtain essential materials after diligent and timely efforts, (5) breakage or accidents to machinery, buildings, equipment, pipelines or canals, partial or entire failure of water supply, or (6) an order or regulation issued by a federal or state regulatory agency or a judgment or order entered by a federal or state court.

11. **Curtailment of Conveyance.** PID has the right to temporarily discontinue or reduce Conveyances under this Agreement (1) as reasonably required to perform scheduled routine or emergency maintenance, and (2) as needed to perform any system modification. PID will give Friant reasonable notice in advance of such temporary discontinuance or reduction, except in case of emergency, in which case no notice need be given. Any repairs, maintenance, replacement, or other work that will necessitate taking all or a portion of the Conveyance system out of operation will, to the extent practical, be undertaken between November and February, inclusive. Upon resumption of service after such reduction or curtailment, PID will attempt to convey the quantity of SJR Restoration Flows that would have been furnished hereunder in the absence of such discontinuance or reduction.

12. **Conveyance Fee.** As payment for Conveyance of SJRRF under this Agreement, Friant will pay PID a total fee of One Hundred Thirty-Five Dollars ($135.00) per acre foot of SJRRF so conveyed, measured by PID upon turnout at the DMC, payable within thirty (30) days after the last day of the calendar month during which such SJRRF are Conveyed. Such fee includes without limitation all administrative, operations, maintenance, Conveyance, energy and other costs incurred or imposed by PID for conveying SJRRF under this Agreement. By the tenth (10th) day of each calendar month, PID will provide Friant with an invoice indicating the amount of SJRRF Conveyed under this Agreement during the immediately preceding calendar month. Except as otherwise provided in this Agreement, should Friant provide notice pursuant to Section 7 that it intends to Convey water under this Agreement in any given month, and such water is available for Conveyance to PID, Friant will be required to make payment to PID pursuant to this Agreement to the extent the capacity requested is not used by Friant in that month unless otherwise utilized in that month by PID to Convey other water.

13. **Losses.** No losses will be imposed by PID on SJRRF Conveyed under this Agreement.

14. **Approvals.** The parties acknowledge that, in order for SJRRF to be acquired by Friant and Conveyed by PID, certain regulatory approvals and consents (the “**Approvals**”) may be required, including without limitation (i) approvals by the California State Water Resources Control Board and (ii) approvals and issuance of a conveyance agreement by the United States Department of the Interior and/or San Luis and Delta Mendota Water Authority, as appropriate, for Conveyance of SJRRF water in
the DMC. The parties will diligently and cooperatively pursue all Approvals and will each dedicate at no charge to the other such staff as is reasonably necessary to obtain them. The out of pocket expenses for obtaining the Approvals will be borne by Friant. Each party will execute such other documents as may be necessary in order to permit the Conveyance of SJRRF under this Agreement. Receipt of all Approvals is a condition precedent to the parties’ obligations hereunder other than the parties’ obligations hereunder other than the parties’ obligations under this Section 14 and Section 16.

15. No Transfer or Assignment. This Agreement may not be assigned in whole or in part by Friant without the prior written consent of the PID, which may be withheld in PID’s sole and absolute discretion. Notwithstanding the foregoing, Friant may permit other designated agencies to utilize all or any portion of the PID Conveyance capacity made available to Friant under this Agreement by providing written notice to PID that it has so designated such other agency(ies). Friant will remain liable for all payments and obligations required of Friant under this Agreement notwithstanding such designation, and all water Conveyed by PID hereunder for Friant’ designees will be deemed Conveyed for Friant hereunder.

16. Environmental Compliance. Compliance with the California Environmental Quality Act (“CEQA”) and all other applicable environmental laws with respect to the actions contemplated by this Agreement is a condition precedent to the parties’ obligations hereunder other than the parties’ obligations under this Section 16 and Section 14. The parties acknowledge and agree that to their best knowledge, compliance with CEQA has been satisfied based on the actions described in the recitals to the Repayment Agreement. Nevertheless, if additional CEQA review and compliance is determined to be required, each party agrees to promptly prepare all appropriate environmental documents, if any are required, for it to undertake the actions contemplated in this Agreement and will dedicate at no charge to the other such staff as is reasonably necessary in connection therewith. The parties will cooperate to diligently complete, or cause the completion of, all environmental review required in order to implement this Agreement, and will use reasonable efforts to reduce any overlap in analyzing, mitigating, or studying environmental impacts associated with the actions proposed in this Agreement. All out of pocket costs of compliance with CEQA and other environmental laws will be borne by Friant. Notwithstanding any other provision of this Agreement, no action will be taken to effect the actions contemplated by this Agreement, and no other action will be taken that irrevocably commits any material resources of any party, until all required environmental review is completed and all parties have independently made all findings required by CEQA and other applicable environmental laws. If, upon completion of such environmental review, a party finds one or more significant, unmitigated environmental impacts resulting from the actions contemplated by this Agreement and cannot make a finding that the benefits of the proposed project outweigh the impact or impacts, or that the impacts can be mitigated to a level below significance, then this Agreement will terminate without further obligation or liability of any party. Neither the execution of this Agreement, nor any steps taken to implement this Agreement, will be taken into account in determining whether mitigating or avoiding any significant impact is feasible. Nothing in this Agreement pre-commits either party to any project approval.

17. Attorneys’ Fees. In the event of any action between PID and Friant seeking enforcement or interpretation of any of the provisions of this Agreement, the prevailing party in such action will be awarded, in addition to damages, its reasonable costs and expenses, including without limitation actual out of pocket costs and attorneys’ fees, all as ordered by the court. In the event a third party challenges this Agreement, whether judicially or otherwise, PID and Friant will assist one another without cost in connection with such challenge by providing information and witnesses as reasonably requested. Any costs of defending any such challenge, including out-of-pocket costs and attorneys’ fees, will be borne by Friant except to the extent such challenge results from the gross negligence or willful misconduct of PID; provided, that PID will have the exclusive right to choose counsel and control such defense after consulting with Friant with respect to PID’s choice of counsel and defense strategy.
18. **Representations and Warranties.** PID and Friant each represent and warrant to the other that (i) it has the authority to enter into this Agreement and to perform as set forth herein without any court approval or consents from third parties except the Approvals, (ii) the execution of this Agreement and performance of its obligations hereunder will not violate any agreement, option, covenant, condition, obligation, court order or undertaking affecting it, nor to the best of its knowledge will it violate any law, ordinance, statute, order or regulation, and (iii) to the best of its knowledge, there is no suit, action or arbitration, or legal, administrative, or other proceeding that affects the ability of such party to perform hereunder.

19. **Water Quality.** PID makes no warranty or representations as to the quality or fitness for use of SJRRF Conveyed to Friant; provided, that PID will not voluntarily or knowingly cause the deposit or discharge of any substance into water being Conveyed for Friant that would preclude the ability to discharge such water into the DMC. Friant will be responsible for all necessary measures at its own expense for the testing, treatment, and other steps required for the intended uses of the SJRRF.

20. **Regulatory and Litigation Costs.** Friant will defend its own interests, and will defend, indemnify and hold harmless, PID in any litigation or regulatory action challenging the validity of the SJRRF or Friant's ability to transfer or Convey said water. The parties will each defend their own interests in litigation or regulatory action involving this Agreement, including environmental compliance and use of the PID Facilities.

21. **Indemnification.** Each party agrees to protect, defend, indemnify, and hold harmless the other party, its officers, agents, servants, employees, and consultants from and against any and all losses, claims, liens, demands and causes of action of every kind and character on account of personal injuries or death or damages to property and, without limitation by enumeration, all other claims or demands of every character occurring or in any way incident to, connected with, or arising directly or indirectly out of the performance or non-performance by the indemnifying party hereunder.

22. **Specific Performance.** The parties acknowledge that Conveyance of SJRRF is unique and of substantial value to Friant, and that the failure of PID to perform under this Agreement may not be readily compensable in monetary damages. Therefore, in addition to any other remedies available to Friant at law or in equity, in the event of a breach or threatened breach of this Agreement by PID, Friant will be entitled to specific performance of this Agreement. Further, PID acknowledges that Friant will make substantial investments in SJRFF in reliance on this Agreement that could be lost if PID fails to perform hereunder.

23. **Measurement.** Necessary measurement of water to permit compliance with this Agreement will be taken by PID by recording measuring devices selected, installed and maintained by PID and subject to inspection at all times by Friant. PID will maintain records of the quantities of water measured by such devices and will make such records available to Friant upon request.

24. **Notices.** All notices under this Agreement will be effective (i) when personally delivered to PID or Friant, as the case may be, (ii) when sent by electronic mail on a business day between the hours of 8 a.m. and 5 p.m. (with written confirmation of transmission) to PID or Friant, as the case may be, at the numbers set forth below, or (iii) three business days after deposit in the United States mail, registered or certified, postage fully prepaid and addressed to the respective parties as follows:

To PID:  
Post Office Box 685  
Patterson, CA  95363  
Attention: General Manager  
Email: vlucchesi@pattersonid.org  
Telephone No.: (209) 892.6233
or such other address as the parties may from time to time designate in writing. As a matter of convenience, however, communications between PID and Friant will, to the extent feasible, be conducted orally by telephone or in person, and/or through the parties’ respective counsel, with such communications to be confirmed and made effective in writing as set forth above; provided, no such oral notice or communication will be effective unless so confirmed in writing.

25. **Further Action.** The parties agree to perform all further acts, and to execute, acknowledge, and deliver any documents that may be reasonably necessary, appropriate or desirable to carry out the purposes of this Agreement. PID and Friant acknowledge that the actions contemplated by this Agreement will require regular consultation and coordination and the parties will in good faith engage in all such consultation and coordination necessary or appropriate to facilitate the arrangements contemplated by this Agreement.

26. **Third Party Beneficiaries.** This Agreement does not create, and will not be construed to create, any rights enforceable by any person, partnership, corporation, joint venture, limited liability company or other form of organization or association of any kind that is not a party to this Agreement.

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28. **Interpretation.** This Agreement will be interpreted as if it had been jointly drafted by both parties. Therefore, the normal rule of construction that ambiguities are construed against the drafted is hereby waived.

29. **Waiver.** Any waiver of the provisions of this Agreement by the party entitled to the benefits thereof as to any instance must be in writing and will in no event be deemed a waiver of the same provision with respect to any other instance or a waiver of any other provision of this Agreement.

30. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof. All prior agreements with respect to that subject matter, whether verbal, written or implied, are hereby superseded in their entirety by this Agreement and are of no further force or effect. Amendments to this Agreement will be effective only if in writing, and then only when signed by the authorized representatives of the respective parties.

31. **Severability.** If any provision of this Agreement is determined by a court of competent jurisdiction to be void or unenforceable, that provision will be deemed automatically reformed to be enforceable to the maximum extent legally permissible, and the balance of this Agreement will be unaffected.

[Signatures on the following page.]
IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first above written.

PATTERSON IRRIGATION DISTRICT

By: ___________________________________
   Vincent Lucchesi, General Manager

FRIANT WATER AUTHORITY

By: ___________________________________
   Douglas DeFlitch, Chief Operating Officer
EXHIBIT A
PRE-EXISTING COMMITMENTS FOR USE OF CONVEYANCE CAPACITY

1. Warren Act 14-WC-20-5559 for 6,000 AF of PID’s pre-1914 Water Rights water, expiring on 12/31/2024

2. Warren Act 14-WC-20-4787 for 10,000 AF of PID’s pre-1914 Water Rights water, expiring on 8/31/2020. To be renewed under a new contract number and extending into 2025.
This REPAYMENT AGREEMENT (“Agreement”) is effective as of March 1, 2020, and is by and between the FRIANT WATER AUTHORITY (hereinafter “FWA”), and, as applicable, ARVIN-EDISON WATER STORAGE DISTRICT, CHOWCHILLA WATER DISTRICT, CITY OF FRESNO, DELANO-EARLIMART IRRIGATION DISTRICT, EXETER IRRIGATION DISTRICT, FRESNO IRRIGATION DISTRICT, FRESNO COUNTY WATER WORKS DISTRICT #18, GARFIELD WATER DISTRICT, GRAVELLY FORD WATER DISTRICT, HILLS VALLEY WATER DISTRICT, INTERNATIONAL WATER DISTRICT, IVANHOE IRRIGATION DISTRICT, KAWEAH DELTA WATER CONSERVATION DISTRICT, KERN-TULARE WATER DISTRICT, LEWIS CREEK WATER DISTRICT, LINDMORE IRRIGATION DISTRICT, LINDSAY-STRAHMORE IRRIGATION DISTRICT, CITY OF LINDSAY, LOWER TULE RIVER IRRIGATION DISTRICT, MADERA IRRIGATION DISTRICT, CITY OF ORANGE COVE, ORANGE COVE IRRIGATION DISTRICT, PORTERVILLE IRRIGATION DISTRICT, SAUCELITO IRRIGATION DISTRICT, SHAFTER-WASCO IRRIGATION DISTRICT, SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT, STONE CORRAL IRRIGATION DISTRICT, TEAPOT DOME WATER DISTRICT, TERRA BELLA IRRIGATION DISTRICT, TRI-VALLEY WATER DISTRICT AND TULARE IRRIGATION DISTRICT (hereinafter individually “Reimbursing District” or collectively “Reimbursing Districts”).

RECITALS

A. The September 2006 Stipulation of Settlement (“Settlement”) in the case of NRDC, et al. v. KIRK RODGERS, et al., included a goal to reduce or avoid adverse water supply impacts on members of FWA, and others, as a result of the Settlement.

B. FWA and other Friant Division Contractors are parties to the Settlement.

C. The Settlement identifies the need for a plan for recirculation, recapture, reuse, exchange or transfer of water released from Friant Dam into the San Joaquin River.

D. As part of its ongoing activities to comply with the Settlement, the U.S. Bureau of Reclamation (“Reclamation”) proposed that FWA, in coordination with other organizations representing the interests of all Friant Division Long Term Contractors that may choose to become Reimbursing Districts, enter into temporary agreements with Patterson Irrigation District (“PID”) and Banta-Carbona Irrigation District (“BCID”) and hereinafter collectively with PID as “Conveying Districts”) for the purpose of...
recapturing “Restoration Flows,” as defined in Section 13(a) of the Settlement, downstream of the Merced River confluence pursuant to the terms of the Settlement and conveying such water to the Delta-Mendota Canal so that the recaptured water (hereinafter “Recirculation Water”) could be made available in the San Luis Reservoir or exchanged consistent with the terms of the State Water Resources Control Board Order dated October 21, 2013 ("2013 Order") related to implementation of the Settlement, as updated by the State Water Resources Control Board Order dated __________ ("2020 Order") pursuant to Reclamation’s petition for a temporary change to transfer up to 76,069 acre-feet of Restoration Flows.

D. FWA has agreed to execute conveyance agreements with the Conveying Districts on behalf of the Reimbursing Districts, which agreements are attached as Exhibit A ("Conveyance Agreements").

E. Reclamation prepared an Environmental Assessment dated July, 2016 that addressed the recapture of Restoration Flows at PID and BCID diversion facilities on the San Joaquin River. The Environmental Assessment resulted in a Finding of No Significant Impact ("FONSI") issued on July 29, 2016. The Recirculation Water was covered in the Recirculation of Recaptured Water Year 2013-2017 SJRRP Flows Environmental Assessment ("Recirculation EA") which, along with its corresponding Recirculation FONSI, is dated April 2013. Reclamation has determined that at this time none of the conditions underlying the Recirculation EA has changed, and therefore it is relying upon the existing Recirculation EA. In addition, Reclamation issued a new FONSI for recapture on ______________ for the 2020 Recapture of Restoration Flows at Patterson Irrigation District and Banta-Carbona Irrigation District.

F. In its 2013 Order, the State Water Resources Control Board found that Water Code section 1729 exempts temporary changes involving a transfer of water from the requirements of the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000, et seq.). And in its 2020 Order, the State Water Resources Control determined, in accordance with Water Code section 1727, that the proposed temporary change would not unreasonably affect fish, wildlife, or other instream beneficial uses.

G. Based on Recitals E & F above, no further environmental review is required.

H. The implementation of the Conveyance Agreements will result in costs associated with the use of facilities involved in the recapture, conveyance and exchange of the Recirculation Water, including, but not limited to, conveyance and energy costs payable by FWA to the Conveying Districts and conveyance costs payable to San Luis & Delta-Mendota Water Authority.
I. FWA is willing to help facilitate the implementation of the Conveyance Agreements, as well as other possible conveyance or exchange agreements subsequently determined to be necessary to recirculate recaptured water and the allocation of Recirculation Water, by agreeing to advance costs incurred in connection therewith (hereinafter "Costs"), so long as FWA is entitled, thereafter, to collect the Costs from the districts that receive the Recirculation Water.

J. The Reimbursing Districts have indicated their intent to receive Recirculation Water as the result of the implementation of the Conveyance Agreements.

NOW, THEREFORE, in consideration of the mutual covenants, conditions and promises hereinafter set forth, the parties agree as follows:

1. Estimate of Costs. At the time of the execution of this Agreement, the best estimate of the total Costs to the Reimbursing Districts for the Recirculation Water made available to Friant contractors in San Luis Reservoir or O'Neill Forebay are those Costs identified on the attached Exhibit B. The parties anticipate that there may be changes in the Costs shown on Exhibit B but that the total cost is not likely to increase significantly.

2. Payment by FWA. FWA will pay the Recirculation Water Costs to the Conveying Districts in accordance with the terms of the Conveyance Agreements in Exhibit A.

3. Agreement to Reimburse FWA for Costs. Each Reimbursing District agrees to pay FWA for its share of the Costs paid by FWA that are attributable to the share of Recirculation Water made available to and accepted by such Reimbursing District. A district will be deemed to have accepted a share of Recirculation Water by either affirmatively accepting or failing to decline shares by the date specified in any notice of available shares provided by FWA. Each Reimbursing District must make payment to FWA within 30 days of the date that Reimbursing District receives from FWA an itemized bill for Costs to facilitate the conveyance of the Recirculation Water received.

4. Attorney Fees. Should it be necessary for any party to initiate any legal action arising out of or related to this Agreement, the prevailing party in such proceeding will be entitled to an award of its reasonable attorney fees and court costs.
5. **Miscellaneous.** This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof. Amendments to this Agreement will be effective only if in writing, and then only when signed by the authorized representatives of the respective parties. This Agreement is governed by and will be construed in accordance with the laws of the State of California. The Agreement may be signed in any number of counterparts. Facsimile and electronic signatures will be deemed valid and binding.

[Signatures on the following page.]
IN WITNESS WHEREOF, the undersigned authorized representatives of the parties have executed this Agreement as of the Effective Date.

FRIANT WATER AUTHORITY ARVIN-EDISON WATER STORAGE DISTRICT

By ___________________________ By ___________________________
Douglas DeFlitch, Chief Operating Officer

CHOWCHILLA WATER DISTRICT DELANO-EARLIMART IRRIGATION DISTRICT

By ___________________________ By ___________________________

CITY OF FRESNO EXETER IRRIGATION DISTRICT

By ___________________________ By ___________________________

GARFIELD WATER DISTRICT HILLS VALLEY WATER DISTRICT

By ___________________________ By ___________________________
INTERNATIONAL WATER DISTRICT
By ___________________________

IVANHOE IRRIGATION DISTRICT
By ___________________________

KERN-TULARE WATER DISTRICT
By ___________________________

LEWIS CREEK WATER DISTRICT
By ___________________________

LINDMORE IRRIGATION DISTRICT
By ___________________________

LINDSAY-STRATHMORE IRRIGATION DISTRICT
By ___________________________

LOWER TULE RIVER IRRIGATION DISTRICT
By ___________________________

MADERA IRRIGATION DISTRICT
By ___________________________
ORANGE COVE IRRIGATION DISTRICT
By ___________________________

PORTERVILLE IRRIGATION DISTRICT
By ___________________________

SAUCELITO IRRIGATION DISTRICT
By ___________________________

SHAFTER-WASCO IRRIGATION DISTRICT
By ___________________________

STONE CORRAL IRRIGATION DISTRICT
By ___________________________

SOUTHERN SAN JOAQUIN MUNICIPAL UTILITY DISTRICT,
By ___________________________

TEAPOT DOME WATER DISTRICT
By ___________________________

TERRA BELLA IRRIGATION DISTRICT
By ___________________________

TRI-VALLEY WATER DISTRICT
By ___________________________

TULARE IRRIGATION DISTRICT
By ___________________________
EXHIBIT A

Conveyance Agreements
Exhibit B: Estimated LSJR Repayment Agreement Costs

<table>
<thead>
<tr>
<th>2019 LSJR Recapture Cost Elements</th>
<th>2020</th>
<th>SLDMWA Rates 2020 ($/AF)</th>
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<tbody>
<tr>
<td>Cost estimate</td>
<td></td>
<td></td>
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<tr>
<td>w/Intertie*</td>
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<tr>
<td>PID/BCID Conveyance Charge ($/AF)</td>
<td>$135.00</td>
<td>Upper DMC (A) $4.91</td>
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<td>SLDMWA Convey ($/AF)</td>
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<td>Total Cost into CA Aq ($/AFxAF)</td>
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<td>Lower DMC/MP (D) $4.76</td>
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<td>CA Aq Water loss to O'Neill</td>
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<td>O'Neill Direct (E) $5.13</td>
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<td>Quantity at O'Neill</td>
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<td>O'Neill Storage (F) $0.25</td>
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<td>CA Aq Conveyance cost to O'Neill</td>
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<td>Reserves (G) $2.50</td>
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<tr>
<td>Total cost Intertie to O'Neill</td>
<td>$166,640.00</td>
<td>DWR 2019 Rates (+2% loss)</td>
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<tr>
<td>Net Cost at O'Neill</td>
<td>$2,440,140.00</td>
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<tr>
<td>Quantity in O'Neill/SLR</td>
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<td>R2B</td>
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<tr>
<td>Estimated Net Cost per AF</td>
<td>$166.00</td>
<td>R3</td>
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</table>

* Assumes all water uses DMC Intertie and CA Aqueduct
** Subject to Confirmation
DATE: February 27, 2020
TO: Board of Directors
THROUGH: Douglas DeFlitch, Chief Operating Officer
FROM: Janet Atkinson and Bill Swanson, Stantec
SUBJECT: Friant-Kern Canal Capacity Correction Project Update

BACKGROUND:
The FKC Capacity Correction Project (Project) is to correct the conveyance capacity problems caused by subsidence and original canal design deficiencies from MP 88 (Fifth Avenue Check) to MP121.5 (Lake Woollomes Check).

DISCUSSION/UPDATE: The following is a summary of the work completed since the last BOD update:

Reclamation Schedule Update and Coordination Meetings – Several working group meetings were conducted (Environmental, Right-of-Way, Design, and Project Management). Provided below is the current milestone implementation schedule.

<table>
<thead>
<tr>
<th>Milestone</th>
<th>Date</th>
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<tr>
<td>NOI/NOP Published</td>
<td>December 2, 2019</td>
</tr>
<tr>
<td>Feasibility Report provided to OMB</td>
<td>late January/early February (see below)</td>
</tr>
<tr>
<td>30-Percent Design Report - Final</td>
<td>February, 2020</td>
</tr>
<tr>
<td>NOA/Draft EIS/EIR Published</td>
<td>May 01, 2020</td>
</tr>
<tr>
<td>Biological Opinion Issued</td>
<td>May 7, 2020</td>
</tr>
<tr>
<td>Project Section 106 Complete</td>
<td>May 28, 2020</td>
</tr>
<tr>
<td>100-Percent Bid Issue Design Completion</td>
<td>October 21, 2020</td>
</tr>
<tr>
<td>NOA/NOD/FEIS/EIR Published</td>
<td>September 11, 2020</td>
</tr>
<tr>
<td>NOD Published</td>
<td>September 25, 2020</td>
</tr>
<tr>
<td>ROD Approval/Signature</td>
<td>October 21, 2020</td>
</tr>
</tbody>
</table>
The above is a fairly aggressive schedule, and it is estimated that a construction contract award would most likely occur in the first half of FY 2021.

**Feasibility Report** - Stantec responded to comments received from the Commissioner’s office and provided the 2nd Administrative Draft Feasibility Report to Reclamation again on January 16th. Additional comments were received and responded to the week of January 20th. **Reclamation submitted the Administrative Draft Feasibility Report to OMB on January 28th.** This represents a significant milestone in the Project’s implementation schedule.

**Environmental Compliance, Cultural Resources and Permitting:** Following is a description of NEPA/CEQA compliance and Permitting activities for the Project.

- Continued updating the Admin Draft EIS/EIR, began preparation of the second Admin Draft EIS/R.
- Conducted review of biological habitat and aquatic features with design team to refine potential impacts biological resources.
- The preliminary draft cultural resources report (Section 106 report) was submitted to Reclamation on January 13th. Work is ongoing to complete report for draft submittal.
- Prepared and submitted completion notices to CDFW, Water Board and USACE for geotechnical drilling, in compliance with the 1600, 401 and 404 permits, respectively.

**Engineering and Design**

- Continued to progress incorporation of Reclamation comments into the 30-percent Design Report. Prepared draft document regarding subsidence phasing criteria.
- Continued developing turnout drawings, check structures, conceptual construction staging area needs, and utility relocation concepts.
- Continued to update utility tracking logs, updated mapping files with utility information and coordinated with utility owners, Tulare County, Kern County and Caltrans.
- Completed legal descriptions and exhibit plats and submitted to Reclamation for review. Received approvals for 37 descriptions.
- Completed the geotechnical field investigations at Deer Creek and White River. Continued preparation of the Geotechnical Data Report, Road Crossing Siphons Report, and Geotechnical Interpretive Report.

**Land Acquisition**

- Agreement with BOR on Preliminary Title Report Opinion format and content to use for title report submittals.
- Continued to review and annotate the Project title reports in preparation of the purchase agreements.
- BRI submitted 45 statements of work for the appraisals as the approved plats and legal descriptions are delivered, these are required for the initiation of the appraisal work. 31 Letters of Engagements have been received and accepted for work.
- 31 Notice of Decision to Appraise have been sent out to the applicable property owners.
• BRI and FWA continued to develop purchase agreement template for the Project.
• Field work was initiated on the ASTM 1527-13 Phase 1 Environmental Site Assessments (Phase 1 ESA).
• Ten Environmental Site Assessments (Phase 1) have been sent to BOR. Prepared and coordinated the delivery schedule for the appraisals.
• Legal descriptions for 37 parcels proposed for acquisition have been approved by Reclamation. Reclamation’s turnaround time has been excellent.

Landowner Coordination and Right-of-Entry (ROE) Support –
• Introduced, via email, staff of Sierra Geotech and Bender Rosenthal Inc. to landowners who will be engaged for Phase I ESA surveys and property appraisal. Responded to landowner inquiries, as needed. Provided landowner coordination advise and support to Sierra Geotech for Phase I ESA surveys that started on Feb. 17, 2020.
• Provided geologic investigation support for studies postponed at Deer Creek and the White River.
• Completed execution of three Right-of-Entry Agreements. Engagement with three remaining landowners for execution of the last remaining agreements. Efforts here have included coordination of a conference call with FWA staff and an out-of-state landowner and in-person visit with a Visalia area landowner.

FUTURE ACTIVITIES - The following activities are anticipated to be conducted next month:

• Feasibility Report – The Stantec team will be available to address any items that arise regarding the Feasibility Study that was submitted to OMB in late January.

• Environmental Compliance, Cultural Resources, and Permitting – Continue coordination calls with Reclamation and FWA. Continue coordination with the USACE and CDFW. Continue analyses of potential impacts and technical analysis for EIS/EIR, address comments on the first Administrative Draft EIS/EIR and prepare the second Administrative Draft EIS/EIR. Finalize cultural resources survey and report preparation, and finalize biological characterization (Biological Resources Assessment), including wetland delineation. Finalize Draft Section 106 Report with submittal in March and develop Historic Property Treatment Plan.

• Engineering and Design – Complete responses to Reclamation review comments on the 30 percent design report and finalize the document. Continue design activities progressing designs from the 30% towards the 60% level of completion later in 2020. Awaiting direction of future subsidence bank scope of work. Participate in Value Engineering Study being planned by Reclamation for early March. Continue to progress the utility research. Continue to refine the hydraulic analyses. Continue detailed field surveys needed to inform the final design. Continue the development of the Check structures. Support the environmental team in technical analyses needed for further the environmental review. The geotechnical team will continue working on the Geotechnical Data Report (GDR), Road Crossings Siphons Report, and the Geotechnical Interpretive Report, and issue the draft GDR for review.

• Land Acquisition - BRI and FWA will finalize the standard purchase agreement template for the Project. BRI’s subcontractor Sierra Geotech will finish site visits, data collection, and other work to finalize the completion of the Phase 1 ESAs. BRI will submit the Scope of Work for any parcels that will
require an Environmental Site Assessments (Phase 2). The appraisal inspections with landowners will continue to be scheduled in order to finalize the appraisals. BRI will also continue annotations for the title reports for submittal to Reclamation.

- **Landowner Coordination and Right-of-Entry Support** – Continue to provide coordination of weekly Right-of-Way Team meetings; continued execution of Right-of-Entry Agreements with the three remaining property owners. Anticipated field coordination includes continued support for Phase I ESA surveys and other activities, as needed.

**RECOMMENDED ACTION:**

None; information only.

**SUGGESTED MOTION:**

None.
MEMORANDUM

DATE: February 27, 2020
TO: Friant Contractors
FROM: Jason Phillips, CEO
     Donald M. Davis, General Counsel
SUBJECT: FKC Capacity Correction Project: Friant Self-Financing Strategies

INTRODUCTION

This memo is intended to provide an overview of the self-financing strategies for the Friant-Kern Canal Middle Reach Capacity Correction Project (Project) currently under consideration. The Friant Water Authority (FWA) is pursuing multiple financing sources, and because many of them remain viable, it is difficult to identify the precise amount needed as either cost-share reimbursement or independent self-financing as a result of any potential funding gaps. Nevertheless, if Project construction is going to begin in a timely manner, FWA and Friant-Kern Canal (FKC) Contractors will need to have funding plans in place that could conceivably cover a significant share of the estimated $400 M plus Project costs.

OVERVIEW OF PROPOSED SELF-FINANCING STRATEGIES

Definitions:

FKC OM&R Funding: Funding from FKC OM&R Contractors allocated per the FKC OM&R cost allocation methodology or other agreed upon methodology.

GSA Mitigation Funding: Funding collected by a Tule Subbasin GSA from groundwater pumpers for implementation of the Project as a means of mitigation for land subsidence caused by such transitional groundwater pumping. Such funding would not result in any additional rights for use of the canal.

Investors: The public water agencies that provide funding for the Project above the amount established as FKC OM&R Funding.

Investor Funding: Funding provided by a public water agency for the purpose of gaining specified rights to capacity in the proposed Zone 3 of the repaired Friant-Kern Canal.

Public Funding: Funding provided by Federal or State government for implementation of the Project with no requirement for the recipient to repay.

Project: The Friant-Kern Canal Middle Reach Subsidence Correction Project.

Public Water Agencies: FKC OM&R Contractors and potentially other approved public agencies that supply water for M&I or agricultural users.
1. **FKC Contractor OM&R Funding – Up to $50 Million**

   It is anticipated that a certain amount of the Project, potentially a significant amount, will need to be financed with debt from the following sources:

   - **Reclamation Repayment Contract**: Some of the federal appropriated dollars for the Project may be deemed “reimbursable”. As such, it is envisioned under this proposal that a long-term repayment contract of 40 years at a zero interest rate (except for M&I delivery) would be executed in order to repay the debt.
   - **WIFIA**: EPA has stated that the Project should be eligible to compete for a long-term loan for up to 49% of the Project cost at a low interest rate. The term could be up to 35 years at an interest rate based on treasury rates. If a WIFIA loan is provided, the total federal funding for the project cannot exceed 80%.
   - **Bonds**: If necessary, FWA is researching its ability to acquire long-term bond financing in the public market and through private placement to support the Project.

   In recognition that both the Federal and State governments would be looking at FKC Contractors to share in the Project costs, the FWA Board adopted Resolution 2019-02 in May of 2019 that simply determined that the amount of $50 million “represents a fair and reasonable preliminary amount for FWA and its affected Friant Division Contractors to contribute towards the estimated Project costs for the purposes of initial discussions with federal and state officials when seeking their assistance with funding for the Project.” Based on this action, FWA has considered the amount of $50 M to be a reasonable FKC Contractor cost-share amount towards the Project under a Federal or State loan or grant program (e.g., Reclamation Repayment Contract, WIFIA), or, if necessary, private borrowing or a bond issuance. FWA has been proceeding with the following basic understanding of how this borrowing would work:

   A. **Maximum Amount.** Annual debt service payments (principal and interest) for a borrowing in an amount up to $50 M would be considered an OM&R expense under the OM&R Transfer Agreement with Reclamation (“Transfer Agreement”). The annual budget would be determined based on a coverage ratio to assure lenders that FWA will generate sufficient revenues to pay for the annual debt service (i.e., a “rate covenant”). Any amount collected above the needed debt service payment as a result of this coverage ratio would be credited to Contractors in the following year.

   B. **Timing of Establishing Obligation.** The total cost of this financing/OM&R expense would be established at the outset and approved by FWA with input from all FKC Contractors. As such, it would become a permanent OM&R budget line item until repaid. In other words, it would be outside the annual OM&R budget process, unless there was a significant revision to the terms and conditions of the borrowing that required Contractor review and approval (e.g., a refunding or restructuring).

   C. **Allocation.** All FKC Contractors would be pay this expense based on their % allocation of OM&R costs or such other allocation methodology as may be approved. (Open issue as to whether such allocations would be fixed at the time of borrowing or adjust annually in accordance with the OM&R cost allocation formula).
D. Default. Any default in payment by a Contractor would be handled like any other failure to pay an OM&R expense, which includes the remedy of termination of water deliveries until the delinquency is cured.

E. Offsetting Revenue. FWA will review and revise (i.e. increase) conveyance fees and charges for all Warren Act water and non-FKC Contractor’s CVP water to help offset the OM&R Funding debt. In addition, all FKC subsidence-related mitigation fees or charges collected by GSAs and turned over to FWA would be applied as received to reduce the OM&R Funding debt.

2. FKC Contractor Investor Funding - An Amount Above the OM&R Funding

FWA has long understood that Project self-financing above the $50M shared OM&R Funding would present both practical and political challenges in terms of achieving broad FKC Contractor consensus. As such, FWA is proposing a voluntary investment strategy for FKC Contractors to incentivize investment in the Project to close the gap between available funding and the full cost of the Project. It is anticipated that the districts that are south of the subsidence area and most affected by the loss of conveyance capacity would be the primary candidates for Investor Funding.

A. Description of FKC Water Zones

The Project lends itself to a very straightforward classification of benefits resulting from the funding, which FWA proposes to classify as 3 layers or “zones” of capacity in the canal.

ZONE 1 - CAPACITY WITHOUT A FIX IN PLACE

- Annually, the capacity of the old canal before the Project is constructed would be calculated based on the old canal cross-section, including existing bridge crossings, and the land surface in that year.
- This zone would have the highest priority within the canal and all current prorates would be maintained consistent with the Friant Operations Guidelines (FOG).

ZONE 2 – INCREASED CAPACITY DUE TO PUBLIC FUNDING, FKC OM&R FUNDING, GSA MITIGATION FUNDING

- A fixed amount of capacity that rides on top of Zone 1
- Would be based on the overall amount of Public Funding, FWA OM&R Funding, and GSA Mitigation Funding.
- For non-Investor water, all Warren Act water and non-FKC OM&R Contractors CVP project water would be assessed a fee to help offset the FKC OM&R Funding debt.
- Priorities would still follow the FOG.
ZONE 3 – INCREASED INVESTMENT DUE TO INVESTOR FUNDING

- A fixed amount of capacity that rides on top of Zone 2
- Would be based on the overall amount of Investor Funding that is provided for the Project to the extent that the funding under Zone 2 is not sufficient.
- All Warren Act water and non-Investor CVP project water would be assessed a fee to help offset Investor Funding debt.

B. General Summary of Investor Funding

To the extent that the funding for the Project comes from FKC OM&R Funding, Public Funding, and GSA Mitigation Funding, the resulting new capacity in the Friant-Kern Canal would be operated with priorities consistent with current policies (Zone 2).

The benefit for Investors in Zone 3 would be that they would have priority access to the FKC consistent with their level of investment, which would be based on a $/cfs rate that would be the overall basis for defining the zones. Investors would also have access to any unused capacity in Zone 2 without any additional expense as long as their total use is capped at their cfs level of investment. Investors that use more cfs than purchased would be charged the same conveyance fee as non-Investors.

The proposed method of determining the cost to purchase Zone 3 capacity is as follows:

1. Once Zone 2 funding is known, a calculation will be made as to what additional capacity Zone 2 funding would add as a stand-alone improvement

2. The difference between the total cost of the Project and Zone 2 funding would be the cost of Zone 3, and the additional calculated capacity of Zone 3 would be used to calculate the $/cfs for Zone 3 Investors.

C. Structure of Zone 3 Investor Funding

As Investor Funding is voluntary, the terms and conditions of any desired financing would be subject to a participation agreement among the Investors and FWA. In addition to standard financing provisions, FWA will analyze with Zone 3 Investors participating in a FWA financing the benefit of credit structures to enhance the credit quality of the financing structure.

This voluntary financing structure could include:

- a potential “step-up” provision whereby Investors agree to cover a default by another Investor. The ratings benefit of a step-up could be limited if only a handful of highly rated Contractors choose to be Zone 3 Investors and participate in a FWA financing. As such, whether Investors...
benefit from such a provision will depend, in part, on whether it results in a higher rating and corresponding lower interest rate.

- A potential “default” penalty for non-payment beyond termination of water deliveries (e.g., reallocation of water supplies to other Investors.) [This mechanism is under review.].

In short, FWA will analyze options with Investors to determine which financing structure best meets the objectives of the Investors participating in a FWA financing.
DATE: February 27, 2020

TO: Board of Directors

FROM: Jason Phillips, CEO; Donald M. Davis, General Counsel

SUBJECT: Review of Draft Friant-Kern Canal OM&R Transfer Agreement

SUMMARY:

At the January Board meeting, the draft renewal agreement with the Bureau of Reclamation transferring operations, maintenance and repair responsibility for the Friant-Kern Canal to the Friant Water Authority (Transfer Agreement) was presented for review and comments. The current Transfer Agreement expires on March 1, 2023, and any financing for the Friant-Kern Canal (FKC) Middle Reach Capacity Correction Project (including Federal loans) will require that a long-term agreement with respect to operational control over the FKC be in place.

Prior to and at the January Board meeting, as well as this past week, FWA has solicited comments from all FKC OM&R Contractors regarding the draft Transfer Agreement. To date, only the Arvin-Edison Water Storage District and the City of Fresno have provided questions or comments on the draft Transfer Agreement.

In anticipation of receiving further comments on the document, FWA will wait until March 6, 2020 to see if further comments are received in order to provide a final, collective response.

The agenda report from the January Board meeting on this item along with a redlined copy of the draft Transfer Agreement showing proposed changes from the existing agreement (the majority of which are Reclamation required Directives and Standards) are attached.

RECOMMENDED ACTION:

All Friant Contractors wishing to provide comments on the draft Transfer Agreement should provide them to FWA (c/o Doug DeFlitch ddeflich@friantwater.org) by March 6, 2020.

ATTACHMENTS:

2. Redline of Proposed Changes to OM&R Transfer Agreement
DATE: January 16, 2020
TO: Board of Directors
FROM: Jason Phillips, CEO; Donald M. Davis, General Counsel
SUBJECT: Review of Draft Friant-Kern Canal OM&R Transfer Agreement

SUMMARY:

The agreement (Transfer Agreement) with the Bureau of Reclamation transferring operations, maintenance and repair responsibility for the Friant-Kern Canal (FKC) to the Friant Water Authority expires on March 1, 2023. Based on a recommendation from the financial consultants (PFM) assisting with developing a self-financing plan for the FKC Middle Reach Capacity Correction Project, the Board, in July 2019, authorized staff to initiate early renewal negotiations with Reclamation as FWA’s borrowing ability is directly tied to its operational control over the FKC.

The San Luis Delta-Mendota Water Authority and the Tehama-Colusa Canal Authority also have OM&R transfer agreements for their respective facilities that expire in the near future. The two authorities and FWA determined it would be advantageous and expeditious to collectively negotiate the “standard terms” of the transfer agreements with Reclamation. Public negotiations on the standard terms were held in November 2019 at Reclamation’s offices in Sacramento, and a general consensus between the authorities and Reclamation as to the standard terms was reached.

FWA intends to hold formal negotiations with Reclamation on its Transfer Agreement in the coming weeks. The purpose of this agenda item is to share the draft Transfer Agreement renewal that incorporates the new Reclamation mandated standard terms, as modified by the three water authority negotiations, so that Friant Division Contractors can review the proposed terms and provide any comments in advance of or during the negotiations. Following completion of the negotiations, including public comments, a final version of the renewed Transfer Agreement will be brought back for Board approval.

RECOMMENDED ACTION:

That Friant Contractors provide preliminary feedback on the draft Transfer Agreement and, following review by home boards and staff, submit any additional comments and concerns to FWA staff at the earliest opportunity.

DISCUSSION:

A redlined and clean copy of the draft renewed Transfer Agreement is attached. The redlined version shows the proposed changes from the current Transfer Agreement that was executed in 1998. Since that time, Reclamation has consolidated and expanded the standard terms that it requires to be in transferred works agreements through a process known as “Directives and Standards” (D&S). Most of the changes in the draft are based on these D&S provisions (which appear in the draft as single spaced
Reclamation regional officials have authority to make only minor changes to D&S terms – significant substantive changes can only be done with the approval of the Commissioner.

Many of the changes are non-substantive and are proposed to ensure consistent use of defined terms, provide clarity, and in many instances eliminate unnecessary legalese in favor of plain language.

The following is a summary of some of the key changes proposed to the Transfer Agreement by Article.

1. **Definitions**: Added a definition of “Capital Improvements,” and clarified that OM&R can include financing of Capital Improvements.

2. **Term**: Extended to 35 years; clarified default/termination process.

3. **OM&R**: FWA is seeking Commissioner approval to maintain existing liability provisions (Article 19) in lieu of the D&S language in proposed Article 3(e); remaining terms are also required D&S provisions.

5. **Capital Improvements**: Clarifies that Capital Improvements not financed with assistance from Reclamation may be deemed OM&R costs.

7. **Administration of Project Lands**: Added a definition of “Project Works Lands” which are distinct from generic “Project Lands” that are CVP-wide. Allows for potential delegation of authority to approve minor right-of-way land use requests to FWA.

11. **Inspections**: While these D&S provisions are more detailed, they do not reflect significant changes in practices or policy regarding costs that are reimbursable or non-reimbursable.

14. **Emergency Reserve Fund**: FWA was careful to exclude OM&R Capital Improvement costs from the 15% average OM&R cost used to calculate the reserve fund. (See 14(b).)

19. **Contamination**: While extensive, and more detailed, liability for new releases of hazardous wastes remains with FWA.

23. **Clear Air and Water**: While extensive, and more detailed, liability for violations of the Clean Air or Clean Water Act remain with FWA.

30. **Protection of Water and Air Quality**: Requires compliance with air and water pollution laws and requires performance of the OM&R of the Project Works in a manner that preserves the quality of the water at the highest feasible level as determined by the Contracting Officer

**ATTACHMENTS:**

1. Redline of Proposed Changes to Renewed Transfer Agreement
2. Clean Copy of Renewed Transfer Agreement.
3. Friant Contractor Letter Regarding Participation in Transfer Agreement Review
UNIVERSAL STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF RECLAMATION
Central Valley Project, California

AGREEMENT TO TRANSFER THE AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND FRIANT WATER AUTHORITY TO TRANSFER THE OPERATION, MAINTENANCE AND REPLACEMENT AND CERTAIN FINANCIAL AND ADMINISTRATIVE ACTIVITIES RELATED TO THE FRIANT-KERN CANAL AND ASSOCIATED WORKS

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AGREEMENT BETWEEN THE UNITED STATES OF AMERICA AND FRIANT WATER AUTHORITY TO TRANSFER THE OPERATION, MAINTENANCE AND REPLACEMENT AND CERTAIN FINANCIAL AND ADMINISTRATIVE ACTIVITIES RELATED TO THE FRIANT-KERN CANAL AND ASSOCIATED WORKS

THIS AGREEMENT, effective the 1st _____ day of March 1998, ____________, (“Effective Date”) in pursuance generally of the Act of Congress of June 17, 1902 (32 Stat. 388), and the acts amendatory thereof or supplementary thereto, including Section 5 of the Act of August 13, 1914 (38 Stat. 687), all collectively hereinafter referred to as the Federal Reclamation laws, between the UNITED STATES OF AMERICA, hereinafter referred to as the United States, and the FRIANT WATER USERS AUTHORITY, hereinafter referred to as the Authority, a public agency of the State of California, duly organized, existing, and acting pursuant to the laws of the State of California. The United States and the Authority are referred to collectively as the “Parties,” and individually as a “Party.”

WITNESS WITNESSETH, That:

EXPLANATORY RECITALS

WHEREAS, the a. The United States Bureau of Reclamation has constructed the Friant Division, Central Valley Project (Project), for storage, diversion, carriage and distribution of water for agricultural, flood control, municipal, industrial, domestic and other beneficial uses and purposes; and
WHEREAS, the Authority represents water users who contract with the United States for water service provided by the Friant Division of the Project; and

WHEREAS, the United States operates the Friant Division of the Project for the benefit, among others, of the water users represented by the Authority; and

WHEREAS, the Authority has for eleven (11) years operated and maintained certain Friant Division facilities pursuant to that certain Cooperative Agreement No. 6-FC-20-04180 between the parties dated August 19, 1986; and Agreement to Transfer the Operation, Maintenance, and Replacement (OM&R) and Certain Financial and Administrative Activities Related to the Friant-Kern Canal and Associated Works, Contract No. 8-07-20-X0356 (Transfer Agreement) between the Parties for a term of twenty-five (25) years, effective March 1, 1998; and

and

WHEREAS, the Authority has demonstrated its ability to operate and maintain such facilities to the satisfaction of the United States Contracting Officer and in a manner which best and most economically serves the water users relying on those facilities; and

WHEREAS, it is deemed to be in the best interests of the parties and the Project’s water users that the operation, maintenance and replacement (continued OM&R, as well as certain administrative and financial activities, of the Project Works) as defined below) be transferred to the Authority as the Operating Non-Federal Entity by renewing the Transfer Agreement; and
WHEREAS, the United States also believes it to be in the best interests of the Parties and the Project’s water users to transfer to the Authority the administrative and financial responsibility to continue to perform and hereafter fund the Authority’s operation, maintenance and replacement OM&R of the Project Works while the United States retains the responsibility to fund the capital Capital Improvement costs of the Project Works; and

WHEREAS, the Authority is willing to assume the operation, maintenance and replacement OM&R of the Project Works as the Operating Non-Federal Entity and perform the enumerated administrative and financial activities in accordance with the terms and conditions herein set forth.; and

l. The National Environmental Policy Act compliance requirement for execution of this Agreement has been met by the Categorical Exclusion dated __________, 2020; and

NOW THEREFORE, in consideration of the mutual and dependent covenants herein contained, it is hereby mutually agreed as follows:

DEFINITIONS

1. When used herein, solely for purposes of this Agreement, unless otherwise distinctly expressed or manifestly incompatible with the intent hereof, the term:

   (a) “Capital Improvement” shall mean any activity that extends the useful life of a property, plant or equipment asset, expands the capacity or efficiency of an asset, or otherwise upgrades an asset to serve needs different from, or significantly greater than, an asset’s current use, as defined in the Blue Book entitled Federal Replacements, Units, Service Lives, Factors, as it exists on the date of this Agreement or in accordance with Federal law and

Factors, as it exists on the date of this Agreement or in accordance with Federal law and
accounting standards, or any other regulations, policies, guidelines, or instructions adopted thereunder.

(b) “Fiscal Year” shall mean the period from and including the first day of October of each calendar year through and including the last day of September of the following calendar year.


(c) “Irrigation Water” shall mean the use Project Water or Other Water to irrigate land primarily for the production of commercial agricultural crops or livestock, and domestic and other uses that are incidental thereto.

(d) “Municipal and Industrial Water” or “M&I Water” shall mean the use of Project Water or Other Water for municipal, industrial, and miscellaneous purposes not falling under the definition of “Irrigation Water” or within another category of water use under applicable Federal authority.

(e) “Operation, Maintenance and Replacement” or “OM&R” shall mean the complete operation and maintenance of the Project Works (as defined below), including performing, funding, and financing such repairs and replacements as are normally considered part of annual operation and maintenance functions and not considered Capital Improvement costs of the Project in accordance with the Blue Book entitled Federal Replacements --, Units, Service Lives, Factors, as it exists on the date of this Agreement or in

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accordance with Federal law or any other regulations, policies, guidelines or instructions adopted thereunder. OM&R shall include the performance, funding and financing of emergency or unusual operation and maintenance or extraordinary operation and maintenance costs, unusual or extraordinary repair or replacement costs, and betterment costs, but only to the extent the costs thereof are not considered capital improvement costs of the Project in accordance with the Blue Book reference referenced above as it exists on the date of the Agreement or in accordance with Federal law or any other regulations, policies, guidelines or instructions adopted thereunder. Notwithstanding the foregoing, OM&R shall also include Capital Items Improvements, as that term is defined in Article 4(a) hereof, which the Authority chooses to accomplish and finance pursuant to Article 4(b) hereof.

(f) “Other Water” shall mean water other than water conveyed or delivered pursuant to Water Delivery Contracts (as defined below) which the United States has a legal or contractual obligation to convey or deliver through the Project Works. Other Water includes, without limitation, water to be conveyed through the Project Works (1) pursuant to contracts under the Warren Act (43 USC 523, et seq.), Section 305 of the Act of March 5, 1992 (106 Stat. 59), Section 3408-(c) of the Central Valley Project Improvement Act (106 Stat. 4706), and Section 215 of the Reclamation Reform Act of 1982 (43 USC 390oo96 Stat. 1263); (2) under other wheeling or conveyance agreements binding on the Secretary; (3) in accordance with agreements for conveyance of water to wildlife refuges and wildlife management areas; and (4) to satisfy other legally imposed environmental obligations of the Secretary.
(g) “Party Entitled to Utilize or Receive Other Water” shall mean the party required to pay the Authority the amounts described in Article 11 hereof in connection with the delivery of Other Water. In the case of Other Water delivered to satisfy agreements for conveyance of water to wildlife refuges and wildlife management areas as well as other legally imposed environmental obligations of the Secretary, the Party Entitled to Utilize or Receive Other Water (and therefore required to pay the Authority the amounts described in Article 11 hereof in connection with the delivery thereof) shall be the Contracting Officer.

(h) “Project” shall mean the Central Valley Project owned by the United States and managed by the Department of Interior, Bureau of Reclamation.

(i) “Project Water” shall mean all water that is developed, diverted, stored, or delivered by the Secretary in accordance with the statutes authorizing the Project and in accordance with the terms and conditions of water rights acquired pursuant to California law.

(j) “Project Works” shall mean those facilities listed or described on the attached Exhibit A, which are incorporated herein by this reference, including: the Friant-Kern Canal and related in-line control facilities; wasteways, laterals, holding reservoirs, turnouts, and measuring devices and associated water level control devices and water level recording instruments; appurtenant equipment, structures and maintenance building and such other facilities as the Parties may agree by modification of this definition and/or addendum to Exhibit A from time to time, without amending this Agreement.

(k) “Secretary” or “Contracting Officer” shall mean the Secretary of the United States Department of the Interior or his/her duly authorized representative.
“(l)” “Substantial Change” shall mean a modification in, or addition to, Project Works which involves changes in the original design intent, function, and/or operational parameters of the facility, or changes in benefits of the Project Works, including non-routine maintenance activities that involve construction or reconstruction of a portion of the facility.

“(m)” “Water Delivery Contract” shall mean (1) any contract entered into by the Secretary under the provisions of Sections 9(c), 9(d) or 9(e) of the Reclamation Project Act of 1939 [43 USC 485(h)(c), (d) and (e)] or Section 3404 of the Central Valley Project Improvement Act (106 Stat. 4706) pursuant to which Project water is to be supplied from or through the Project Works, and (2) any exchange contract, water rights settlement contract or similar agreement pursuant to the terms of which water is to be supplied by the Secretary from or using the Project Works.

“(n)” “Water Delivery Contractor” shall mean a party holding a Water Delivery Contract with the United States.

TERM OF AGREEMENT

2. (a) This Agreement shall be effective as of March 1, 1998, the Effective Date and shall remain in effect for twenty-five thirty-five (2535) years thereafter; Provided, that That this Agreement is not terminated at an earlier date pursuant to Article 2(b) below. Subject to modification acceptable to the United States Contracting Officer and the Authority, the Authority shall have the option to renew this Agreement for successive periods not to exceed twenty-five thirty-five (2535) years each by providing written notice of such to the Contracting Officer not more than one (1) year, but not less than six (6) months, prior to the end of the then-current term, unless by mutual agreement to renew sooner.
(b) The Contracting Officer may terminate this Agreement at any time before the expiration of its term whenever the Contracting Officer determines that the Authority is in substantial violation of the Agreement as provided in this Article 2(b); Provided that, That prior to the effective date of any such termination, the Contracting Officer shall first notify the Authority in writing of the reason for the proposed termination, including with specificity, the specific purported deficiencies of the Authority in carrying out the terms and conditions of this Agreement. Such notice of purported deficiency shall be issued only if it is the intent of the Parties that disputes be resolved pursuant to this Article 2(b) as expeditiously as is reasonably possible without the necessity of other relief at law or in equity. If after the designated representative of the Authority has met with the Contracting Officer or his or her designated representative to and attempt in good faith and with the use of best efforts to resolve any dispute arising from the purported deficiency. It is the intent of the parties that disputes be resolved pursuant to this Article 2(b) as expeditiously as is reasonably possible without the necessity of other relief at law or in equity an agreement is not reached, the Contracting Officer may issue a notice of proposed termination, which includes the specific deficiencies of the Authority’s performance under this Agreement. The Authority shall have at least ninety (90) days from receipt of the written notice of said reasons for proposed termination to correct all deficiencies referred to in said written notice; Provided, that That in the event of a condition which threatens the safety or integrity of the Project Works, the Contracting Officer may specify a shorter notice correction period which the Contracting Officer determines to be appropriate under the circumstances. In the event the Authority does not correct all deficiencies referred to in said written notice within the applicable period, the Contracting Officer may thereafter terminate this agreement.
Agreement upon thirty (30) days prior written notice to the Authority. Any termination pursuant to this Article shall be subject to the rights and obligations of the parties as more specifically set forth in this Agreement.

(c) The Authority may at any time, upon giving twelve (12) months written notice, terminate this Agreement; Provided that such termination shall not relieve the Authority of any of its duties, liabilities or obligations accruing from the effective date of the Agreement to the effective date of such termination, except insofar as the Authority lacks funding to perform such obligations due to a failure by the United States to meet any of its obligations under this Agreement.

(d) Upon any termination of this Agreement, the United States will take over from the Authority the care, OM&R of the Project Works and the Authority shall transfer to the United States (1) title to all tools, vehicles, supplies, and equipment transferred under Article 3 (b) of the original agreement 8-07-20-X0356 (to the extent still on hand) or purchased by the Authority for the purposes of this Agreement, and (2) any funds in its possession which were collected for, or allocated to, the OM&R of the Project Works for the then-current Fiscal Year which are in excess of the obligations of the Authority for the OM&R of the Project Works. All other funds and reserves in the Authority’s possession, including without limitation all other funds collected for, or allocated to, the OM&R of the Project Works and the reserve funds established under Article 13 hereof shall be retained or distributed by the Authority in accordance with the direction of the Authority’s board of directors.

TRANSFER OF OM&R TO THE AUTHORITY

3. The effective date for the transfer of the Project Works to the Authority for
OM&R pursuant to the terms and conditions of this Agreement shall be March 1, 1998;

Provided, that the effective date for the transfer of any facilities subsequently included as Project Works by way of an addendum to Exhibit A shall be as mutually agreed by the parties. After a transfer of any Project Works to the Authority for OM&R, and so long as such Project Works are necessary for the conveyance of water pursuant to Water Delivery Contracts or to convey or deliver Other Water, the Authority shall be responsible for the OM&R of such Project Works in accordance with the terms and conditions of this Agreement. The Authority shall maintain the Project Works in such a manner that the Project Works shall remain in substantially the same condition for the storage, diversion and carriage of water as they existed on the effective date of the transfer of such Project Works to the Authority for OM&R, excepting ordinary and reasonable wear and Acts of God. In addition, the Authority shall operate, maintain and replace the Project Works consistent with the guidelines provided by existing Designer Operating Criteria, standard operation procedures and/or manufacturer’s technical manuals for the Project Works, in accordance with such sound engineering practices as have been or may be developed for the Project Works, and in accordance with applicable Federal, State, and local environmental laws. Deviations from or changes to these standards shall be approved by the Contracting Officer.

(a) In connection with the transfer of Project Works to the Authority for OM&R as herein provided, the Contracting Officer, at the request of the Authority, shall transfer to the Authority title to all tools, non-passenger vehicles, supplies and equipment owned and used by the United States in the OM&R of the Project Works as such equipment is noted on the property records maintained by the United States for the Project Works. Only title to personal property
owned by the United States shall be transferred to the Authority pursuant to this Article. Title to all Project Works and any real property associated or used in connection with the Project Works shall remain with the United States unless and until the Congress of the United States provides otherwise; Provided, that the United States hereby grants to the Authority a right of possession to all real property owned by the United States which is included in, associated with or used in connections with the OM&R of the Project Works for as long as this Agreement remains in the effect with respect to any of the Project Works.

(e) An Agreement review must be performed at least every fifteen (15) years. A more frequent review will be established if determined to be appropriate by the Contracting Officer. The review and update will be limited to focus on this Agreement’s standard articles and incorporation of any new statutory requirements applicable to this Agreement.

OPERATION AND MAINTENANCE OF PROJECT WORKS

3. (a) The Contracting Officer has transferred, and the Authority has accepted and assumed the care, OM&R of the Project Works. Title to the Project Works will remain in the name of the United States, unless otherwise provided by the Congress of the United States.

(b) The Authority, without expense to the United States, will care for, OM&R the Project Works in full compliance with the terms of this Agreement and in such a manner that the Project Works remain in good and efficient condition, subject to exercise of discretion to fund and carry out Capital Improvements, as described below in Article 5(b).

(c) Necessary repairs of the Project Works will be made promptly by the Authority. In case of unusual conditions or serious deficiencies in the OM&R of the Project Works threatening or causing interruption of water service, the Contracting Officer may issue to the Authority a special written notice of those necessary repairs. Except in the case of an emergency, the Authority will be given sixty (60) days to either make the necessary repairs or submit a plan for accomplishing the repairs acceptable to the Contracting Officer. In the case of an emergency, or if the Authority fails to either make the necessary repairs or submit a plan for accomplishing the repairs acceptable to the Contracting Officer within sixty (60) days of receipt of the notice, the Contracting Officer may cause the repairs to be made, and the cost of those repairs.
reparis will be paid by the Authority as directed by the Contracting Officer.

The Authority shall make no substantial change \( (d) \) The Authority will not make any Substantial Changes in the Project Works without first obtaining \( (b) \) the written approval consent of the Contracting Officer. The Contracting Officer’s determination as to whether any change in any such Project Works is or is not substantial shall ordinarily be made after consultation with the Authority and shall be conclusive and binding upon the parties hereto.

\( (e) \) The Authority agrees to indemnify the United States for, and hold the United States and all of its representatives harmless from, all damages resulting from suits, actions, or claims of any character, except for intentional torts committed by employees of the United States, brought on account of any injury to any person or property arising out of any act, omission, neglect, or misconduct in the manner or method of performing any construction, care, operation, maintenance, supervision, examination, inspection, or other duties of the Authority or the United States on Project Works required under this Agreement, regardless of who performs those duties.

\( (f) \) Omitted.

\( (g) \) In the event the Authority is found to be operating the Project Works or any part thereof in violation of this Agreement or the Authority is found to be failing any financial commitments or other commitments to the United States under the terms and conditions of this Agreement, then upon the election of the Contracting Officer, the United States may take over from the Authority the care, OM&R of the Project Works by giving written notice to the Authority of such election and the effective date thereof. Thereafter, during the period of operation by the United States, upon notification by the Contracting Officer the Authority will pay to the United States, annually in advance, the cost of the OM&R of the Project Works as determined by the Contracting Officer. Following written notification from the Contracting Officer the care, OM&R of the Project Works may be transferred back to the Authority.

\( (h) \) In addition to all other payments to be made by the Authority under this Agreement, the Authority will pay to the United States, following the receipt of a statement from the Contracting Officer, all reimbursable miscellaneous costs to be incurred by the United States for any work involved in the administration and supervision of this Agreement.

\( (i) \) Nothing in this Article will be deemed to waive the sovereign immunity of the United States.

TRANSFER INSPECTION

4. The Authority (including its predecessors) has been the Operating Non-Federal Entity for the Project Works since 1986. Joint inspections of the Project Works have been performed...
conducted by the United States and the Authority since _______. The inspection report
signature pages are attached to this Agreement as Exhibit C.

CAPITAL IMPROVEMENTS AND REPAIRS

4.5 (a) Nothing in this Agreement shall be construed to require the Authority to
make or fund improvements, modifications, replacements or repairs of any nature to the Project
Works, the costs of which should be or will be added to the capital Capital Improvement costs
of the Project (herein “Capital Items”). The identification of Capital Items Improvements shall
be made in accordance with Federal law or any regulations, policies, guidelines or instructions
adopted thereunder. The Contracting Officer’s determination of whether the costs of any
improvements, modifications, replacements or repairs should be or will be added to the capital
Capital Improvement costs of the Project shall be accepted by the Authority after the contracting
Contracting Officer has conferred in good faith with the Authority with respect thereto;
Provided, that such determination shall be subject to review by a court having jurisdiction
over the dispute. The Authority shall act in accordance with such determination unless and until
it is reversed or modified. The Authority shall submit annual OM&R work forecasts at the start
of each Fiscal Year. The OM&R work forecasts shall include all work to Project Works that is
projected to be done in the following Fiscal Year and work to be done in the next three (3) Fiscal
Years. Following the completion of a Review of Operation and Maintenance (RO&M)
examination of the Project Works as set forth in Article 10 (b) of this Agreement, if that
RO&M examination identifies a potential Capital Improvement, and at such other times as the
parties agree are necessary, the Authority and the Contracting Officer shall confer to
identify any Capital Items Improvements planned or necessary for the Project Works for the

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accomplishing and financing the Capital Items Improvements.

(a)(b) Notwithstanding the provisions of Article 4(a) hereof 5(a), in the event the Authority identifies Capital Items Improvements it deems necessary for the OM&R of the Project Works and the Contracting Officer is unable or unwilling to provide a mechanism for accomplishing and financing such Capital Items Improvements, the Authority in its sole discretion may proceed with the accomplishment and financing of such Capital Items Improvements and deem the costs thereof to be OM&R costs hereunder, regardless of whether such costs are capitalized by the Authority added to the Capital Improvement costs of the Project under Article 5(a).

Such Capital Items Improvements may include, without limitation, the acquisition, repair or replacement of personal property (such as motor vehicles and heavy equipment) which might otherwise be deemed to be Capital Items and the construction or improvement of structures utilized by the Authority in connection with the OM&R of the Project Works.

PERFORMANCE WORK STATEMENT, EMERGENCY ACTION PLANS AND NOTIFICATIONS

6. (a) The Authority shall maintain the Project Works in such a manner that the Project Works shall remain in good and efficient condition for the storage, diversion and carriage of water. The Authority shall perform the OM&R of the Project Works consistent with the guidelines provided by existing Designer’s Operating Criteria, standard operation procedures (SOPs) and/or manufacturer’s technical manuals for the Project Works, in accordance with such sound engineering practices as have been or may be developed for the Project Works, and in accordance with applicable Federal, State and local environmental laws. Deviations from or
changes to these standards shall be approved by the Contracting Officer.

5.(b) The Authority shall prepare such emergency action plans for the Project Works as are required by governmental agencies with jurisdiction over the Authority’s operations. The Authority shall furnish copies of any such plans to the Contracting Officer.

(b) In addition to implementing Article 5(a) hereof, the Authority shall notify the Contracting Officer as soon as reasonably practicable after initial observation by the Authority of any event or situation which threatens (1) the safety or integrity of the Project Works, or (2) the well-being of humans or property located adjacent to the Project Works. Notwithstanding Article 27 hereof, such notification shall be made telephonically or by facsimile transmission via electronic mail rather than by mail.

(d) The Authority shall submit monthly reports to the Contracting Officer outlining all work accomplished.

(e) The Authority shall annually review, and as necessary update, all SOPs and EAPs and provide such updates to the Contracting Officer.

(f) The performance work statement (PWS) will consist of the OM&R work forecast, current SOPs for all the major facilities, and EAPs as applicable.

ADMINISTRATION OF FEDERAL PROJECT LANDS

6.7. (a) The lands and rights-of-way interests in lands acquired and/or withdrawn, or reserved and needed by the United States for the purposes of the construction, care, operation and/or maintenance of the Project Works (hereafter referred to as collectively, “Project Lands”) may be used by the Authority for such purposes without being charged any administrative fees therefor. The Authority shall not issue rights-of-way across such lands or issue any other rights, leases, licenses, permits or special-use agreements involving such lands. All such land use instruments shall only be issued by the Contracting Officer. Ensure that no unauthorized encroachment occurs on Federal Project lands.
The Authority does not have the authority to issue any land-use agreement or grant that conveys an interest in Federal real property, nor to lease or dispose of any interest of the United States.

Where there are existing unauthorized encroachments as of the Effective Date on Project Works Lands, the Authority will work with the Contracting Officer to resolve the encroachments to the Contracting Officer’s satisfaction. For the purposes of this Agreement “encroachment” means any unauthorized building, structure, or object of any kind or character placed, into, over, or under any Project Works Lands.

(1)(2) The Contracting Officer shall not issue any rights-of-way across Project Works Lands or any leases, licenses, permits or special-use agreements involving Project Works Lands until the Contracting Officer has determined that the grant is compatible with the Project purposes and with the OM&R of the Project Works. The Contracting Officer shall issue such rights-of-way across Project Works Lands or any leases, licenses, permits or special-use agreements involving Project Works Lands only after offering the Authority the opportunity to provide appropriate comment concerning the request. Requests for such grants that are received by the Authority shall be referred to the Contracting Officer along with appropriate comment concerning the request. A copy of all such grants issued by the Contracting Officer shall be provided to the Authority.

(b) The Authority shall regularly inspect the Project Works Lands to identify any trespass and determine the general condition of the real property itself. Cases of trespass shall be corrected, where possible, by the Authority. Trespass cases which the Authority feels may require undue time and/or expense to correct shall be referred without delay to the Contracting Officer for resolution.
Construction by the Authority of any new facilities on Project Lands, other than new facilities (1) constructed in connection with the OM&R of the Project Works, or (2) the costs of which are added to the capital costs of the Project, shall not be commenced without the written approval of the Contracting Officer. Plans of sufficient detail to describe the proposed location of construction, the employment of sound engineering practices, and the use to be made of the proposed facility shall be reviewed by the Contracting Officer for sufficiency and for consistency with the purposes of the Project. The Contracting Officer, upon finding the proposed new facility to be consistent with this Agreement, sound engineering practices, and the purpose of the Project shall issue the Authority appropriate permission for such use without any use or administrative fee; Provided, that the Authority shall reimburse the Contracting Officer for the Contracting Officer’s actual costs incurred in reviewing and approving the Authority’s plans for such proposed new facilities.

The Authority shall review land-use requests for compatibility within Project Works Lands. The Contracting Officer shall remain responsible for review and action upon all requests for use of the Project Works or Project Works Lands unless a delegation of authority to the Authority is otherwise provided for by the express written consent of the Contracting Officer.

The United States retains responsibility for compliance with the National Historic Preservation Act of 1966, and the Native American Graves Protection and Repatriation Act of 1990. The Authority will notify the Contracting Officer and, only when on tribal land, also notify the appropriate tribal official, immediately upon the discovery of any potential historic properties or Native American human remains, funerary objects, sacred objects, or objects of cultural patrimony.
OVERSIGHT AND PARTICIPATION

7.8. (a) The Contracting Officer shall, to the greatest extent possible, afford the Authority the opportunity to: (a) review preliminary and final development plans, environmental documents and other documents which affect the Project Works. A copy of the Authority’s comments shall be provided to the Contracting Officer; and

(b) When appropriate, The Parties shall, to the greatest extent possible, afford each other the opportunity to participate with city, county, State, and Federal governments, or governmental groups and private concerns in meetings, hearings and other activities affecting the Project Works. The Authority Parties shall keep the Contracting Officer each other informed of these activities.

DELIVERY OF WATER BY THE AUTHORITY

8.9. (a) The Authority shall convey and distribute water in and from the Project Works in accordance with the directives of the Contracting Officer so that the Contracting Officer can satisfy all valid water delivery obligations of the United States from the Project Works, including without limitation all water delivery obligations of the United States under Water Delivery Contracts and for the delivery of Other Water. The Authority shall deliver water to each party Water Delivery Contractor or Party Entitled to Utilize or Receive Other Water entitled thereto from the Project Works through turnouts or such temporary diversion facilities as are specified in then-existing Water Delivery Contracts or other arrangements or agreements relating to Other Water specifying such turnouts and delivery points, or as may be agreed to by such party entitled to utilize or receive water from the Project Works, the Authority Water.
Delivery Contractor(s) or Party Entitled to Utilize or Receive Other Water, the Authority, and the Contracting Officer.

(a)(b) A complete list of all valid obligations of the United States to convey and distribute water in and from the Project Works is attached as Exhibit B and incorporated herein by this reference. Exhibit B indicates whether each obligation is under a Water Delivery Contract or is for the delivery of Other Water. The Contracting Officer shall modify Exhibit B from time to time as such obligations change or as new obligations are added.

(b)(c) Prior to the Contracting Officer entering into, renewing or amending any Water Delivery Contract or any other agreement which requires or permits the conveyance of water through any of the Project Works, the Contracting Officer shall consult with the Authority about the terms of such contract action, and shall provide the Authority the opportunity to review and comment thereon. Any such contract action shall be taken by the Contracting Officer only after the Contracting Officer has given due consideration to, and has taken all reasonable actions to mitigate the impacts of such contract action on (1) the quantity or quality of water available to those parties which are Water delivery Contractors, or Parties Entitled to Utilize or Receive Other Water, as of the date of this Agreement, and (2) the ability of the Authority to perform its obligations under this Agreement. The Contracting Officer shall provide the Authority a copy of all contracts entered into with Water Delivery Contractors or Parties Entitled to Utilize or Receive Other Water utilizing the Project Works for delivery or conveyance.
RESOLUTION OF DISPUTES

9.10. Should any dispute arise concerning delivery or conveyance of water by the Authority through the Project Works between the Authority and any Water Delivery Contractor(s) and/or any Party(ies) Entitled to Utilize or Receive Other Water from or through the Project Works, which the Authority concludes cannot be resolved through negotiations with the other party(ies) to the dispute, the Authority shall provide its position with respect to such dispute to the other party(ies) thereto in writing. Within sixty (60) days after such notice is provided, the dispute shall be referred to the Contracting Officer for resolution. The Contracting Officer's resolution of the dispute shall be accepted by the Authority and other party(ies) thereto as final and conclusive and the Authority and the other party(ies) shall promptly comply with said decision, and shall operate the Project Works in conformance with such decision until the same is stayed, reversed or modified by a decision of a court of competent jurisdiction.

EXAMINATION, INSPECTION, AND TECHNICAL ASSISTANCE, AND AUDIT OF PROJECT WORKS, RECORDS, AND REPORTS FOR DETERMINING ADEQUACY OF OM&R

10. The Contracting Officer shall at all times have access to the Project Works, and may periodically, as reasonably necessary, inspect and investigate the same for the purpose of ascertaining if the Project Works are being operated, maintained and replaced in accordance with this Agreement. The Contracting Officer shall provide the Authority with reasonable advance notice of any such inspections and investigations, and the purpose and scope thereof. The actual costs of such reasonable inspections and investigations shall be reimbursed by the Authority within sixty (60) days after receipt by the Authority of a detailed billing for such costs. Any determinations by the Contracting Officer as to the reasonableness of such inspections and...
investigations shall be subject to article 17 hereof.

(a) In addition to the inspection rights of the Contracting Officer provided in Article 10 (a) hereof, no more frequently than annually, the Contracting Officer may upon written notice to the Authority referencing this Article 10 (b), or upon request of the Authority shall, conduct a RO&M examination of any or all of the Project Works to assist the Contracting Officer and/or the Authority in determining the condition of the Project Works and the adequacy of the Authority’s OM&R thereof, as appropriate. A report of the review, including recommendations, if any, shall be prepared by the Contracting Officer and a copy shall be furnished to the Authority. The Authority shall reimburse the United States for the actual costs incurred for each RO&M examination, including the actual costs of any further inspections or investigations the Contracting Officer determines to be necessary as a result of conditions observed during the RO&M examination. The Contracting Officer shall provide a detailed billing to the Authority for such costs and the Authority shall pay such billings within sixty (60) days from the date the billing is received.

11. (a) The Contracting Officer may examine the following: the Authority’s books, records, and reports with respect to OM&R obligations under this Agreement; the Project Works being operated by the Authority; the adequacy of the OM&R program; the reserve fund; and the water conservation program including the water conservation fund, if applicable. Notwithstanding title ownership, where the United States retains a financial, physical, or liability interest in facilities either constructed by the United States or with funds provided by the United States, the Contracting Officer may examine any or all of the Project Works providing such interest to the United States.

(b) If requested by the Authority, the Contracting Officer shall undertake special reviews and provide technical assistance relating to the Project Works, and related...
determine the remedial measures required for their correction and to assist the Authority in solving specific problems. Any such reviews or technical assistance provided shall, except in a case of emergency, be requested in writing at least thirty (30) days in advance. The Contracting Officer shall bill the Authority for the actual cost of such reviews and technical assistance and the Authority shall pay such billings within sixty (60) days from the date the billing is received. Except in an emergency, any special inspection or audit shall be made only after written notice thereof has been delivered to the Authority by the Contracting Officer.

(c) The Authority shall provide access to the Project Works, operate any mechanical or electrical equipment, and be available to assist in the examination, inspection, or audit.

(d) The Contracting Officer shall prepare reports based on the examinations, inspections, and audits and furnish copies of such reports and any recommendations to the Authority.

(e) The costs incurred by the United States in conducting OM&R examinations, inspections, and audits and preparing associated reports and recommendations related to high- and significant-hazard dams and associated facilities shall be nonreimbursable. Associated facilities include carriage, distribution, and drainage systems; pumping and pumping generating plants; power plant structures; tunnels/pipelines; diversion and storage dams (low-hazard); Type 2 bridges which are Reclamation-owned bridges not located on a public road; regulating reservoirs (low-hazard); fish passage and protective facilities, including hatcheries; river channelization features; rural/municipal water systems; desalting and other water treatment plants; maintenance buildings and service yards; facilities constructed under Federal loan programs (until paid out); and recreation facilities (reserved works only); and any other facilities as determined by the Contracting Officer.

(f) Expenses incurred by the Authority, as applicable, in participating in the OM&R site examination will be borne by the Authority.

(g) Requests by the Authority for consultations, design services, or modification reviews, and the completion of any OM&R activities identified in the formal recommendations resulting from the examinations (unless otherwise noted) are to be funded as project OM&R and are reimbursable by the Authority to the extent of current OM&R allocations.

(h) Site visit special inspections that are beyond the regularly scheduled OM&R examinations conducted to evaluate particular concerns or problems and provide assistance relative to any corrective action (either as a follow up to an OM&R examination or when requested by the Authority) shall be nonreimbursable.

(i) The Contracting Officer may provide the State of California an opportunity to observe and participate in, at its own expense, the examinations and inspections.
The State of California may be provided copies of reports and any recommendations relating to such examinations and inspections.

COST RECOVERY FOR AUTHORITY OPERATON, MAINTENANCE, AND REPLACEMENT (OM&R) ACTIVITIES: TERMINATION OF WATER DELIVERIES

11.12. As of the effective date of this Agreement, the Authority shall be responsible for directly funding the OM&R of the Project Works transferred hereby. Except as otherwise provided herein, the parties acknowledge that the United States will no longer provide funding through the appropriations process for such OM&R. The United States hereby delegates to the Authority all required authority under statutes, contracts, regulations, and policies to collect for OM&R of the Project Works. The procedures and authorities to be utilized by the Authority for such direct funding are set forth in this Article 11.12.

(a) OM&R Budgets. Not later than ninety (90) days before the start of each Fiscal Year, the Authority shall submit to each Water Delivery Contractor, and all Parties Entitled to Utilize or Receive Other Water, the proposed budget for each of the next two succeeding Fiscal Years for all activities of the Authority to be carried out under this Agreement. The budget so developed shall include amounts necessary to establish the reserve fund described in Article 13 hereof and such other reserves as may be determined to be necessary by the Authority from time to time. The Authority shall afford each Water Delivery Contractor and all Parties Entitled to Utilize or Receive Other Water the opportunity to submit comments on such proposed budget by thirty (30) days before commencement of the Fiscal Year. Except as otherwise provided in the Memorandum of Understanding described in Article 11 (f), any dispute(s) regarding the proposed budget shall be resolved in the manner described in Article 9 hereof. The Authority shall submit the final
budget for each Fiscal Year to the Contracting Officer prior to the start of that Fiscal Year. The Authority shall use reasonable efforts to perform its responsibilities under this Agreement in accordance with the applicable final budget.

(b) Cost Recovery Methodology. The Authority shall develop a methodology to recover all costs incurred by the Authority in carrying out its responsibilities under this Agreement, including without limitation all costs described in the budgets prepared pursuant to Article 11(a) hereof.

(1) The Authority’s cost recovery methodology shall (i) provide for the equitable allocation of the costs to be recovered among Water Delivery Contractors with an obligation to pay for water delivered or conveyed through the Project Works and all Parties Entitled to Utilize or Receive Other Water with an obligation to pay therefor, including without limitation the United States Contracting Officer; (ii) provide for the equitable allocation of the costs to be paid to the San Luis and Delta-Mendota Water Authority pursuant to the Memorandum of Understanding described in Article 11(f) hereof; and (iii) clearly set forth the manner in which all such costs shall be collected by the Authority, including deadlines for payments and/or deposits required of Water Delivery Contractors and all Parties Entitled to Utilize or Receive Other Water under the methodology.

(2) Such methodology shall recover costs in lieu of the conveyance operation and maintenance OM&R cost component and the conveyance pumping operation and maintenance OM&R cost component heretofore calculated by the United States pursuant to its ratesetting policies for the Project. In addition to OM&R costs for directly funding the OM&R of the Project Works, such methodology shall recover power costs for conveyance pumping.
incurred by the United States for the production or transmission of such power that are payable
by the Water Delivery Contractors, Parties Entitled to Utilize or Receive Other Water, and
contractors in the Friant Division pursuant to the Memorandum of Understanding described in
Article 11(f) thereof, in connection with the delivery or conveyance of water through the
Project Works.

(3) The Authority's cost recovery methodology and any subsequent
amendments thereto shall be approved by the Authority and provided to all parties with
payment obligations under this Article 11 by July 1 of each year, or not less than sixty (60)
days prior to the effective date of any amendment thereof. Except as otherwise specified in the
Memorandum of Understanding described in Article 11(f) thereof, any dispute(s) regarding
the Authority's cost recovery methodology shall be resolved in the manner described in Article 9
hereof. The Contracting Officer has approved the Authority’s initial cost recovery
methodology. All proposed amendments shall be submitted to the Contracting Officer for
review and comment concurrent with the dissemination to all parties with payment obligations
noted above.

(c) Deficiencies in Cost Recovery. The Authority is not obligated to provide
funding from non-Federal sources for the cost of delivering water to Water Delivery
 Contractors or Parties Entitled to Utilize or Receive Other Water who do not pay the Authority in
full for the OM&R of the Project Facilities.

(1) In the event any Water Delivery Contract or obligation to deliver
Other Water provides for or results in the payment of less than all of the costs to be recovered by
the Authority in accordance with Article 11(b) thereof (a “deficiency”), whether resulting
for from the inadequacy of contract provisions between the Water Delivery Contractor or Party Entitled to Utilize or Receive Other Water and the United States to cover the Authority’s OM&R costs, delinquency in payment of amounts due as described in Article 11(d), or otherwise, the United States shall pay to the Authority the amount of any such deficiency.

(2) Except as otherwise provided under this Article 11(e), payment for such deficiencies shall be made through a separate service contract or such other appropriate legal instrument as may be entered into by the parties from time to time, by the terms of which the United States agrees to pay or provide funding to the Authority for water delivery services provided under this Agreement to the United States on behalf of the parties incurring the deficiencies. The solicitation and award of any service contract shall be made pursuant to the applicable Federal acquisitions laws, regulations, and policies governing such contracts, including the Federal Acquisition Regulations (FAR), and the Department of the Interior and Bureau of Reclamation Acquisition Regulations. Payments made by the United States to the Authority for such deficiencies shall become the financial obligation of the deficient party Water Delivery Contractor or Party Entitled to Utilize or Receive Other Water to the Contracting Officer.

(3) If payments for deficiencies as provided in this Article 11(e) are not timely made by the United States in accordance with said service contract or other appropriate legal instrument, the Authority may exercise its rights under Article 11(d).

(d) Termination of Water Deliveries. Subject to subparagraphs (1) and (2) of this Article 11(d), in the event any amount due to or to be collected by the Authority from a Water Delivery Contractor or any other party Party Entitled to Utilize or Receive Other Water...
Water pursuant to Article 11 hereof is not paid when due (a “delinquency”), the Authority is authorized by the United States to discontinue delivery and conveyance of water to or for such Water Delivery Contractor or Party Entitled to Utilize or Receive Other Water until such time as the delinquency is cured.

(1) The Authority shall give the Contracting Officer and the delinquent party written notice of the delinquency and of the date deliveries will be terminated if the delinquency is not cured. The Contracting Officer and the Authority shall agree in writing, from time to time, on the appropriate timing and length of such notice period.

(2) In the event, and only in the event, the Contracting Officer directs the Authority in writing to deliver or convey water to or for a delinquent party, the United States shall be liable to the Authority for the costs to be recovered from such party under Article 11(e) of this Agreement, and the Authority shall have no obligations to collect any amounts associated with such water from the delinquent parties.

(e) Interest. In the event any amounts due to the Authority from the United States under this Agreement are not paid when due, in addition to exercising the rights afforded the Authority under Article 11(c) and Article 11(d) hereof, the Authority will receive interest on the delinquent amounts pursuant to the Prompt Payment Act, as amended (31 USC 3901, et seq.). Provided, That the Authority shall have previously submitted appropriate invoices to the United States in accordance with 48 CFR Section 32.907-1.

(f) Recovery of Certain Costs and Memorandum of Understanding. The parties acknowledge that the OM&R of certain Project facilities benefiting parties in the Friant Division will be performed by the San Luis and Delta-Mendota Water
Authority pursuant to that certain Agreement to Transfer Operation and Maintenance and Replacement and Certain Financial and Administrative Activities Related to the San Luis and Delta-Mendota Canals, Tracy Pumping Plant, and O’Neill Pumping/Generating Plant, San Luis Drain and Associated Works. In connection therewith, the Authority has entered into that certain “Memorandum of Understanding Between the Friant Water Authority (as successor to the Friant Water Users Authority) and the San Luis and Delta-Mendota Water Authority Relating to Allocation, Collection, and Payment of Operation, Maintenance, and Replacement Costs for Water Delivered Through Certain Central Valley Project Facilities,” effective March 1, 1998, amended February 25, 2003, and as it may be further amended by the parties thereto from time to time. Pursuant to such Memorandum of Understanding, certain OM&R costs described therein will be payable by contractors in the Friant Division of the Project, and collected by the Authority and paid to the San Luis and Delta-Mendota Water Authority in accordance with the terms of such Memorandum of Understanding, as it may be amended by the parties thereto from time to time. The United States acknowledges and agrees that it is not a party to such Memorandum of Understanding. While this Agreement is in effect, the Authority shall comply with the terms of such Memorandum of Understanding, as it may be amended by the parties thereto from time to time.

(g)(1) Direct Charges Replace U.S. Rate Components. After the effective date of this Agreement, the United States shall not charge water rate components for conveyance operation and maintenance or OM&R, conveyance pumping operation and maintenance OM&R, to a Water Delivery Contractor or Party Entitled to Utilize or Receive Other Water, except to the extent (i) financial obligations otherwise properly included in
such components have been incurred by the United States prior to the date of this Agreement and
have not been included as an expense therein under the ratesetting policies for the Project; or (ii)
the United States has paid or provided funding to the Authority for delivering water to a Water
Delivery Contractor or Party Entitled to Utilize or Receive Other Water to cover a deficiency in
payment.

(1) To the extent the Authority’s cost recovery methodology includes
recovery of power costs for conveyance pumping that are incurred by the United States for the
production or transmission of such power, the Authority shall remit such funds to the
Contracting Officer within thirty (30) days after receipt of the Contracting Officer’s billing
therefor.

(2) All costs recovered pursuant to the Authority’s cost allocation
methodology and not required to be remitted to the Contracting Officer pursuant to this Article
shall be immediately available for funding the costs of the Authority pursuant to this
Article.

(h) Deposits of Amounts Collected. Amounts collected by the Authority
pursuant to this Article shall be placed on deposit or otherwise invested in accordance with
the Authority's investment policy and in conformance with state law to be expended solely
for purposes of the Agreement. All interest accruing on said account shall be property of the
Authority, and not of the United States, and shall be applied against OM&R costs.

(i) The Contracting Officer agrees that material changes in Project operations
affecting the quantity of water to be delivered or in Project finances may affect the ability of the
Authority to carry out its obligations under this Agreement. Under such circumstances,
parties will meet and confer as to emergency measures available to reduce the economic hardship to the Authority, the Water Delivery Contractors, and/or Parties Entitled to Utilize or Receive Other Water.

WATER ACCOUNTING

12.13. (a) The Contracting Officer’s water accounting system shall be the source data utilized in maintaining water delivery records and in allocating costs for all Water Delivery Contractors and all other parties utilizing or receiving water from the Project Works. The Water-Parties Entitled to Utilize or Receive Other Water. The water accounting system shall fully and accurately document the allocation and deliveries of water through the Project Works and account for financial transactions affecting the Water Delivery Contractors, the Friant Division Contractors required to make payments via the Friant Water Users Authority to the San Luis and Delta-Mendota Water Authority pursuant to the Memorandum of Understanding described in Article 11(f) hereof, and all Parties Entitled to Utilize or Receive Other Water with an obligation to pay therefor.

(a)(b) The Contracting Officer shall direct the Water Delivery Contractors and other Parties Entitled to Utilize or Receive Other Water to provide the Authority and the Contracting Officer with water delivery and payment information for all water delivered to said Water Delivery Contractors and Parties Entitled to Utilize or Receive Other Water pursuant to this Agreement. All water accounting records created or maintained by the Authority under this Agreement shall be subject to Article 14 hereof and shall be accessible by the Contracting Officer.
In order to further their mutual goals and objectives, the Contracting Officer and the Authority shall communicate, coordinate, and cooperate with each other, in order to improve the OM&R of the Project, including the financing thereof. The communication, coordination, and cooperation shall include, but not be limited to, any action which will or may materially affect the quantity or quality of Project Water supply, the allocation of Project Water supply, and Project financial matters, including but not limited to, budget and water accounting issues. The communication, coordination, and cooperation provided for hereunder shall extend to all provisions of this Agreement. Each party shall retain exclusive decision making authority for all actions, opinions, and determinations to be made by the respective party.

The Contracting Officer acknowledges that some or all of the Water Delivery Contractors and Parties Entitled to Utilize or Receive Other Water may appoint the Authority as agent for such parties or may otherwise designate, in writing, the Authority to act as an intermediary with the Contracting Officer concerning the water accounting or financial information. Upon notice, in writing, of such relationship, the Contracting Officer agrees to recognize the Authority in such capacity.

**EMERGENCY RESERVE FUND**

Upon transfer of the OM&R of the Project Works under this Agreement, the Authority shall accumulate and maintain a minimum reserve fund or demonstrate to the satisfaction of the Contracting Officer that other funds are available for use as an emergency reserve fund. The Authority shall establish and maintain that emergency reserve fund to meet costs incurred during periods of special stress caused by damaging droughts, storms, earthquakes, floods, or other emergencies threatening or causing interruption of water service.

Upon transfer of the OM&R of the Project Works under this Agreement, the Authority shall establish and maintain a minimum reserve fund account balance will be maintained to
finance (1) unusual OM&R costs; (2) costs associated with addressing conditions which threaten or cause interruption of water service; (3) unforeseen or extraordinary OM&R costs; and (4) costs associated with addressing conditions which threaten the safety or integrity of the Project Works. Provided, that such reserve fund may also be utilized as needed to provide funding for OM&R activities necessary before the collection of monthly billings during periods of diminished water deliveries. If the funds in the reserve fund are insufficient to pay the costs described in the preceding sentence, the Contracting Officer shall, subject to the availability of funds, make funds available to the Authority terms and conditions on which the Authority and the Contracting Officer agree.

(a) The targeted minimum reserve fund amount will be accumulated by deposits made no less frequently than annually. (b) The Authority shall accumulate the reserve fund with annual deposits or investments over a maximum of ten (10) years and is to be held in an interest-bearing or dividend-paying account in a Federally insured financial institution in a Federally interest- or dividend-bearing account or in securities guaranteed by the Federal Government, in the California Local Agency Investment Fund, or, if approved by the Contracting Officer, in any fiduciary account in a manner provided by the laws of the State of California. The targeted minimum reserve fund amount shall equal: Provided, That money in the reserve fund, including accrued interest, shall be available within a reasonable time to meet expenses for such purposes as those identified in paragraph (d) herein. Such annual deposits and the accumulation of interest to the reserve fund shall continue until the basic amount of fifteen percent (15%) of the average annual actual OM&R costs incurred by the Authority for the Project Works during the three most recent Fiscal Years. For purposes of the preceding sentence, the Authority’s actual OM&R costs for Fiscal Years 1995-1997 shall be deemed to be the Contracting Officer’s actual OM&R costs for the Project Works in those Fiscal Years, is accumulated (excluding any OM&R costs pertaining to Capital Improvements). Following an emergency expenditure from the fund, the annual deposits shall continue from the year following the emergency expenditure until the previous balance is restored. After the initial amount is accumulated or after the previous balance is restored, the annual deposits may be discontinued, and the interest earnings shall continue to accumulate and be retained as part of the reserve fund.

(c) Upon mutual written agreement between the Authority and the Contracting Officer, the basic reserve fund or the accumulated reserve fund may be adjusted to account for risk and uncertainty stemming from the size and complexity of the Project, the size of the annual OM&R budget; additions to deletions from, or changes in Project Works; and OM&R costs not contemplated when this Agreement was executed.
(d) The Authority may make expenditures from the reserve fund only for OM&R costs incurred during periods of special stress, as described in paragraph (a) herein; or for meeting unforeseen extraordinary operation and maintenance costs; or for meeting unusual or extraordinary repair or replacement costs; or for meeting betterment costs (in situations where recurrence of severe problems can be eliminated) during periods of special stress. Proposed expenditures from the fund shall be submitted to the Contracting Officer in writing for review and written approval prior to disbursement. Whenever the reserve fund in reduced below the current balance by expenditures therefrom, the Authority shall restore that balance within five (5) years of withdrawal by the accumulation of annual deposits which will be over and above the normal annual contribution to the reserve fund.

(e) During any period in which any of the Project Works are operated and maintained by the United States, the Authority agrees the reserve fund shall be available for like use by the United States.

(f) On or before October 1, of each year, the Authority shall provide a current statement of the principal and accumulated interest of the reserve fund account to the Contracting Officer.

BOOKS, RECORDS, AND REPORTS

(b) The Authority shall submit proposed expenditures from the reserve fund in writing to the Contracting Officer for review and approval prior to incurring the obligation, and such expenditures shall be deemed approved if the Contracting Officer does not respond within thirty (30) days; Provided, that in the event the Authority determines an expenditure from the reserve fund is necessary to correct an emergency that poses an immediate threat to or is causing interruption of water service, the Authority determines an expenditure from the reserve fund is necessary to correct an emergency that poses an immediate threat to or is causing interruption of water service, the Authority may request and receive oral consent of the Contracting Officer for expenditures of reserve funds to address the emergency. The Contracting Officer shall confirm the consent in writing within five (5) working days, the amount withdrawn from the reserve fund consistent with this Article 13 (c) shall be replaced in the reserve fund within five (5) years of withdrawal, in amounts which will be over and above the normal annual contribution to the reserve fund.
reserve fund; Provided. That any withdrawals made to provide funding for OM&R activities
necessary before the collection of monthly billings during periods of diminished water deliveries
shall be replaced in the reserve fund within twelve (12) months of withdrawal.

(e) The Authority may collect other reserve funds as it deems necessary in
addition to the targeted minimum reserve fund set forth under Article 13 (b) hereof. Any such
additional reserve amount collected by the Authority is not subject to the terms and conditions
set forth in this Article 13, but may be incorporated into the budget and the cost allocation
methodology described in Article 11 of this Agreement.

RECORDS

14-15. (a) The Authority shall establish and maintain separate, adequate and
appropriate records and books for the OM&R and financial and administrative activities
undertaken by the Authority relative to the Project Works under accounts and other books and
records pertaining to administration of the terms and conditions of this Agreement, including the
Authority’s financial transactions; water supply data; OM&R logs; Project Works Lands and
rights-of-way use agreements; and other matters that the Contracting Officer may require.
Reports shall be furnished to the Contracting Officer in such form and on such date or dates as
the Contracting Officer may require. Subject to applicable Federal law and regulations, each
Party to this Agreement shall have the right during officer hours to examine and make copies of
the other Party’s books and records relating to matters covered by this Agreement.

All records and books maintained pursuant to this Agreement shall be available to, and subject at
all reasonable times to inspection, examination, copying or audit by authorized
representatives of affected Water Delivery Contractors, Parties Entitled to Utilize or Receive
Other Water delivered or conveyed through the Project Works, and the Contracting Officer.

Each month the Authority shall collect and certify all delivery and measurement records and
report any abnormal findings to the Contracting Officer.
(a)(b) The Authority shall maintain and verify records of actual expenditures in accordance with an accounting system prescribed by the California State Controller in compliance with California Government Code Section 53891. The Contracting Officer and the Authority shall preserve and make available their respective financial and accounting records and books relating to this Agreement until the later of either (1) the final disposition of any litigation or settlement of claims arising out of performance under this Agreement, or (2) the expiration of five (5) years after the activities giving rise to the creation of such records and books. By the January 31-March 31, following the completion of each Fiscal Year, the Authority shall provide the Contracting Officer with a copy of its audited financial statements as of the end of the preceding Fiscal Year.

(b) Pending transfer of such records to the United States, the Authority shall retain the originals or copies of all significant OM&R records pertinent to the Project Works and/or water operations, including modifications to Project Works; as-built drawings; maintenance and repair logs; equipment tests, equipment operations logs; emergency response plans; spill prevention control and countermeasure plans; written inquiries received by the Authority pursuant to the Federal Freedom of Information Act or analogous State law; Congressional or State Legislative requests; or public or private claims or potential claims against the United States and/or the Authority relative to the Project Works.

(c)(d) The Contracting Officer shall make available to the Authority those operation, maintenance, financial and administrative records relating to
the Project Works in his possession at the time this agreement is executed as of the Effective Date and any revisions or modifications to those records subsequent to such execution.

**COOPERATION/MUTUAL AID**

15. In situations which the Contracting Officer and the Authority determine to be emergencies or other extraordinary circumstances affecting the Project, including without limitation, the Project Works, either the Contracting Officer or the Authority may request the other to furnish personnel, materials, tools, equipment or other resources. The party so requested shall immediately cooperate with the other and render such assistance as the party so requested determines to be available. Unless otherwise agreed, the party making the request, within sixty (60) days of receipt of properly itemized bills from the other party, shall reimburse the party rendering such assistance for all costs properly and reasonably incurred by it in such performance. Such costs shall be determined on the basis of current charges or rates charged by the party rendering the assistance.

(a) In instances in which the total costs of responding to emergencies or other extraordinary circumstances, whether due to a single event or condition or to multiple events or conditions, exceed or substantially deplete the Authority’s minimum reserve fund established pursuant to Article 13 (b) hereof, the Contracting Officer agrees to cooperate with the Authority (1) to promptly identify sources of funding, including but not limited to, sources available from or to the United States; (2) to allocate responsibility for paying the costs of responding to such emergencies or other extraordinary circumstance, including but not limited to by determining Capital Items under Article 13 (b) hereof; and (3) to develop a timetable for repayment of such
NOTIFICATION OF THIRD PARTIES

16.16. (a) The Contracting Officer shall instruct all Water Delivery Contractors and all Parties Entitled to Utilize or Receive Other Water that, effective March 1, 1998, the Authority became the Operating Non-Federal Entity with respect to the Project Works. The Contracting Officer shall inform all parties to be so notified of the Authority’s rights, authorities, and obligations under this Agreement and any other agreements relevant to the Authority's status as the Operating Non-Federal Entity and shall cooperate with the Authority in ensuring that all such parties timely and properly make all required payments to the Authority. Without limiting the foregoing, the Contracting Officer shall direct all such parties to simultaneously provide the Authority with copies of all water delivery schedules provided to the Contracting Officer. The Contracting Officer shall also inform all parties to be notified pursuant to this Article 16(a) that, after the effective date Effective Date of this Agreement, the United States shall not charge the conveyance operation and maintenance OM&R cost component or the conveyance pumping operation and maintenance OM&R cost component heretofore calculated by the United States pursuant to its ratesetting policies for the Project to Water Delivery Contractors, or Parties Entitled to Utilize or Receive Other Water, except to the extent financial obligations otherwise properly included in such components have been incurred by the United States prior to the effective date Effective Date of this Agreement and have not been included as an expense therein under the ratesetting policies for the Project.
(b) In accordance with the original agreement 8-07-20-X0356, the Secretary shall include in all agreements providing for the delivery or conveyance of water through the Project Works which entered into, renewed, or amended after May 29, 1998, a provision requiring that, while this Agreement is in effect, the Authority shall be the Operating Non-Federal Entity with respect to the Project Works. All such new, renewed, or amended agreements shall include provisions recognizing the Authority’s status as the Operating Non-Federal Entity, and shall require that the non-Federal parties to such agreements timely and properly make all required payments to the Authority. Such new, renewed, or amended agreements shall also include provisions requiring the non-Federal parties to such agreements to simultaneously provide the Authority with copies of all water delivery schedules and water delivery and payment information provided to the Contracting Officer. The Contracting Officer shall also include in all such new, renewed, or amended agreements a provision confirming that, after May 28, 1998, the United States shall not charge the conveyance operation and maintenance OM&R cost component, or the conveyance pumping operation and maintenance OM&R cost component heretofore calculated by the United States pursuant to its ratesetting policies for the Project to Water Contractors, or Parties Entitled to Utilize or Receive Other Water, except to the extent financial obligations otherwise properly included in such components have been incurred by the United States prior to the effective date of this Agreement and have not been included as an expense therein under the ratesetting policies for the Project.
17.17. (a) Where the terms of this Agreement provide for actions to be based upon the opinion or determination of either party, 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 Agreement, expressly reserve the right to 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.

(a)(b) The Contracting Officer shall have the right to make determinations necessary to administer this Agreement that are consistent with the expressed and implied provisions of this Agreement, the laws of the United States and the State of California, and rules and regulations applicable to the Contracting Officer. Such determinations shall be made in consultation with the Authority to the extent reasonably practicable.

18.18. (a) The Authority shall be subject to interest, administrative and penalty charges on delinquent installments or payments. When a payment is not received by the due date, the Authority shall pay an interest charge on the delinquent payment for each day the payment is delinquent beyond the due date. When a payment becomes 60 sixty (60) days delinquent, the Authority shall pay, in addition to the interest charge, an administrative charge to cover additional costs of billing and processing the delinquent payment. When a payment is delinquent 90 ninety (90) days or more, the Authority shall pay, in addition to the interest and administrative charges, a penalty charge of 6 percent per year for each day the payment is delinquent beyond the due date, based on the remaining balance of the payment due at the rate of six (6) percent per year. Further, the Authority shall also pay any fees incurred for debt collection services associated with a delinquent payment.

(a)(b) The interest charge rate shall be the greater of the rate prescribed quarterly in the Federal Register by the Department of the Treasury for application to overdue payments, or the interest rate of 0.5 percent per month prescribed by Section 6 of the Reclamation Project.
Act of 1939 (Public Law 76-260). The interest charge rate shall be determined as of the due date and remain fixed for the duration of the delinquent period.

(b)(c) When a partial payment on a delinquent account is received, the amount received shall be applied first, to the penalty, secondly to the administrative charges, third to the accrued interest, and finally to the overdue payment.

LIABILITY

i.19. The Authority hereby agrees that it will not assert that the United States, its agents and employees are responsible or liable for any liability on account of personal injury, death, or property damage of any nature whatsoever and by whomsoever asserted arising out of any act or omission of the Authority, its agents or employees under this Agreement; Provided, that the Authority does not assume any liability to the United States or any other person or persons for damages or injuries caused by (1) any action or omission by the United States, including any action or omission by the United States in the planning, design, construction, or OM&R of the Project Works prior to the date of transfer of the Project Works to the Authority for OM&R, (2) any directive given by the Contracting Officer to the Authority relating to the OM&R of the Project Works, or (3) acts of God, riot, war, the enactment of any governmental law, executive or judicial order or decree, or by any other cause beyond the reasonable control of the Authority, its members, officers, directors, agents and employees.

(a) The United States hereby agrees that it will not assert that the Authority, its members, officers, directors, agents and employees are responsible or liable for any claims, demands, actions and causes of action, loss or damage, cost or expense, or for any liability on account of personal injury, death or property damage of any nature whatsoever and by whomsoever asserted arising out of any act or omission of the United States, its agents or employees.
employees under this Agreement including, but not limited to (1) any action or omission by the
United States, including any action or omission by the United States in the planning, design,
construction, or OM&R of the Project Works prior to the date of transfer of the Project Works to
the Authority for OM&R, (2) any directive given by the Contracting Officer to the Authority
relating to the OM&R of the Project Works, or (3) acts of God, riot, war, the enactment of any
governmental law, executive or judicial order or decree, or by any other cause beyond the
reasonable control of the Authority, its members, officers, directors, agents and employees;
Provided, that Article 19 (b) (3) shall not apply in circumstances where the damage results from
the failure of the Authority to implement a legally applicable law, executive or judicial order or
decree.

(b) Within thirty (30) days of the receipt of any claim which may result in the
imposition of liability on either party to this Agreement relating to the Project Works or this
Agreement, the parties shall notify each other of such claim and provide a copy of that claim, if it
is in written form. The Authority and the United States shall have the right to intervene in any
action arising from such a claim, and the parties shall have the right to name each other as
indispensable parties in any such action. In the event of such a claim, Either party may bring
action against the other if the party against which such claim is made believes some or all of the
liability arising under such claim should be borne by the other party. The parties understand that
the payment of any money damages by the United States may be subject to the availability of
appropriated funds.

HAZARDOUS MATERIALS
CONTAMINATION OR POLLUTION OF FEDERAL PROPERTY

19. (a) The Authority shall not allow contamination or pollution of Federal Project lands, Project waters, or Project works of the United States or administered by the United States and for which the Authority has the responsibility for care, operation, and maintenance by its employees or agents under this Agreement. The Authority shall also take reasonable precautions to prevent such contamination or pollution by third parties.

20.20. (b) The Authority shall comply with all applicable Federal, State, and local laws and regulations and Reclamation policies and instructions existing or hereafter enacted or promulgated, concerning any Hazardous Material that will be used, produced, transported, stored, released, or disposed of on or in lands or water of the Project Works. Federal Project lands, Project waters, or Project works.

Project Works that are adversely affected as a result of the violation. (c) The Authority shall include the provisions contained in Articles 20 (a) through (c) hereof in any subcontract or third party contract it may enter into pursuant to this Agreement.

(b)

(a) The Authority shall take reasonable steps to prevent the deposit or release of Hazardous Material on or in lands or waters of the Project Works if such deposit or release would violate applicable laws or regulations. The Authority shall initiate immediate remedial action upon discovery of any event or condition which may or does result in such a deposit or release. Within twenty-four (24) hours of the discovery of any such event or condition, the Authority shall report such event or condition to the Contracting Officer with full details of the remedial actions taken and to be taken.

Violation of any of the provisions of this Article 20 shall make the Authority liable for any and all penalties and fines assessed by Federal, State, or local enforcement agencies as a result of such violation, and for the cost of full and complete remediation and/or restoration of the Project Works or water in the (c) "Hazardous material" means (1) any substance falling within the definition of “hazardous substance,” “pollutant or contaminant,” or “hazardous waste” under the Comprehensive Environmental Response, Compensation and
Liability Act (42 U.S.C. § 9601(14), (29), and (33)); (2) oil, as defined by the Clean Water Act (33 U.S.C. § 1321(a)) and the Oil Pollution Act (33 U.S.C. § 2701(23)); (3) thermal pollution, refuse, garbage, sewage effluent, industrial waste, mine or mill tailings, mineral salts, pesticides, and other solid waste, and (4) any other substance regulated as hazardous or toxic under Federal, State, local or Tribal law.

(d) Upon discovery of any event which may or does result in contamination or pollution of Federal Project lands, Project water, or Project Works, the Authority shall immediately undertake all measures necessary to protect public health and the environment, including measures necessary to contain or abate any such contamination or pollution, and shall report such discovery with full details of the actions taken to the Contracting Officer. Reporting shall be within a reasonable time period but shall not exceed twenty-four (24) hours from the time of discovery if it is an emergency and the first working day following discovery in the event of a non-emergency.

(e) If violation of the provisions of this Article occurs and the Authority does not take immediate corrective action, as determined by the Contracting Officer, the Authority may be subject to remedies imposed by the Contracting Officer, which may include termination of this Agreement in accordance with Article 2(b).

(f) The Authority shall be liable for any response action or corrective measure necessary to protect public health and the environment or to restore Federal Project lands, Project waters, or Project Works that are adversely affected as a result of such violation, and for all costs, penalties or other sanctions that are imposed for violation of any Federal, State, local or Tribal laws and regulations concerning hazardous material. At the discretion of the Contracting Officer, the United States may also terminate this Agreement in accordance with Article 2(b) as a result of such violation.

(g) The Authority shall defend, indemnify, protect and save the United States harmless from and against any costs, expenses, claims, damages, demands, or other liability arising from or relating to Authority’s violation of this Article.

(d) The Contracting Officer, using reasonable diligence, shall (h) Reclamation agrees to provide information necessary for the Authority, using reasonable diligence, to comply with the provisions of this Article-20.

(e) Notwithstanding any other provision of this Article 20, in addition to any rights the Authority may possess under Article 19 hereof, with respect to any Hazardous Material present in, on or under the Project Works as of August 19, 1986, nothing in the Agreement shall be construed to alter the financial responsibility of the United States, if any, for (1) all penalties
and fines assessed by Federal, State, or local enforcement agencies in connection therewith and
(2) costs incurred by the Authority in connection with the disposal, cleanup or other remedial
actions the Authority undertakes in connection therewith.

ASSIGNMENT PROHIBITED: SUCCESSORS, SUCCESSORS AND ASSIGNS
OBLIGATED: OBLIGATED

21.20. The provisions of this Agreement shall apply to and bind the successors and
assigns of the respective parties, but no assignment or transfer of the this Agreement by
the Authority, or any part thereof or interest therein, shall not be valid unless and until
approved by the Contracting Officer in writing. Any waiver at any time by any party to this
Agreement of its rights with respect to a default, or any other matter arising in connection with
this Agreement, shall not be deemed to be a waiver with respect to any subsequent default or
matter by either Party shall be valid until approved in writing by the other Party.

CONTINGENT ON APPROPRIATION OR ALLOTMENT OF FUNDS

22.21. The expenditure or advance of any money or the performance of any obligation of
the United States under this Agreement shall be contingent upon appropriation or allotment of
funds. Absence of appropriation or allotment of funds shall not relieve the Authority from any
obligations under this Agreement. No liability shall accrue to the United States in case funds are
not appropriated or allotted.

OFFICIALS NOT TO BENEFIT

23.22. No member of or delegate to Congress, Resident Commissioner or official of the
Authority shall benefit from this Agreement other than as a water user or landowner in the same
manner as other water users or landowners.

WATER AND AIR POLLUTION CONTROL

24. The Authority, in carrying out this Agreement, 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.
CLEAN AIR AND WATER

23. (a) The Authority agrees as follows:

(1) To comply with all the requirements of section 114 of the Clean Air Act, as amended (42 U.S.C. § 7414), and section 308 of the Clean Water Act (33 U.S.C. § 1318), relating to inspection, monitoring, entry, reports, and information, as well as other requirements specified in those sections, and all applicable regulations and guidelines issued thereunder.

(2) That no portion of the work required by this Agreement will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the Effective Date unless and until the Environmental Protection Agency eliminates the name of such facility or facilities from such listing.

(3) To use its best efforts to comply with clean air standards and clean water standards at the facility where the Agreement work is being performed.

(4) To insert the substance of the provisions of this Article into any nonexempt subcontract, including this subparagraph (a)(4).

(b) The following definitions apply for purposes of this Article:


(3) The term “clean air standards” refers to all enforceable rules, regulations, guidelines, standards, limitations, orders, controls, prohibitions, and other requirements which are contained in, issued under, or otherwise adopted pursuant to the Clean Air Act or Executive Order 11738, an applicable implementation plan as described in section 110 of the Clean Air Act (42 U.S.C. § 7410), an approved implementation procedure or plan under subsection 111(c) or subsection 111(d) of the Clean Air Act (42 U.S.C. § 7411(c) or (d)), or an approved implementation procedure under subsection 112(d) of the Clean Air Act (42 U.S.C. § 7412(d)).

(4) The term “clean water standards” refers to all enforceable limitations, controls, conditions, prohibitions, standards, and other requirements which are promulgated pursuant to the Clean Water Act or contained in a permit issued to a discharger by the Environmental Protection Agency or by a state under an approved program, as authorized by section 402 of the Clean Water Act (33 U.S.C. § 1342), or by local government to ensure compliance with pretreatment regulations as required by section 307 of the Clean Water Act (33 U.S.C. § 1317).
(5) The term “comply” refers to compliance with clean air or water standards. It also refers to compliance with a schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency, or an air or water pollution control agency in accordance with the requirements of the Clean Air Act or Clean Water Act and regulations issued pursuant thereto.

(6) The term “facility” means any building, plant, installation, structure, mine, vessel or other floating craft, location, or site of operations owned, leased, or supervised by a contractor or subcontractor to be utilized in the performance of a contract or subcontract. Where a location or site of operations contains or includes more than one building, plant, installation, or structure, the entire location or site shall be deemed to be a facility except where the Director, Office of Federal Activities, Environmental Protection Agency, determines that independent facilities are collocated in one geographical area.

COMPLIANCE WITH CIVIL RIGHTS LAWS AND REGULATIONS


(a)(b) These statutes require that no person in the United States shall, on the grounds of race, color, national origin, handicap, age, sex, or religion, be from being excluded from participation in, be being 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 Agreement, the Authority agrees to immediately take any measures necessary to implement this obligation, including permitting officials of the United States to inspect premises, programs and documents.

(b)(c) The Authority 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 Authority 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 Authority recognizes and agrees that such Federal assistance will be extended in reliance on the representations and agreements made in this article and that the United States reserves the right to seek judicial enforcement thereof.
Complaints of discrimination against the Authority shall be investigated
by the Contracting Officer’s Office of Civil Rights.

EQUAL OPPORTUNITY

26.25. During the performance of this Agreement, the Authority agrees as follows:

(a) The Authority will not discriminate against any employee or applicant for employment because of race, color, religion, sex, age, sexual orientation, handicap, or national origin. The Authority will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Authority 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 this nondiscrimination clause.

(b) The Authority will, in all solicitations or advertisements for employees placed by or on behalf of the Authority, state that all qualified applicants will receive consideration for employment without discrimination because of regard to race, color, religion, sex, age, sexual orientation, handicap, or national origin.

(c) The Authority will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee’s essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the Authority’s legal duty to furnish information.

(d) The Authority will send to each labor union or representative of workers with which they have a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency Contracting Officer, advising the said labor union or workers’ representative of the Authority’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.
(d)(e) The Authority will comply with all provisions of Executive Order No. 11246 of September 24, 1965, as amended, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(e)(f) The Authority will furnish all information and reports required by said amended Executive Order No. 11246 of September 24, 1965, and by the rules, regulations and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records and accounts by the Contracting Officer Agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.

(f)(g) In the event of the Authority’s noncompliance with the nondiscrimination clauses of this Agreement or with any of the said rules, regulations or orders, this Agreement may be canceled, terminated or suspended, in whole or in part, and the Authority may be declared ineligible for further Government contracts in accordance with procedures authorized in said amended Executive Order No. 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in said 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)(h) The Authority will include the provisions of paragraphs (a) through (gh) 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 said amended Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Authority 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 Authority becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the Authority may request the United States to enter into such litigation to protect the interest of the United States.

NOTICES

26. (a) Any notice, demand, or request authorized or required by this Agreement shall be deemed to have been given, on behalf of the Authority, when mailed, postage prepaid, or delivered to the Area Manager, South-Central California Area Office of the United States, 1243 N Street, Fresno, California 93721, Bureau of Reclamation, 2366 North Grove Industrial Drive, Suite 106, Fresno, CA 93727-1851 and on behalf of the United States, when mailed, postage prepaid, or delivered to the Board of Directors, Chief Operating Officer of the Friant Water Users Authority, 854 North Harvard Avenue, Lindsay, CA 93247-1715 or such other address as from time to time may be designated in a written notice to the parties of this Agreement; Provided, that this Article 27. The designation of the addressee or the address may be changed by notice given in the same manner as provided in this Article for other notices.
27. (b) This Article 26 shall not preclude the effective service of such notice by other means.

TERMINATION OF COOPERATIVE AGREEMENT

28. Effective March 1, 1998, that certain Cooperative Agreement No. 6-FC-20-04180 between the parties dated August 19, 1986, shall be terminated; Provided, that all obligations of the parties thereunder which survive a termination of such Cooperative Agreement shall be unaffected by such termination.

MODIFICATIONS

29. Each of the parties reserves the right to propose modifications to this Agreement at any time while it is in effect. If either proposes any such modifications, the parties shall promptly attempt to negotiate in good faith an amendatory agreement to accommodate the proposed modifications.

OMITTED

28. [Intentionally Omitted.]

CHANGES IN CONTRACTOR’S ORGANIZATION

29. While this Agreement is in effect, no change may be made in the Authority’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 Agreement including, but not limited to, dissolution, consolidation, or merger, except upon the Contracting Officer’s written consent.

PROTECTION OF WATER AND AIR QUALITY

30. (a) The Authority, without expense to the United States, will perform the OM&R of the Project Works in a manner that preserves the quality of the water at the highest feasible level as determined by the Contracting Officer.
(b) The United States will perform the OM&R of reserved works in a manner that preserves the quality of the water at the highest feasible level as determined by the Contracting Officer. The United States does not warrant the quality of the water delivered to the Water Delivery Contractors and Parties Entitled to Utilize or Receive Other Water and is under no obligation to furnish or construct water treatment facilities to maintain or improve the quality of water delivered to the Water Delivery Contractors and Parties Entitled to Utilize or Receive Other Water.

(c) The Authority will comply with all applicable water and air pollution laws and regulations of the United States and the State of California; and will obtain all required permits or licenses from the appropriate Federal, State, or local authorities necessary for the delivery of water by the Authority; and will 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 Federal facilities or Project Water provided by the Authority within its Project Water service area.

(d) This Article will not affect or alter any legal obligations of the Secretary to provide drainage or other discharge services.

RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION

31. When acquiring land or an interest in land and relocating persons or personal property in connection with the construction, operation, and maintenance of Project Facilities, the Authority shall comply with the provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Pub. L. 91-646; 84 Stat. 1894; 42 U.S.C. § 4601, et seq.) and Department of Transportation regulations at 49 C.F.R. part 24.

PEST MANAGEMENT

32. (a) The Authority is responsible for complying with applicable Federal, State, and local laws, rules, and regulations related to pest management in performing its responsibilities under this Agreement.

(b) The Authority is responsible for effectively avoiding the introduction and spread of, and for otherwise controlling, undesirable plants and animals, as defined by the Contracting Officer, on or in Federal Project lands, Federal Project waters, and Federal Project works for which and to the extent that the Authority has operation and maintenance responsibility. The Authority is responsible for exercising the level of precaution necessary in meeting this responsibility, including inspecting its vehicles, watercraft, and equipment for reproductive and vegetative parts, foreign soil, mud or other debris that may cause the spread of weeds, invasive species and other pests, and removing such materials before moving its vehicles, watercraft, and equipment onto any Federal land, into any Federal project facility waters, or out of any area on Federal project land where work is performed.

(c) Where decontamination of the Authority’s vehicles, watercraft, or
equipment is required prior to entering Federal project land or waters, the decontamination shall be performed by the Authority at the point of prior use, or at an approved offsite facility able to process generated cleaning wastes, pursuant to applicable laws, rules, and regulations. Upon the completion of work, the Authority will perform any required decontamination within the work area before moving the vehicles, watercraft, and equipment from Federal Project lands and waters.

(d) Programs for the control of undesirable plants and animals on Federal Project lands, and in Federal Project waters and Federal Project works for which the Authority has operation and maintenance responsibility will incorporate Integrated Pest Management (IPM) concepts and practices. IPM refers to a systematic and environmentally compatible program to maintain pest populations within economically and environmentally tolerable levels. In implementing an IPM program, the Authority will adhere to applicable Federal and State laws and regulations and Department of the Interior and Bureau of Reclamation policies, directives, guidelines, and manuals, including but not limited to, the Department of the Interior Manual, Part 517 Integrated Pest Management Policy and Part 609 Weed Control Program, the Plant Protection Act of June 20, 2000 (Pub. L. 106-224), and Executive Order 13112 of February 3, 1999.

MEDIUM FOR TRANSMITTING PAYMENTS

33. (a) All payments from the Authority to the United States under this Agreement 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.

(b) Upon execution of the Agreement, the Authority shall furnish the Contracting Officer with the Authority’s taxpayer’s identification number (TIN). The purpose for requiring the Authority’s TIN is for collecting and reporting any delinquent amounts arising out of the Authority’s relationship with the United States.

SUSTAINABLE OPERATION AND MAINTENANCE

34. The Authority shall comply with Section Two (2) of Executive Order 13834 “Regarding Efficient Federal Operations”. Implementation of this Executive Order as it applies to this Agreement is provided in Exhibit D to this Agreement.

COOPERATION/MUTUAL AID

35. (a) In situations which the Contracting Officer and the Authority determine to be emergencies or other extraordinary circumstances affecting the Project, including without
limitation, the Project Works, either the Contracting Officer or the Authority may request the
other to furnish personnel, materials, tools, equipment, or other resources. The Party so
requested shall immediately cooperate with the other and render such assistance as the Party so
requested determines to be available. Unless otherwise agreed, the Party making the request,
within sixty (60) days of receipt of properly itemized bills from the other Party, shall reimburse
the Party rendering such assistance for all costs properly and reasonably incurred by it in such
performance. Such costs shall be determined on the basis of current charges or rates charged by
the Party rendering the assistance.

(b) In instances in which the total costs of responding to emergencies or other
extraordinary circumstances, whether due to a single event or condition or to multiple events or
conditions, exceed or substantially deplete the Authority’s minimum reserve fund established
pursuant to Article 14(b), the Contracting Officer agrees to cooperate with the Authority (1) to
promptly identify sources of funding, including but not limited to, sources available from or to
the United States; (2) to allocate responsibility for paying the costs of responding to such
emergencies or other extraordinary circumstances, including but not limited to by determining
Capital Improvements under Article 5(a); and (3) to develop a timetable for repayment of such
costs that are provided by the United States and are allocated to the Authority.

AGREEMENT DRAFTING CONSIDERATIONS

36. This Agreement has been negotiated and reviewed by the Parties hereto, each of
whom is sophisticated in the matters to which this Agreement pertains. Articles 1 through 36 of
this Agreement have been drafted, negotiated, and reviewed by the Parties, and no one Party
shall be considered to have drafted the stated Articles.
IN WITNESS WHEREOF, the parties hereto have executed this Amendment Agreement as of the day and year first above written.

THE UNITED STATES OF AMERICA

(SEAL)

APPROVED AS TO LEGAL
FROM AND SUFFICIENCY

James E. Turner
OFFICE OF REGIONAL SOLICITOR
DEPARTMENT OF THE INTERIOR

By: Roger K. Patterson
Regional Director, Mid-Pacific Region
Bureau of Reclamation

Friant Water Users Authority

FRIANT WATER AUTHORITY

(SEAL)

By: Kole Upton
Chairman, Board of Directors

Attest:

53
Richard M. Moss
Secretary
(I:\CCCONT15.FWU)
RENEWAL OF FKC OM&R TRANSFER AGREEMENT

Questions & Answers
Draft: 2/27/20

City of Fresno

1. The draft includes a definition for “Capital Improvement” (page 3). The current agreement uses the term “Capital Item” but does not provide a definition. The proposed definition of “Capital Improvement” includes activities that “extend the useful life of a property, plant or equipment asset, expands the capacity or efficiency of an asset, or otherwise upgrades an asset to serve needs different from, or significantly greater than” its current use. When read together with updates to the definition of “Operation, Maintenance, and Replacement” (page 4) and updates to Article 5(b) (page 14), the draft clarifies that where the contracting officer is unable or unwilling to provide a mechanism for accomplishing and financing a Capital Improvement the FWA has deemed necessary for OM&R, the FWA can accomplish and finance those improvements and classify them as OM&R. The City would like clarification as to whether this definition includes the proposed Friant-Kern Canal Middle Reach Capacity Correction Project.

   The proposed repairs to existing portions of the canal and the realignment of portions of the canal would be considered “Capital Items” under the existing agreement and clearly fall under the definition of “Capital Improvement” in the draft agreement. As discussed at the February FWA Board meeting, one current strategy for project self-financing is the funding of an amount up to $50M as a potential OM&R expense under this authority.

2. On Page 11, there is newly proposed language about “necessary repairs.” The proposed language includes timelines for notifying FWA of necessary repairs and for completion of the necessary repairs, and the consequences for not completing those repairs (government will complete them at FWA’s expense). The City would like clarification as to whether this represents a difference in how such repairs are currently addressed.

   This provision in Article 3(c) (line 236), like all single spaced text, is required language based on Reclamation Directives & Standards (D&S). What is “necessary” is based on the general obligation to maintain the Project Works in a “good and efficient condition” as provided in Article 3(b) (lines 232-235) and Article 6 (a) (lines 317 – 323). The process for determining what repairs are “necessary” is outlined Article 5(a), which includes the submission of OM&R work forecasts, as well as the Review of Operation and Maintenance (RO&M) process outlined in Article 11. As noted above, the funding procedure for addressing a necessary repair that would constitute a “Capital Improvement” is covered under Article 5, which provides that Reclamation

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1 References to line locations are those in the Redline draft dated 1/15/20
can either add such amount to overall CVP Project costs for reimbursement or provide some other funding mechanism, or FWA can elect to self-finance the repair.

These provisions are substantially the same as under Article 3 of the existing agreement, pursuant to which FWA is required to maintain the FKC “in substantially the same condition” as upon transfer in 1998 (lines 202-203) as well as consistent with Designer Operating Criteria and standard operating procedures and technical manuals (lines 205-210), and FWA’s OM&R performance has long been subject to inspection and a determination of adequacy under current Article 10.

3. The FWA’s agenda report notes that the FWA is seeking commissioner approval to retain the liability provisions on pages 40 and 41, rather than adopting the new language on page 12. The City’s Risk Division still needs to review this item.

**FWA has not agreed to the proposed D&S liability language and the provision remains under review.**

4. The draft includes several new reporting requirements such as requirements that FWA submit annual work forecasts (page 13) and monthly reports outlining all work accomplished (page 15). The City would like clarification as to whether these new requirements represent a change in how the FWA is currently operating and whether it will impact costs.

**FWA has been providing a two-year work forecast as part of its budget process. Reclamation has indicated that it will accept the monthly OM&R report that FWA provides to the Board as the “monthly report”. As such, these provisions will not increase existing costs.**

5. Page 31-32 updates the provisions concerning the Emergency Reserve Fund. The changes clarify what the reserve fund may be used for, that the funds must be accessible within a reasonable time when needed, what authorization is required from the contracting officer to disburse emergency funds, how the fund is to be accumulated, and the timeline for replenishing the fund when expenditures have been made. The basic amount for the emergency fund is 15% of the average annual actual OM&R costs incurred by the FWA during the three most recent fiscal years. The draft agreement explicitly excludes any Capital Improvements treated as OM&R from that calculation. The new provisions also state that the parties may agree, in writing, to adjust the reserve fund. The City would like clarification if any of the proposed changes contained in the draft would increase the cost of the FWA’s obligations under the agreement and if so, whether/how that would be passed on to the Friant Contractors.

**The Reserve Fund is maintained, as stated in Article 14, to finance emergency or unforeseen or extraordinary OM&R costs (lines 725-728). The requisite reserves have been based on up to 10 years of deposits, with the annual deposit based on 15% of the average annual OM&R costs for the most recent three fiscal years. FWA and the other**
water agencies renewing their Transfer Agreements requested an exclusion for “Capital Improvements” since those costs have historically not been included in the calculation and with FWA and SLDMWA anticipating significant OM&R Capital Improvement costs in the near future (FKC Project and Jones Pumping Plant Rewind Project, respectively), did not want to artificially inflate the amount required to be maintained in the Reserve Fund. This will allow FWA to potentially apply such funds directly to the Capital Improvements currently contemplated (i.e., the Middle Reach Capacity Correction Project).

6. Pages 46-48 address compliance with civil rights laws and equal opportunity. The only reason I point these changes out is to note that some classes mentioned in the current agreement were deleted in a few places (age, disability, religion, gender). The City is wondering if this may have been an unintentional deletion.

This was a change made by Reclamation to incorporate current D&S language. The change appears to reflect the specific statutes cited, which may not cover the two deleted categories (sex and religion). We will confirm with Reclamation. (See Article 25 (Equal Opportunity), which does acknowledge, sex, sexual orientation and religion as protected categories under those statutes.

7. Pages 49-51 contain new provisions regarding Protection of Water and Air Quality and Pest Management. With regard to water and air quality, the draft states that the FWA must perform OM&R in a manner that preserves the quality of water at the highest feasible level as determined by the contracting officer. The government is required to perform its obligations to the same standard but the proposed additions explicitly state that the government does not warrant the quality of the water delivered and has no obligation to provide or construct water treatment facilities. The City would like to know whether adoption of this language will result in any practical changes or cost increases. This also applies with regard to the Pest Management provisions. Lastly, does this impose any new requirement or obligation on FWA or are they already following the pest management practices outline in the draft?

*FWA is already under an obligation to comply with federal and state clean water and air laws and regulations (see Article 24), so the language in proposed Article 23, while more detailed in citing specific laws, does not represent a fundamental change in obligations.*

*With respect to the water quality language regarding “highest feasible level” this is mandated D&S language and is already in every Contractor’s current water service contract with Reclamation. How it may be implemented by Reclamation in the future is not fully known at this time. FWA is generally supportive of the language, however, to the extent that it may allow FKC Contractors to voluntarily develop and implement a negotiated water quality plan with approval by the Contracting Officer. Reclamation’s disclaimer of warranting the quality of water is simply a repeat of the language in its water supply contracts*
The Pest Management provisions reflect existing practice as the operative federal policies cited have been in effect for many years.

9. On Page 51, there is a new provision indicating that the FWA must comply with a portion of a 2018 Executive Order outlining a series of sustainability and efficiency goals. The City is unclear how this will impact the FWA’s costs and operations.

FWA has not seen the specific text for this Exhibit. However, the “goals” for energy and environmental efficiency in Section 2 of Executive Order 13834 do not at this time appear to present significant new operating costs with respect to Canal OM&R.

AEWSD: (Key Comments – in addition other good suggestions or questions)

10. Consider using same definitions in Article 1 for terms that are used in 9(d) contracts.

11. Consider adding greater specificity as to the Contracting Officer’s obligation to maintain records of the allocation and deliveries of water through the Project Works in Article 13(a).
Discussion and Assessment
Transfer of Title to the Friant-Kern Canal

Friant Water Authority
February 20, 2020
## Revision History

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Prepared for:
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This Discussion and Assessment of Title Transfer of the Friant-Kern Canal was prepared in accordance with the standard of care commonly used as state-of-practice in the planning and engineering profession. Standard of care is defined as the ordinary diligence exercised by other practitioners in the same geographical area performing the same services under similar circumstances during the same period.

AECOM does not attest to the accuracy, completeness, or reliability of data, opinions, or other information provided by others that are included in this Discussion and Assessment. The information cited was characterized as being the most comprehensive and accurate available at the time it was provided, recognizing that title transfer discussions remain in the early stages and more accurate and detailed information will be made available as the work progresses. AECOM has not performed independent validation or verification of data or opinions provided by others. The data presented in this report are compiled for the purposes of evaluating title transfer only and should not be extended or used for any other purposes.

By: [Signature]
Brian Person, P.E.
Project Manager

Date: Feb. 20, 2020
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1. Introduction

1.1 Executive Summary

This Discussion and Assessment of Title Transfer was prepared by AECOM for the Friant Water Authority (Authority) under Professional Services Agreement LA #4841-8907-5632, and presents information on the proposed transfer of title to the Friant-Kern Canal (FKC) from the Bureau of Reclamation (Reclamation) to the Authority. A variety of sources were consulted and cited in assembling this paper, including federal and state statutes, federal and state policies, Reclamation’s Title Transfer website, documents for other title transfers prepared and provided by Reclamation, specific concerns brought to the attention of the Authority by contractors that are supplied water by the FKC, and others. A number of Reclamation staff with experience and expertise in title transfer were also consulted during the compilation and verification of information specific to the proposed FKC transfer, and information was provided by Authority staff as well.

Although title transfers meeting certain criteria have been statutorily simplified, as will be explained further in later sections, the pursuit of title transfer remains a significant undertaking. The title transfer process itself would require a commitment by the Authority in terms of both time and cost. Accordingly, this paper is structured to inform decisions relevant to the title transfer Process, as well as provide information on impacts to the Authority’s roles, responsibilities, and liabilities following the actual title transfer, as discussed in the Outcome section.

It is important to emphasize that the title transfer process is by design progressive and iterative, with several junctures where the Authority can simply elect to proceed no further. The next significant step, as described in the Process section, would be to complete negotiations with Reclamation on the terms of the Draft Memorandum of Understanding (MOU) (described in the Reclamation Draft Memorandum of Understanding section), then execute the document. The MOU serves primarily to identify the roles and responsibilities of the Authority and Reclamation during the title transfer, and would be accompanied by a Letter of Agreement, also executed by both parties, describing the Authority’s obligation to fund certain of Reclamation’s costs incurred during the process.

As this paper illustrates, title transfer of the FKC is certainly achievable, and offers several benefits to the Authority in terms of reduced Reclamation oversight, greater efficiencies in fulfilling operation and maintenance responsibilities, and access to revenue streams from use licenses and excess conveyance capacity contracts. Reclamation currently receives significant revenue for use of the FKC, the FKC right of way, and appurtenant facilities derived from utility crossing licenses, communication equipment licenses, and the conveyance of non-Central Valley Project (CVP) water authorized by several Warren Act contracts. If title transfer is completed, that revenue stream would revert to the Authority, and based on currently-available information, on an annual basis would far exceed the additional cost incurred to fulfil the additional responsibilities the Authority would assume following transfer.

There are facets of most title transfers, however, and certainly some associated with this particular transfer, that while not insurmountable, are complex and require careful consideration to resolve. One of the issues worth mentioning here is the concern expressed by several contractors regarding the point of delivery for water provided by Reclamation to the various contractors supplied by the FKC. This concern, as well as an agreement that provides resolution, are discussed in sections 5.2.2 and 5.2.3.
To the extent the information available for each aspect allowed, every effort has been made in this Discussion and Assessment to present an objective assessment of the benefits, concerns, and efforts associated with title transfer, including a comparison of costs where appropriate and available. Other aspects of title transfer are unavoidably subjective in nature, however, and thus a discussion of the perceived benefits and concerns is presented, in part based on input from subject matter experts.

Finally, it is important to note that while key Reclamation staff were accessible and helpful in providing information for this Discussion and Assessment, they were unable to allocate significant time to these preliminary discussions because the MOU has not yet been executed. Further, some of the detailed information will not be available until specific discussions and negotiation with Reclamation occur. As a result, some of the information presented herein is preliminary and subject to refinement or correction as discussions progress after the MOU is executed.

1.2 Summary of Scope

Primary components of the scope of this Discussion and Assessment include:

- Review of pertinent federal legislation, policy, and guidelines, along with the Authority’s policies, operation and maintenance practices, financial and cost data, and other documents as necessary, in support of the Title Transfer Study.

- Engage in discussions with Authority staff, legal counsel, management, and Board of Directors members to exchange information pertaining to the Title Transfer Study. Present findings as required.

- Analyze the various aspects of the title transfer process as directed by or mutually agreed upon with the Authority, including an evaluation of the specific steps, compliance with prevailing statutes and policies, timelines, and approximate costs.

- Analyze the various aspects of the title transfer outcome as directed by or mutually agreed upon with the Authority, including an evaluation of the advantages and risks to the Authority post-transfer. The analysis will focus on the advantages and disadvantages to the Authority in specific areas such as operations, maintenance practices, regulatory oversight and compliance, revenue streams, rights and interests of individual districts, water delivery and water rights implications, contractual implications, and cost impacts.

- As directed by or mutually agreed with the Authority, engage in discussions directly with Reclamation and/or other entities pertaining directly or indirectly to the Title Transfer Study.

- Provide other services to the Authority pertaining to the Title Transfer Study as directed by the Authority, including, potentially, a final report on the Title Transfer Study.

1.3 Background and Purpose

Since Reclamation initiated title transfers in the mid 1990s, some 30 water user organizations have received title to Reclamation water storage, water conveyance, power distribution, buildings and grounds, and appurtenant facilities, with several more transfers pending (a roster of title transfers completed to date is provided as Appendix A). Entities receiving title have cited reduced costs, the elimination of or significantly reduced approval processes, the ease of making repairs or modifications, and reduced oversight and recordkeeping as primary reasons for pursuing title. Beginning several years ago, the Authority opened discussions with Department of the Interior officials in Washington, D.C., and with
Reclamation officials at the Mid-Pacific Regional Office and the South-Central California Area Office regarding the transfer of title to the FKC from the United States to the Authority.

As the Authority continues to evaluate the potential benefits of receiving title to the FKC, it has contracted with AECOM Technical Services to compile information and assess several aspects of title transfer. This paper represents the first deliverable described in the contract, and is intended to help inform the Authority’s decision-making processes as the pursuit of title transfer is further considered.

Information presented in the Process section is intended to guide the Authority in its consideration of the aforementioned MOU. Other aspects of title transfer examined in this paper include all those common to previous transfers completed by Reclamation thus far, as identified in title transfer program documents, as well as the unique provisions of this particular transfer identified by Reclamation and Authority managers and staff, along with Reclamation contractor representatives. These aspects include the specific steps within the transfer process, changes in Reclamation's role and authority post-transfer, regulatory compliance implications post-transfer, operational issues and changes, water rights and delivery considerations, contractual impacts, costs (associated with the transfer process, as well as the outcome) and a host of others.

1.4 Project Works

The FKC is a 152-mile-long CVP water conveyance feature, originally constructed by Reclamation, used to augment irrigation capacity in Fresno, Tulare, and Kern counties in California. Construction began in 1949 and was completed in 1951, at a cost of $60.8 million. The FKC originates at Friant Dam, which impounds Millerton Lake, a reservoir on the San Joaquin River north of Fresno, and extends south along the eastern edge of the San Joaquin Valley, ending at Kern River near Bakersfield. In a typical year, the FKC diverts most of the flow of the San Joaquin River. The CVP Delta-Mendota Canal replenishes the San Joaquin River at the town of Mendota, and replaces the volume of water being delivered by the FKC. Average annual throughput is 1,051,000 acre feet, with a high of 1,720,000 acre feet in 2005, and a low of 58,000 acre feet in 2015. The FKC capacity is 5,000 cubic feet per second (cfs) in the upstream reach, gradually decreasing to 2,000 cfs at its terminus. The FKC is built in both concrete and unlined earth sections. The cross section is up to 128 feet wide at the top and 24 feet wide at the bottom of the concrete segments, and 40 to 64 feet wide in the unlined segments. Water depths range from 11 to 19.9 feet.

The Draft MOU states that the transferred facilities shall include “all right, title, and interests of the United States of America in the Friant-Kern Canal system of the Central Valley Project … are referred to as the ‘Project Works.’” It further states that the Project Works are defined in Article 1(f) and Exhibit A of the Agreement to Transfer the Operation, Maintenance and Replacement and Certain Financial and Administrative Activities Related to the Friant-Kern Canal and Associated Works (Contract No. 8-07-20-X0356). An inventory of the Project Works is provided in a later section of this document.

1.5 Operation and Maintenance-

For several decades following the completion of the FKC, Reclamation fulfilled all operation and maintenance responsibilities. In the mid 1990s, the Authority began investigating the option of entering into a contract to assume operation and maintenance responsibility. In 1998, Reclamation and the Friant Water Users Authority entered into an Agreement to Transfer the Operation, Maintenance and Replacement and Certain Financial and Administrative Activities Related to the Friant-Kern Canal and Associated Works (Contract No. 8-07-20-X0356). On June 30, 2004, the Agreement was assigned to the Authority, as
successor entity to the Friant Water Users Authority, and the Authority has performed all operation, maintenance, and related functions since.

2. **Governing Statutes and Policies**

There are several provisions of federal law and Reclamation policy that specifically govern the title transfer process. Chief among them include:

- Title VIII of the *John D. Dingell, Jr. Conservation, Management, and Recreation Act* (the Dingell Act) (PL 116-9) (described in detail in a later section)

- Title Transfer Framework, originally developed by Reclamation in 1995 to provide step-by-step guidance for navigating the title transfer process, was updated in 2004. In 2019, the Dingell Act brought significant changes to the title transfer process for those to which it applies, requiring that further updates to the Framework be made. At this writing, Reclamation indicates they are actively developing title transfer guidance, building on the existing title transfer framework to reflect the provisions of the Dingell Act.

- Title Transfer Checklist (2009) developed by Reclamation as a means to identify and characterize information pertaining to the facilities to be transferred, transfer impacts, potential regulatory requirements, affected entities, etc.

- Reclamation Manual Directives and Standards CMP TRMR-120 *Transfer of Title for Reclamation Project Facilities* (temporary release incorporating the Dingell Act provisions, currently set to expire May 21, 2020)¹

- Sundry Civil Expenses Appropriations Act of 1922 (also referred to as the Contributed Funds Act) cited primarily because it provides the statutory authority for Reclamation to receive advance payment for administrative expenses associated with title transfer)

The title transfer process must also comply with several federal statutes and California state regulatory laws. Key among them include:

- (Federal) National Environmental Policy Act (1969)
- (Federal) Endangered Species Act (1973)
- (Federal) National Historic Preservation Act (1966)
- California Environmental Quality Act (1970)

3. **Facilities to be Transferred – Project Works**

Facilities proposed to be transferred include the Project Works, consisting of:

- the entire approximately 152-mile length of the FKC;
- all lands adjoining the FKC alignment acquired by Reclamation in fee title;
- all easements held by Reclamation that encumber lands adjoining the FKC. The easements are transferrable (believed by Reclamation to be fewer than 10 total);
- all check structures, gates, and other control structures, measuring features, and equipment;

¹ Reclamation Office of Policy indicates the final version of the D&S is projected for release in March 2020.
• all bridges, utility crossings, and other crossings owned by Reclamation;
• all recreation facilities at Lake Woollomes Park;
• office building;
• maintenance yard;
• two ditchrider residences; and
• lands acquired for radio repeater stations.

4. Title Transfer Process Considerations

4.1 Reclamation Draft Memorandum of Understanding

If the Authority elects to formally explore title transfer, execution of the aforementioned MOU would be the next step. The MOU would serve to identify the key issues to be addressed and the primary steps comprising the transfer exploration (and potentially execution) processes, and the roles and responsibilities of the parties. Reclamation developed an initial draft modeled closely after versions used for previous transfers, and sent the draft to the Authority for review and comment on October 23, 2019. Key provisions of the MOU are provided below; an unedited version is attached as Appendix B.

• Cites the Dingell Act as the authority for the transfer;
• References the entire Project Works as being subject to the transfer;
• States that the existing responsibility for operation and maintenance costs is unaffected by the transfer;
• States that repayment contract obligations are unaffected by the transfer;
• Requires compliance with all applicable federal laws;
• Pledges cooperation between Reclamation and the Authority, in consultation with any existing potentially affected water contractors;
• Provides that both parties will appoint representatives who are committed to providing the necessary resources; and
• Specifies that the parties will enter into a Letter of Agreement (LOA) (described in the next section) under which the Authority will be responsible for advancing funds to Reclamation for costs incurred due to the transfer.

4.2 Letter of Agreement

The draft MOU clearly states that Reclamation has no funds appropriated to provide for its internal costs associated with the proposed transfer. Rather, Reclamation routinely executes a LOA with the entities responsible for reimbursing Reclamation's internal costs for unique undertakings such as title transfer. The LOA specifically describes the entity's pre-payment obligation. On November 15, 2019, Reclamation forwarded to the Authority the LOA executed on September 27, 2019, between Reclamation and the Contra Costa Water District for payment of costs associated with transfer of title to the Contra Costa Canal System, offering it as a template, and suggesting that the LOA with the Authority would be very similar. The Contra Costa LOA is provided in Appendix C. Citing the Sundry Civil Expenses Appropriations Act as Reclamation's authority for receiving payment, the LOA lists administrative costs associated with:

• review of the project pursuant to the National Environmental Policy Act, Endangered Species Act, and National Historic Preservation Act;
• administrative and general overhead;
• travel, meetings, consultations, and research; and
• other activities required to affect the title transfer and to ensure compliance with state and federal laws.

Citing the Anti-Deficiency Act, the LOA states that funds must be remitted to Reclamation in advance of any activities performed by Reclamation personnel. If the MOU is executed, the Authority would deposit an initial advance (e.g., $50,000, as in the case of Contra Costa), then replenish the fund as necessary to maintain a minimum balance (typically $10,000).

4.3 Dingell Act

On March 12, 2019, the President signed into law the John D. Dingell, Jr. Conservation, Management, and Recreation Act (Public Law 116-9). Title VIII of the Act provides Reclamation with new authority to transfer the title to certain eligible facilities to qualifying entities without separate and individual acts of Congress, as was statutorily required prior to passage of the Dingell Act.

The Dingell Act stipulates that the Secretary of the Interior, after receiving a proper application from a qualifying entity, may convey to the entity all rights, title, and interest of the United States to the entity. The implementing steps include:

• Not later than 90 days before the Secretary makes the conveyance, she or he must submit to the Congress: 1) a written notice of the proposed conveyance, and 2) a description of the reasons for the conveyance.
• If a joint resolution disapproving the proposed conveyance is not enacted before the date on which the Secretary makes the conveyance, the Secretary will enter to a written agreement with the entity.
• The written agreement must be developed in consultation with any existing water and power customers affected by the conveyance of the facility.

During conversations with Reclamation officials in Washington, D.C. and the South-Central California Area Office, they opined that the proposed FKC transfer would fall within the requirements of the Dingell Act. If made official, this determination would significantly streamline the legislative aspect of the transfer process, saving the Authority significant time, effort, and expense as compared to the pursuit of separate and distinct legislation. The balance of this paper is prepared under the assumption that title transfer would occur under the authority of the Dingell Act.

4.4 Regulatory Compliance

4.4.1 National Environmental Policy Act

4.4.1.1 General

In accordance with the National Environmental Policy Act (NEPA) and its implementing regulations, the transfer of title would constitute a “federal action” because Reclamation, as a federal agency, can “exercise discretion over the outcome” and has “actual power to control the project.” Further, Section 8007(a)(1) of the Dingell Act states “Before conveying an eligible facility under this subtitle, the Secretary shall comply with all applicable Federal environmental laws, including … (1) the National Environmental Policy Act of 1969.” As has been the norm with other title transfers undertaken thus far, the Draft MOU states that Reclamation will be the lead agency for NEPA compliance.
When considering NEPA compliance for a proposed action such as title transfer, Reclamation generally undertakes a three-tier analysis:

- First, if the proposed action is determined to not individually or collectively cause significant impacts, documenting the impacts of the proposed action may be accomplished within a categorical exclusion (CE) (see the next section for more information on the new title transfer-specific CE).

- Second, if the action is not categorically excluded, Reclamation may require the completion of an Environmental Assessment (EA), describing the action in greater detail ("purpose and need statement") and comparing alternatives. If Reclamation concludes in the EA that the proposed action will not significantly affect the environment, Reclamation may execute a Finding of No Significant Impact (FONSI).

- Third, if a proposed action may have a significant impact on the human environment, Reclamation must prepare an Environmental Impact Statement (EIS), also providing a "purpose and need statement" and describing impacts and alternatives in greater detail. The public notice, involvement, and review steps are more comprehensive and require formal documentation of comments and concerns. Reclamation must "rigorously explore and objectively evaluate all reasonable alternatives" to a proposed action, including the "no action" alternative, where, in this case, title would be retained by Reclamation. At the conclusion of the public involvement process, Reclamation must issue a Record of Decision (ROD), summarizing the factors described in the EIS that Reclamation considered in making its final decision to select a particular alternative.

Whether a particular alternative is reasonable and should have been analyzed in greater detail is frequently at the center of NEPA compliance-related litigation involving actions potentially impacting the management of natural resources.

NEPA does not apply to the Authority’s actions in its process of receiving title because the Authority’s action itself is not subject to any federal permitting, oversight, or control, but the Authority must comply with the requirements of the California Environmental Quality Act (CEQA) (discussed further in section 4.5).

4.4.1.2 Categorical Exclusions Under Improved Title Transfer Process

In completing the thirty title transfers executed thus far, Reclamation has fulfilled NEPA compliance by completing an EA/FONSI in most cases, or an EIS/ROD in select instances. In May 2019, the Department of the Interior revised the Departmental Manual, adding a CE developed specifically for the transfer of title of certain projects and facilities, at 516 DM 14, Section 14.5. The language is excerpted below.

**TITLE TRANSFER ACTIVITIES**

“Transfer from Federal ownership of facilities and/or interest in lands to a qualifying entity where there are no competing demands for use of the facilities; where the facilities are not hydrologically integrated; where, at the time of transfer, there would be no planned change in land or water use, or in operation, or maintenance of the facilities; and where the transfer would be consistent with the Secretary’s responsibilities, including but not limited to existing contracts or agreements, the protection of land resources and water rights held in trust for federally recognized Indian tribes and Indian individuals, and ensuring compliance with international treaties and interstate compacts.”

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2 The Humboldt Project in Nevada and the Wellton-Mohawk Project in Arizona are two examples of title transfers where NEPA compliance required the preparation of an Environmental Impact Statement.
CE QUALIFICATION FACTORS

The CE is limited to the transfer of projects and/or project facilities from federal ownership to a qualifying entity, which means an agency of State or local government or Indian tribe, a municipal corporation, quasi-municipal corporation, or other entity such as a water district that, as determined by the Secretary, has the capacity to continue to manage the conveyed property for the same purposes for which the property has been managed under Reclamation law. Accordingly, projects involving the following considerations (CE Qualification Factors) of a qualifying non-Federal entity would generally be eligible to be considered for the title transfer CE:

1. The potential transferee must demonstrate the technical capability to maintain and operate the facilities and lands on a permanent basis and an ability to meet financial obligations associated with the transferred assets.
2. The potential transferee must affirm that it has no plans to change the maintenance, operations, or use of the lands and water associated with the transferred facilities.
3. The potential transferee must ensure that there are no competing demands for use of the transferred facilities, with the exception of those demands accommodated by existing contractual arrangements.
4. The potential transferee must ensure that the facilities proposed for transfer are not hydrologically integrated with other facilities, thereby impacting other contractors, stakeholders, or activities, with the exception of those impacts accommodated by existing contractual arrangements.
5. The transfer would not include lands or facilities involving Indian trust responsibilities.
6. The potential transferee must ensure that issues involving existing contracts and agreements, and interstate compacts and agreements, are resolved, and treaty and international agreement obligations are fulfilled prior to transfer.
7. The potential transferee must assume responsibility for all commitments and agreements into the future.
8. Potentially affected state, local, and tribal governments, appropriate Federal agencies, and the public will be notified of the initiation of discussion to transfer title and will have: (a) the opportunity to comment and suggest options for remedying any problems; and (b) full access to relevant information, including proposals, analyses, and reports related to the proposed transfer. The title transfer process will be carried out in an open and public manner. If a project or facility is not eligible for transfer under Public Law 116-9, Title VIII, the transfer proponent may seek legislation to authorize the negotiated terms of the transfer of each project or facility.

4.4.1.3 Categorical Exclusion Sufficiency

At this writing, Reclamation officials have not yet made a final determination whether all eight of the conditions listed in the new Categorical Exclusion can be met and will therefore fulfill NEPA compliance requirements for title transfer. During informal discussions, however, they have suggested that at this point they do not believe all eight can be met, and accordingly, they indicate that an Environmental Assessment will likely be required. As mentioned above, NEPA compliance for the vast majority of title transfers has been achieved by the preparation of an EA and FONSI.

4.4.2 Endangered Species Act

There are potential Endangered Species Act (ESA) compliance implications associated with the title transfer process as well as the title transfer outcome.

Section 8004 (b)(2)(C)(i) of the Dingell Act specifically states as a requirement that “the eligible facility continues to comply with the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.) in a manner that provides no less protection to the listed species as existed under Federal ownership.” Further, Section 8007(a)(2) states “Before conveying an eligible facility under this subtitle, the Secretary shall comply with all applicable Federal environmental laws, including ... the Endangered Species Act of 1973.”
To achieve ESA compliance, federal agencies are required to consult with U.S. Fish and Wildlife Service (Service) and/or National Marine Fisheries Service (NMFS) to ensure they are not undertaking, funding, permitting, or authorizing actions that are likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitat. The Service has primary responsibility for terrestrial and freshwater organisms, while the responsibilities of NMFS are mainly marine wildlife such as whales and anadromous fish such as salmon.

Informal consultation is an optional process that, in the case of title transfer, can help the applicant (potentially Reclamation) and the Service/NMFS determine whether formal consultation is needed. It would include all discussions, correspondence, etc., between the Service/NMFS and Reclamation, and has no specified timeframe for completion. Federal agencies and the designated non-federal entity may use this period to work with the Service and NMFS on project design and conservation actions that would remove all adverse effects and avoid the need for formal consultation. Formal consultation is a mandatory process for proposed projects that may adversely affect listed species. The process is initiated in writing by the action agency, and concludes with the issuance of a biological opinion by the Service and NMFS. The Service and NMFS strongly encourage the use of informal consultation so that projects can be designed for minimal impact on listed species, possibly resulting in a determination of either “no effect” or “not likely to adversely affect,” thereby eliminating the need for formal consultation.

As a federal agency, Reclamation is not required to consult with the Service or NMFS if it determines an action will not affect listed species or critical habitat. Reclamation is required to consult if an action “may affect” listed species or designated critical habitat, even if the effects are expected to be beneficial. In many cases, projects with overall beneficial effects still include some aspects that will adversely affect individuals of listed species and such adverse effects require formal consultation. If an agency determines that its action is not likely to adversely affect listed species or critical habitat, it can request the concurrence of the Service or NMFS on this determination. If they agree, consultation is concluded with a concurrence letter.

In the case of a “may affect” determination, Reclamation will typically request, via formal letter, an official species list to assist in evaluating the potential impacts of a project. Reclamation has not yet done so as the process is not to that state, but Reclamation officials have stated that the San Joaquin Kit Fox, federally listed as endangered in 1967 and listed as threatened by California in 1971, has habitat within the FKC area.

Reclamation officials have preliminarily indicated that they do not believe that formal consultation will be required, as the title transfer action itself would not result in take. They suggest that they confer with the Service and NMFS at the appropriate time and discuss whether a disclosure memo describing the title transfer action will suffice.

4.4.3 National Historic Preservation Act – Section 106

Section 106 of the National Historic Preservation Act of 1966, as amended, requires federal agencies to take into account the effects of their actions on historic properties and to afford the Advisory Council on Historic Preservation (Council) a reasonable opportunity to comment when an action will have an adverse effect on historic properties. The first step in Section 106 compliance for the proposed transfer is for Reclamation to “determine whether the proposed federal action is an undertaking as defined in 36 CFR 800.16(y) and, if so, whether it is a type of activity that has the potential to cause effects to historic properties.” In previous title transfers, Reclamation has typically determined that the “Proposed Action/Preferred Alternative” (from the NEPA document) meets the definition of an undertaking, and that the undertaking has the potential to affect cultural resources because the facilities and adjoining lands will be
released from federal ownership. In such cases, Reclamation notifies the Council of the finding and invites the Council to participate in the resolution of adverse effects. The Council may then elect, or decline, to participate.

In 1997, the Federal Highway Administration obtained a consensus determination for the National Register of Historic Places eligibility for the FKC. Reclamation has since treated the FKC as eligible for inclusion in the National Register pursuant to 36 CFR, but has not received a consensus determination on its own formal evaluation of the FKC.

In February 2017, Reclamation and the California State Historic Preservation Officer executed a Programmatic Agreement as a step toward achieving Section 106 Compliance for Reclamation’s proposed modifications to the FKC to restore conveyance capacity. While Reclamation officials indicate a separate Programmatic Agreement will likely be necessary for title transfer, they indicate that the information compiled during the February 2017 effort will provide helpful information.

4.4.4 Hazardous Materials Survey

The Draft MOU provides that Reclamation will inspect the Project Works to identify any hazardous wastes, contamination, or public hazards, and develop and implement a remediation plan for any known or discovered hazardous waste sites. It also includes a provision, however, that the inspection may be waived if both parties agree in writing.

4.4.5 Indian Trust Asset Evaluation and Tribal Consultation

Indian Trust Assets (ITAs) are legal interests in property held in trust by the United States for Indian Tribes or individuals. The Secretary of the Interior, acting as the trustee, holds many assets in trust. Examples of objects that may be trust assets are lands, minerals, hunting and fishing rights, and water rights. While most ITAs are on reservations, they may also be found off-reservations. The United States has an Indian trust responsibility to protect and maintain rights reserved by or granted to Indian Tribes or Indian individuals by treaties, statutes, and executive orders. These are sometimes further interpreted through court decisions and regulations. Tribal lands are lands that have been deeded to tribes or upon which tribes have a historical claim. No such lands are known in the FKC area.

Executive Order 13175, "Consultation and Coordination with Indian Tribal Governments," was issued to establish regular and meaningful consultation and collaboration with tribal officials in the development of federal policies that have tribal implications. Under the Order, Reclamation is required to consult with tribal officials on any matters impacting tribal interests.

4.5 California Environmental Quality Act

4.5.1 General

NEPA and California Environmental Quality Act (CEQA) processes are similar by design. Importantly, both encourage a joint federal and state review in cases such as title transfer that require both federal and state approvals. A joint document preparation and review process often avoids redundancy, improves efficiency, and reduces cost and time. There are important differences, however, that would require careful

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3 36 CFR PART 800, Subpart B, Section 800.5 (2) (vii) Protection of Historic Properties states that examples of adverse effects include: “Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.”

4 Excerpt from the February 2017 Programmatic Agreement described in the next paragraph.
coordination between the Authority, Reclamation, and state officials. In some cases, executing a Memorandum of Understanding among the three entities can be helpful for clarifying responsibilities and avoiding conflict and delay.

4.5.2 Compliance

CEQA Guidelines include a list of Categorical Exemptions for which no additional environmental analysis is needed, subject to certain exceptions. It has not yet been determined if title transfer is within the framework of the Categorical Exemptions, but at this point it likely is not. The next level of CEQA compliance, and approximately parallel to an EA under NEPA, is the Initial Study (IS). Provided that the environmental impacts of the title transfer can be adequately characterized in the IS, a Negative Declaration (approximately parallel to a Finding of No Significant Impacts under NEPA) or a Mitigated Negative Declaration can be executed.

4.6 Title Transfer Process Cost Summary

4.6.1 Regulatory Compliance, Inspection, and Related Requirements

As summarized in earlier sections, the Dingell Act, and in greater detail Reclamation Manual Directives and Standards CMP TRMR-120, stipulate the title transfer transaction costs, and provide that such costs must be paid in advance. The Draft MOU also referenced earlier provides further detail and guidance in this regard.

In response to the Authority’s request letter dated June 15, 2018, Reclamation provided the Authority with a cost estimate for several of the primary title transfer process requirements it would complete internally, presented in Table 1 below. Related requirements that would presumably be contracted to consultants with specialized expertise are presented in Table 2. Significant effort remains to assemble and refine the various cost components associated with the title transfer process, but some preliminary cost estimates have been made available. Reclamation emphasizes that the estimates are subject to their further internal review, as well as negotiations with the Authority.
### Table 1 – Reclamation (Internal) Title Transfer Process Cost Estimate

<table>
<thead>
<tr>
<th>Work Component and Description</th>
<th>Conditions/Assumptions</th>
<th>Estimated Cost$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory compliance, including NEPA and ESA</td>
<td>Authority will hire a consultant to develop EA and conduct surveys; informal consultation under ESA Section 7 will be sufficient</td>
<td>$20,000</td>
</tr>
<tr>
<td>The National Historic Preservation Act (NHPA) Section 106 Compliance, including consultation, Memorandum of Agreement with SHPO, Native American consultation, document review</td>
<td>Authority will hire a consultant to conduct surveys and other tasks necessary for Section 106 compliance</td>
<td>$27,140</td>
</tr>
<tr>
<td>Engineering and technical services inspections of all facilities to be transferred, findings report preparation, analyses reviews, report finalization</td>
<td>Assumes a very robust inspection. Reclamation indicates this effort and cost could be significantly reduced if the Authority agrees to a more overview-type approach, given that they have operated and maintained the facilities for years. If the Authority elects to accept title to all facilities in “as-is” condition, this inspection could be waived and the associated cost would be eliminated.</td>
<td>$80,000</td>
</tr>
<tr>
<td>Develop and negotiate title transfer MOU, negotiate contract delineating the terms of the transfer, etc.</td>
<td>Assumes nine full-day negotiating sessions, 30 days of staff time to develop and complete contract, six days for review by the Office of the Solicitor</td>
<td>$30,000</td>
</tr>
<tr>
<td>Prepare legal descriptions; compile, copy, and review associate Form 528; research any third-party agreements; prepare quit-claim deeds; transfer ownership interest</td>
<td>Assumes over 300 ownership records associated with the FKC (over 3,700 separate parcels associated with the individual water district’s water distribution systems, but those are not included in this revised figure)</td>
<td>$350,000</td>
</tr>
<tr>
<td>Conduct Environmental Site Assessment for hazardous materials</td>
<td></td>
<td>$35,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$542,140</strong></td>
</tr>
</tbody>
</table>

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5 Each of the line-item costs were originally provided by Reclamation in their October 3, 2018 letter responding to the Authority’s June 15, 2018 request. The letter advises that the estimates are for all facilities, including those managed by individual districts, and are subject to change as more detailed information on the transfer becomes available. In response to the Authority’s later request, Reclamation responded in a June 26, 2019 email to Doug DeFitch with revised figures pertaining to transfer of the FKC only. These latter figures are depicted in the table.
Table 2 – Contracted Services Title Transfer Process Cost Estimate

<table>
<thead>
<tr>
<th>Work Component and Description</th>
<th>Conditions/Assumptions</th>
<th>Estimated Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare Draft (presumed) Environmental Assessment and companion Initial Study to achieve NEPA and CEQA compliance</td>
<td>Authority will hire a consultant to gather required information and develop draft and then final EA and IS, leading to FONSI and Negative Declaration. Assumes Reclamation's title transfer CE will not fulfill NEPA compliance</td>
<td>$20,000 - $40,000</td>
</tr>
<tr>
<td>Conduct surveys and perform other work needed to comply with Section 106</td>
<td>Authority will hire a consultant to conduct surveys and other tasks necessary for Section 106 compliance</td>
<td>$100,000 - $500,000</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>$120,000 - $540,000</td>
</tr>
</tbody>
</table>

Costs for the activities listed in Table 2 vary widely as shown. Reclamation is unable to provide a narrower range at this point, as the circumstances of each transfer vary and examples from prior transfers are not indicative of costs in this case. Reclamation indicates they will be able to narrow the range as more details are known.
4.6.2 Present Worth Determination and Payment

The Dingell Act requires that the entity receiving title will provide compensation to the Reclamation Fund an amount equivalent to the net present value of any repayment obligation to the United States or other income stream that the United States derives from the facility to be transferred, as of the date of transfer.

On November 15, 2018, Reclamation provided the Authority with an accounting of the integrated cost of construction the Authority owes for CVP facilities using the then draft 2019 data from the Rate Book Schedules A-2Ba, which is provided in Table 2 below. It is important to note that the cost information compiled is date sensitive, and may be significantly different if revised based on current information.

Table 3 – Authority Net Project Indebtedness

<table>
<thead>
<tr>
<th>Authorized Purpose</th>
<th>Component</th>
<th>Amount Owed (Credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation</td>
<td>Buchanan Unit</td>
<td>$1,353,061</td>
</tr>
<tr>
<td></td>
<td>Friant Dam Class 2</td>
<td>($1,018)</td>
</tr>
<tr>
<td></td>
<td>FKC Class 1</td>
<td>$15,532,651</td>
</tr>
<tr>
<td></td>
<td>FKC Class 2</td>
<td>($7,922,125)</td>
</tr>
<tr>
<td></td>
<td>Madera Canal Class 1</td>
<td>$3,258,243</td>
</tr>
<tr>
<td></td>
<td>Madera Canal Class 2</td>
<td>($4,678,669)</td>
</tr>
<tr>
<td>M&amp;I</td>
<td>Friant Dam</td>
<td>($35,674)</td>
</tr>
<tr>
<td></td>
<td>FKC</td>
<td>($6,742,940)</td>
</tr>
<tr>
<td></td>
<td><strong>Net Total</strong></td>
<td><strong>$763,529</strong></td>
</tr>
</tbody>
</table>

5. Title Transfer Outcome Considerations

5.1 Regulatory Compliance

5.1.1 NEPA

NEPA would generally not apply to operation, maintenance, repair, or modification activities undertaken by the Authority post-transfer, provided the activities are within those described in the NEPA compliance document prepared for the transfer itself.

5.1.2 Endangered Species Act

As briefly described in the Process section, the ESA directs all federal agencies to work to conserve endangered and threatened species and to further the purposes of the ESA. Because the FKC is federally owned, Reclamation is required to comply with the provisions of the ESA for any proposed actions that may

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7 The reclamation fund is a special fund established by the United States Congress under the Reclamation Act of 1902, as amended, for receipts from the sale of public lands and timber, proceeds from the Mineral Leasing Act, and certain other revenues. Congress appropriates money from this fund for the investigation, construction, operation, and administration of Bureau of Reclamation projects. Collections from water users for payments made on the reimbursable costs of the federal projects are also returned to the fund.
affect listed species and collaborate with the Service or NMFS. Section 7 of the ESA, termed “Interagency Cooperation,” provides the mechanism by which Reclamation ensures compliance, generally by engaging in Informal or Formal Consultation. Informal Consultation can result in a determination that the proposed action is not likely to affect listed species, meaning there is no requirement to engage in Formal Consultation. If it is determined the proposed action may affect listed species, Reclamation would generally prepare a biological assessment to assist the Service and/or NMFS in determining the project's affect, and they may as a result determine that Formal Consultation is required, generally culminating with the issuance of a biological opinion.

In contrast to Section 7 of the ESA, which regulates federal government actions, Section 10 of the ESA allows an individual or private citizen (and in this case, the Authority) to “take” a listed species if they develop a Habitat Conservation Plan (HCP). The purpose of the HCP process and issuance of Incidental Take Permits (ITPs) is to authorize the incidental take of threatened or endangered species, not to authorize the underlying activities that result in take (typically the CEQA process will identify the potential need for a HCP in California).

Section 10 of the Endangered Species Act (ESA) is designed to regulate a wide range of activities affecting plants and animals designated as endangered or threatened, and the habitats upon which they depend. With some exceptions, the ESA prohibits activities affecting these protected species and their habitats unless authorized by a permit from the Service or NMFS. Permitted activities are designed to be consistent with the conservation of the species.

The Service's Ecological Services Program, located in each of their Regional offices, issues permits for native endangered and threatened species, except for import or export permits, which are issued by the Division of Management Authority. NMFS also issues permits involving certain aquatic species. Permits issued by the Service's Ecological Services program are of three basic types. The most common is the Incidental Take Permit, which may be sought when a non-federal entity believes their otherwise lawful activities may result in a take of endangered or threatened animal species.

Incidental Take Permits are described in Section 10(a)(1)(B) and are required if an entity intends to conduct an otherwise lawful activity where a listed species may be adversely affected through direct harm or habitat destruction, and the purpose of the activity is not scientific research or enhancement of a listed species, as would be the case for activities undertaken by the Authority. Examples of activities that may require an Incidental Take Permit include, but are not limited to construction and/or development activities or in-stream or watershed activities that may impact listed species.

Reclamation indicates that routine operation and maintenance activities will not typically trigger ESA compliance action, as there is no concern that impacted species will be harmed. Significant repairs, alteration, or construction requiring excavation or deposition of material or other activities potentially affecting species may trigger ESA compliance action, however. While obtaining information from Reclamation to inform this section, it was suggested that the Authority may have Section 7 coverage under the existing Biological Opinion for an interim period following transfer. Reclamation stated that they had recently queried the Service on this precise point when discussing another title transfer, and that the Service replied that Section 7 coverage ends at the point title transfer is executed.

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8 Section 3(18) of the ESA defines “take” as “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct.”
5.1.3 NHPA

NHPA would generally not apply to operation, maintenance, repair, or modification activities undertaken by the Authority post-transfer, provided the activities are within those described in the NEPA/NHPA compliance documents prepared for the transfer itself. Typically, these conditions and limitations would be described in the Memorandum of Agreement (MOU) executed between Reclamation, the Authority, and the State Historic Preservation Office (SHPO). Reclamation officials have suggested that the MOU could be expanded to include provisions and commitments—potentially including mitigation measures—that would apply post-title transfer. Reclamation would simply sunset out of the MOU, post transfer, but the provisions would remain in effect between the Authority and the SHPO.

5.1.4 California Environmental Quality Act

California Public Resources Code Sections 21000-21004 generally stipulate that state agencies must regulate the activities of private individuals, corporations, and other public agencies whose activities may affect the environment, and that no project that would cause significant environmental effects should be approved as proposed if there are feasible alternatives or mitigation measures that would lessen those effects.

As is the case with the title transfer process, the Authority will also serve as the lead agency for CEQA compliance post transfer. The vast majority of the Authority's activities associated with the FKC fall under one or more CEQA Categorical Exemptions (as defined in CEQA Guidelines [14 CCR Section 15300-15331]), as they are considered to not have potential impacts on the environment.

For activities beyond the scope of routine operation, maintenance, and repair, CEQA requirements and permitting would apply to all discretionary projects proposed to be conducted by the Authority. Any proposed actions within the CEQA regulatory framework would require that the Authority first prepare an Initial Study/Negative Declaration, or Environmental Impact Report. The Authority reports that when this need arises, they typically contract with a consultant to complete the process.

5.1.5 Water Quality

The Division of Drinking Water, an organizational subunit of the California Water Resources Control Board, regulates public drinking water systems within the state, and has issued permits to the municipalities (Orange Cove, Strathmore, and Terra Bella, for example) that have municipal and industrial water conveyed and delivered by the FKC. Water quality surveys are regularly conducted, partly to manage the introduction of non-Project water into the FKC to ensure that the water quality is uncompromised. Following title transfer, Authority staff may have an expanded role in the water quality oversight effort. For instance, because municipal and industrial water conveyance has a lower priority within the FKC, Reclamation has retained water in Millerton Reservoir in drier years as necessary to provide sufficient water volume within the FKC to provide dilution for water quality purposes.

5.2 Water Contract Administration and Related Responsibilities

5.2.1 Background

The Draft MOU contains a provision normally seen in title transfer pursuits where other contractors are potentially impacted. The provision states “Reclamation and the Authority will cooperate in consultation with any existing water contractor potentially affected by title transfer to proceed in accordance with the Dingell Act and the applicable policy.” Further, the Draft MOU states “all other terms from the long-term renewal
contract, repayment contract, or other water service contract, for each respective CVP contractor on the FKC system will remain in effect.”

There are currently 27 districts and water user entities under contract with Reclamation to receive water deliveries from Millerton Reservoir via the FKC. As described in earlier sections, the Authority performs all operation and maintenance responsibilities associated with the FKC, including water delivery management and measurement. However, Reclamation, as the owner of the FKC, has responsibility for ensuring that deliveries are fulfilled in accordance with each respective contract. If title transfer is executed, CVP water would be conveyed and delivered through a facility that Reclamation no longer owns, a situation that is not unprecedented within Reclamation, but one requiring contractual remedy.

5.2.2 Point of Delivery

As expressed by several districts served by the FKC, the point of delivery for Project water is one of the more significant concerns associated with title transfer, and thus is discussed in this and the following section. As stipulated in each of the contracts between Reclamation and the contractors served by the FKC for the delivery of Project water, the point of delivery is the respective turnout from the FKC to each contractor’s delivery system. Accordingly, Reclamation is contractually obligated to ensure that water deliveries are conveyed through the FKC headworks to each turnout.

During discussions with Reclamation, they expressed their preference that if title to the FKC is transferred, the point of delivery for all Project water be relocated to the FKC headworks. Their concern is with having to fulfill a contractual obligation that requires the use of facilities they would no longer own. In response, several of the districts under contract with Reclamation expressed concern with any change in the point of delivery, preferring that Reclamation not subcontract its obligations to the Authority. Reclamation later relented, stating that if certain conditions could be met, they would consider an agreement with the Authority maintaining the point of delivery at the turnouts. This proposed agreement is described in detail in the following section. There would be no requirement to open or re-negotiate any of the existing contracts. Rather, an administrative action could be implemented to memorialize any changes prompted by the title transfer.

5.2.3 Draft Agreement and Limited Use License

In May 2019, the Authority provided Reclamation a Draft Agreement for the Delivery of Project Water and Limited Use License Between the Friant Water Authority and Bureau of Reclamation for review. The Draft Agreement makes several commitments to ensure that CVP Project water would be managed and delivered in the same manner that it is delivered today.

- Authority agrees to convey and distribute Project water through the FKC in accordance with the directives of Reclamation’s contracting officer in a manner that will fulfill all valid delivery obligations of Reclamation.
- Delivery would be through turnouts or temporary diversion facilities as specified in water delivery contracts or other agreements with parties contractually entitled to receive water.
- The Authority would not be responsible for conveyance losses.
- Prior to Reclamation’s executing any new contracts, or renewing or amending any existing contracts for Project water, Reclamation’s contracting officer would consult with the Authority about the terms and conditions of those agreements.
Reclamation’s contracting officer would consider the Authority’s ability to fulfill its obligations under the Agreement before taking any contractual action that would impact the Authority’s ability to deliver water.

The Authority would agree that the conveyance of non-Project water in the FKC would not affect the delivery of Project water to the entities contractually entitled to receive it.

Reclamation would acknowledge that during instances when public health and safety are at risk, the Authority might need to limit water conveyance capacity through sections of the FKC to support maintenance or repair activities.

The Dispute Resolution clause provides that Reclamation’s contracting officer and an Authority representative shall express their respective views to the other party in writing, then meet to discuss the dispute and attempt to resolve it. If resolution cannot be reached, the parties can request that a neutral third party, acceptable to both parties involved in the dispute, shall be authorized to research the dispute and recommend a solution. If that process fails, each party may seek legal remedy.

Reclamation replied to the Authority in an October 11, 2019 letter stating that the draft conceptually addressed a number of Reclamation’s concerns. The letter went on to suggest that it would be prudent to attain a better understanding of how Reclamation and the Authority could acknowledge and address other issues, including water quality, future management of existing easements and rights-of-way, and the Friant Operating Guidelines. Reclamation indicates they have been the primary arbiter of disputes arising from water delivery, which they indicate are most commonly associated with diminished water quality. As the proposed Dispute Resolution clause states, however, Reclamation would collaborate with the Authority in attempts to resolve any disputes.

More recently, Reclamation’s South Central California Area Office leadership has indicated that in lieu of the Draft Agreement, they prefer a formal easement to memorialize the agreement. They maintain that the terms described in the Draft Agreement are reasonable and would form the basis for development, but an easement would be a formal, recorded encumbrance and would have firmer legal standing.

5.2.4 Water Rights Implications

Information provided for this assessment indicates that several legal opinions have been offered over the years in response to water rights permits actions by the State Water Resources Control Board pertaining to diversions from Friant Dam. The proposed title transfer does not include water rights, which would be retained by the federal government, nor would the operation of Friant Dam change.

5.2.5 Section 215 and Free Water Deliveries

During periods of above-average hydrologic conditions, Reclamation has made “Section 215 water” available, generally when inflows to Millerton Reservoir exceed storage limitations. The “Section 215 water” term is in reference to Section 215 of the Reclamation Reform Act of 1982 (Public Law 97-293) which defines temporary water supplies that are unusually large and not storable for project purposes. The water is then made available for application to lands otherwise ineligible to receive federal water.

As is currently the case, the Draft Agreement for the Delivery of Project Water and Limited Use License Between the Friant Water Authority and Bureau of Reclamation includes a provision (the sixth of the eight bullets in the Draft Agreement section above) stipulating that the conveyance of non-Project water would be subordinate to the delivery of Project water. The delivery of Project water, then, would appropriately remain uncompromised.
5.3 Lands Management

5.3.1 Encroachments and Licensing

As is the case with most Reclamation projects with facilities, including lengthy stretches of canals and drains adjacent to privately held lands, there are a number of encroachments onto the FKC rights of way, generally consisting of unauthorized structures, planting of permanent crops, or other similar uses. Upon discovery, the Authority attempts to inform the responsible entity of the encroachment and seek its removal. More complicated or longer-term encroachments are brought to Reclamation’s attention. Reclamation reports that they are currently working to address such encroachments on a case-by-case, time-available basis as they are brought to Reclamation’s attention, but they currently estimate that 20-30 remain unresolved. Resolution most often consists of notifying the adjoining landowner, who in some cases is unaware of property boundaries and who subsequently removes the encroaching planting. In cases where that is not practicable, and where granting a license would not harm Reclamation's or the Authority's interests and the Authority is amenable, a license is granted.

Reclamation’s land management officials indicate that they would not insist on reconciling all encroachments prior to title transfer. Rather, they would execute quit-claim deeds relinquishing all right, title, and interest to the facilities subject to transfer, including those upon which the encroachments exist. The Authority would then determine the appropriate course of action. The Authority would also be solely responsible for addressing any new encroachments that occur post transfer.

5.3.2 Exercise of Eminent Domain

5.3.2.1 Initiated by the Authority

A concern has been expressed that following title transfer, the power to exercise eminent domain could be diminished. The premise is that while the Authority may have legal standing under state law to exercise eminent domain, it may be limited in scope as compared to Reclamation's authority under federal statutes. Reclamation's extreme reluctance to impose eminent domain in recent decades suggests that this concern is unfounded. Some Reclamation officials familiar with land management and acquisition queried could recall perhaps one or two instances across Reclamation over the last 20 or more years where a land parcel was condemned and acquired through eminent domain, and others could recall none. Representatives of the Office of the Solicitor made similar reports.

5.3.2.2 Initiated by Other Entities

Another concern raised pertaining to condemnation is protection of the FKC and appurtenances from the exercise of eminent domain by other entities, such as the California High Speed Rail Authority. It has been suggested that as a federal agency-owner, Reclamation would have a prior legal right and would therefore enjoy greater influence and legal resources than would the Authority, and that this prior right must be preserved. Reclamation officials indicate that they may agree to an extent as to influence, but could not project any differences in the outcome of any proposed acquisition. Under the terms of the Draft Agreement for the Delivery of Project Water and Limited Use License described earlier, Reclamation would maintain a contractual interest in the continued unobstructed operation of the FKC, so they would presumably assist with defending its existence and function.
5.3.3 Canal Crossings

There is a large inventory of approved FKC crossings, most authorized by Reclamation via an easement or license. For the first several years after the Authority contractually assumed responsibility for the operation and maintenance of the FKC, Reclamation reports that the Authority cosigned their approval on the crossing document(s) only in some cases. Reclamation reports that over the last 10-15 years, the Authority has cosigned all such documents.

Reclamation completes a technical sufficiency review of each crossing application, and the Authority provides their concurrence prior to Reclamation issuing the license. Crossings typically consist of utility service lines, including water, wastewater, electrical power, communication, natural gas, and others. Reclamation developed a document titled *Engineering and O&M Guidelines for Crossings, Bureau of Reclamation Water Conveyance Facilities (Canals, Pipelines, and Similar Facilities)* published in 2008, which serves as a reference for technical reviews. The *Guidelines* document is available to the Authority during the review of future crossing applications.

Reclamation also conducts field inspections of crossings during their construction, with the frequency dependent on the scale and complexity of the crossing infrastructure. Authority technical representatives participated in the inspections of selected crossings.

Authority operations and maintenance managers indicate that while Reclamation has taken a lead role to date, the Authority is well-equipped to assume the role of administering crossing requests. They anticipate that a single full-time-equivalent (FTE) would be assigned to receive and process crossing requests, and they will coordinate with Authority engineering staff for the technical aspect of the review. The designs for any technically complex crossings would be reviewed by consultants as appropriate. Administering crossing requests should be budget-neutral, as the requesting entity is responsible for all costs.

Reclamation indicates that post-transfer, they may maintain a contractual interest in at least some of the crossings they have authorized to date, depending on the terms of the authorizing documents. Accordingly, Reclamation expects to be consulted on any proposed changes to the provisions of any such agreements.

5.3.4 Master Crossing Agreements

For the purposes of approving and managing crossings more efficiently with entities requesting multiple crossings, Reclamation often enters into master crossing agreements (sometimes referred to as franchise agreements). Reclamation officials report having seven master crossing agreements for the FKC, with the roster including PG&E, Southern California Edison, Southern California Gas Company, Shell (dba as Equilon Enterprises), Standard Oil, Ponderosa, and Pacific Bell. In the event an additional crossing is proposed, Reclamation would be required to complete regulatory compliance requirements and perform a technical review, but the administrative aspects are simplified under the master agreement.

Reclamation reports that the master crossing agreements are transferable, and that the Authority could assume them following title transfer if they so choose.

5.3.5 Stormwater Introduction

In reaches where the FKC alignment traverses cross-sloped terrain, the canal prism impedes the flow of runoff, in some cases presenting no alternative outlet and requiring that the runoff be introduced to the canal. *Reclamation Manual Directives and Standards ENV 06-01* provides policy guidance and process requirements for Reclamation’s consideration of accepting non-agricultural discharges into Reclamation-
Return flows from irrigated agriculture and agricultural stormwater discharges are excluded from the definition of “point source” and therefore do not require NPDES permits. Mixed agricultural and non-agricultural discharges in some cases require an NPDES permit, depending on the specific circumstances of the discharge source, quantity, and other factors. Reclamation has sought to avoid the requirement that flows through its facilities will be subject to NPDES permit requirements by making certain that all Reclamation-authorized non-agricultural discharges into its facilities have received and comply with appropriate NPDES permit coverage. Reclamation reports that there are currently no water introductions requiring or having an NPDES permit.

5.3.6 Project Land Acquisitions and Quit Claim

Reclamation reports that there were several hundred land acquisitions made in fee title prior the initiation of construction of the FKC, and has indicated that each acquisition would need to be researched and documented in the quit-claim deed. Area Office officials have stated that they are not sufficiently staffed to perform the research, and recommend that the Authority hire a consultant to perform the work. In terms of effort, Reclamation has suggested that compiling the information, including all information available on encumbrances, may consume up to one full staff year.

In addition to fee title, Reclamation also acquired easements on several parcels in support of the construction, operation, and maintenance of the FKC. For easements including an assignment clause, Reclamation has indicated it would assign the easement to the Authority coincident with the transfer. There is no easement roster readily available.

5.3.7 Recreation Facilities Management

Reclamation entered into a Recreation Management and Lease Agreement with Kern County under which the county manages Lake Woollomes Park, on Lake Woollomes, the regulating reservoir on the FKC. Access to the park is allowed 7 days a week year-round, and considerable investment in a considerable investment in recreation facilities has been made, with amenities including nine landscaped acres for picnics, 41 picnic tables, 30 barbeque grills, a group picnic area, a boat dock and launch ramp, drinking water, restrooms, and playground equipment. Reclamation reports that park facilities are utilized primarily by economically-disadvantaged residents of the surrounding area.

The current Agreement expires in 2023, and Reclamation officials report that Kern County has not yet given any indication they wish to renew. Parkgoers are charged an entry fee based on the number of occupants per vehicle ranging from $4 to $11, along with boating permits costing $60 per year. While Reclamation reports that they have not provided funds directly to the County to offset operational costs, Reclamation has performed upgrades through in-kind services over the last approximately 5 years to provide for basic health and human safety. Recent projects completed by Reclamation by contracting directly with construction firms include pavement overlays, a comprehensive restroom remodel, and the installation of speed bumps on park roadways.

When Reclamation-owned recreation facilities are subject to title transfer, there is typically one of three outcomes, depending on a variety of factors:

- **New Operating Agreement** - The entity receiving title enters into a similar agreement with the recreation management entity, in this case Kern County. Key considerations with this option include the county’s willingness, whether the facility is self-supporting from a cost vs. revenue
standpoint, the present value of deferred maintenance needs, legal liability implications, use projections, etc.

- **Authority Operates** - The entity receiving title elects to operate and maintain recreation facilities themselves. This option is very rarely implemented, as most entities receiving title are not structured or equipped to enter into the recreation management role.

- **Closure** - The entity receiving title elects to close the facility to recreation.

### 5.3.8 Facility Security and Emergency Management

As is the case with virtually all transferred works operated and maintained by a water user entity, security and emergency management functions associated with the FKC are performed or overseen by the Authority. Facility security roles, responsibilities, and procedures are described in *Reclamation Manual Directives and Standards SLE 03-02*, last updated May 9, 2017.

The Authority relies on the appropriate county sheriff offices and emergency response teams to respond to instances of fire, injury, criminal activity, or other situations. Reclamation requires that all deaths at Reclamation-owned facilities be reported by the Authority to the South-Central California Area Office, which then forwards the information to the Regional Safety Officer and the Regional Special Agent at the California-Great Basin Regional Office.

Reclamation has assigned a Security Criticality Designation to its facilities, either singly or categorically, to one of five levels. The level determines the security and monitoring requirements, response and reporting requirements, and security status review frequency. Those levels are National Critical Infrastructure (assigned to five of the largest dams in Reclamation, including Grand Coulee, Hoover, Glen Canyon, Shasta, and Folsom), Major Mission Critical, Mission Critical, Project Essential, and Low Risk. The FKC is designated as Project Essential, meaning it is “essential to a specific project and its associated service area, the incapacity or destruction of which would have a significant impact on security, economic security, public health or safety, or any combination of those matters in the associated service area.” Reclamation has established security standards for this designation, primarily centered around monitoring and reporting of any observed suspicious activity, as well as sharing and reporting of any direct or general threats that could involve the facilities.

Following title transfer, Reclamation’s formal involvement in overseeing security at the facility will cease. Because, as described above, the primary security and emergency response responsibility lies with the Authority, the only concern would be that in an extreme emergency potentially involving the Federal Bureau of Investigation or other federal law enforcement entity, the Reclamation’s Regional Security Officer may have more direct access to information.

### 5.4 Waters of the United States

In April 2017, the U.S. Army Corps of Engineers (USACE) made a jurisdictional determination, associated with the Pixley Groundwater Bank, that the FKC conveys waters of the U.S., and is therefore subject to jurisdiction under Section 404 of the Clean Water Act (CWA). A key factor in the determination was that the water flow within the FKC is relatively permanent and flows from traditionally navigable waters into “navigable-in-fact waters.” This determination supersedes a June 2016 jurisdictional determination sent to the Fresno Irrigation District that stated the FKC does not convey waters of the U.S. It is viewed as unlikely

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9 Much of the information in this section was excerpted from a January 8, 2020 email summary provided by Ginger Fodge, Principal at Madrone Ecological Consulting.
that the USACE would exclude other portions of the FKC in this determination, as it appears to carry surface flow from Friant Dam to the Kern River.

The jurisdictional status for the waters of the U.S. determination on the FKC is not dependent on the ownership, so the title transfer would have no effect on this determination. The discharge of dredged or fill material into waters of the U.S. requires a permit under Section 404 of the CWA. However, construction and maintenance of irrigation ditches is exempt from permitting requirements under 404(f). The FKC appears to meet the definition of “irrigation ditch” as stated on Page 3 of the USACE July 4, 2007 Regulatory Guidance Letter with the Subject: Exemptions for Construction or Maintenance of Irrigation Ditches and Maintenance of Drainage Ditches Under Section 404 of Clean Water Act. The Guidance Letter states that construction of an irrigation ditch is defined as new work or work that results in an extension or expansion of an existing structure, such as relocation, conversion into a pipe, or lining. Maintenance is defined as repair to an existing structure or feature to keep the ditch in its existing state or proper condition, or to preserve it from failure or decline, such as excavation of accumulated sediments back to original contours and re-shaping of side slopes. It is reasonable to assume that all routine operation, maintenance, and repair activities would fall comfortably within the confines of the maintenance definition.

5.5 Operations and Maintenance

5.5.1 Water Scheduling - Establishing New Procedures

During discussions of coordinating water delivery operations following title transfer, a concern was raised that new operational procedures would need to be established to ensure that water deliveries remain accurate and efficient. Based on discussions with Reclamation and Authority water operations managers, some aspects of the process would require change, but the change is not substantial.

At present, the Authority receives water orders in advance from the districts served by the FKC. The orders are provided to Reclamation, which uses the demand information, in conjunction with data on water supplies, remaining undelivered contract volumes, and hydrologic information to develop monthly forecasts. Reclamation compiles operational data on an ongoing basis and performs an operational data “true-up” on a monthly basis and provides that information to the Authority and the contractors. The Authority is responsible for all day-to-day FKC operations. These roles and responsibilities would change little following title transfer.

As described earlier, the Authority (and its predecessor organization) have performed all operation, maintenance, and repair associated with the FKC and appurtenances since 1998, and thus they are intimately familiar with those operations and operational procedures.

5.5.2 Revisions to Friant Operating Guidelines

The Friant Operating Guidelines (Guidelines) establish the overall procedures for managing water supplies within the Friant Division of the CVP. They define the priorities for water service and water scheduling, as well as the proration guidelines used within the Friant Division Service Area with the stated objective of optimizing water supplies while remaining in compliance with water service contracts and the Agreement to Transfer the Operation, Maintenance and Replacement and Certain Financial and Administrative Activities Related to the Friant-Kern Canal and Associated Works described in Section 1.4.

The Introduction section of the Guidelines states that they are to be reviewed on an annual basis to affirm that they remain current with ongoing practices. An update is in progress at this writing and unavailable for review, but the current version of the Guidelines, distributed by Reclamation in March 2005, was available.
Based on that review, it appears that if title transfer is executed, only relatively minor changes in the Guidelines would be required to clarify roles, describe information flow and key contacts on operational matters, and clarify some of the nomenclature.

5.5.3 Routine Maintenance

As described earlier, the Authority (and its predecessor organization) have performed all maintenance and repair associated with the FKC and appurtenances since 1998, and thus they are intimately familiar with the FKC features and maintenance requirements. They receive little guidance or assistance on routine matters from Reclamation, so this aspect of the Authority’s responsibilities following transfer would be virtually unchanged.

5.5.4 Future Repairs

Regarding future operations and maintenance, one of the concerns expressed is that following transfer, making repairs or minor alterations to the FKC and appurtenances would be more arduous and time consuming. The Authority is contractually obligated to fund and perform all operation, maintenance, and repair responsibilities in the absence of any unique provisions. As is the case with most operating entities, Authority crews directly perform basic repairs not requiring specific design or other engineering oversight, and seek technical guidance from Authority engineering staff for more complex undertakings. The design and execution of projects exceeding the Authority’s technical capability or capacity are contracted to engineering and/or construction firms.

Reclamation requires that detailed information on any proposed significant repairs or modifications must be submitted in advance for review and approval by Reclamation, generally accompanied by a completed form MP-620. Depending on the technical complexity and scale of the repair or modification, Reclamation’s technical staff at the area office, regional office, or technical service center (commensurate with escalating levels of complexity) will perform the review. Generally, the reviews are performed on a reimbursable cost basis. Post-transfer, the MP-620 and Reclamation review processes would no longer be required, so repairs or minor alterations would be planned, reviewed, and executed in-house by the Authority, in most cases in less time and at lower cost than under the current protocol.

A concern has been raised that post-transfer, regulatory agencies may be more critical of proposed repairs during the planning and permitting phase if ownership is transferred to a non-federal entity. Regulatory requirements are addressed in specific sections of this paper, and differences in those requirements post-transfer are explained in some detail. In a general sense, however, there is no indication that regulatory agencies are more inclined to oppose plans proposed by a non-federal entity than they are to oppose plans proposed by Reclamation.

5.5.5 Review of Operation and Maintenance

Under the Review of Operation and Maintenance Program for Examination of Associate Facilities, Reclamation performs detailed inspections of Associated Facilities (facilities other than high- and significant-hazard dams) at regular intervals, and provides the operating entity with a comprehensive report, including recommendations to address any deficiencies. Reviews of the FKC occurred at approximately 3-year intervals until approximately 2015, when a revision to Reclamation’s governing Directives and Standards extended the interval to up to 6 years at the discretion of the area office (after considering several condition-based factors). Per the Reclamation Manual Directives and Standards FAC 01-04, the reviews are non-reimbursable, meaning they are at no cost to the Authority.
Because Reclamation would be divested of any ownership interest in the FKC post-transfer, examinations under the program would cease. Some managing water user entities regard the reviews as a significant benefit, in that they present an opportunity for technical experts to provide input and guidance. Authority operation and maintenance managers, however, report that while Reclamation’s expertise during the reviews has been well-received, they can recall no instances where a concern was cited by Reclamation on any matter that the Authority was previously unaware of.

_Reclamation Manual Directives and Standards FAC 01-04_, last revised in July of 2019, provides detailed information on the Program.

### 5.6 Incidental and Miscellaneous Revenues

Under several provisions of Reclamation law, incidental revenues generated from the use of lands, facilities, water storage, and water conveyance facilities associated with projects are received and accounted for by Reclamation. _Reclamation Manual Policy Incidental Revenues (PEC P03)_ and _Reclamation Manual Directives and Standards PEC 03-01 Crediting Requirements for Incidental Revenues_ provides policy guidance on this topic.

### 5.7 Warren Act Contracts

The Warren Act of 1911 authorized the United States to execute contracts for the conveyance and storage of non-project water in federal facilities when excess capacity exists. Reclamation has executed several Warrant Act contracts for the conveyance of non-Project water in the FKC, and reports that the annual revenue is approximately $500,000 in most years. In Water Year 2015, Reclamation reported that Warren Act contract revenues totaled approximately $570,000, although this was a high-volume water carriage year. It is important to note that if title is transferred, Reclamation would require compensation for the forgone revenue stream from the Warren Act contracts. Typically Reclamation would compute a present worth of the revenue stream and negotiate payment terms with the entity receiving title.

### 5.8 Use Authorizations

Reclamation provided a roster of 17 licenses held by 13 different licensees for crossings or other encumbrances to the FKC and for communication towers on Bear Mountain. The term of each license ranges from 5 to 50 years. Four of the 17 licenses impose a recurring fee, while the remaining 13 required a one-time fee. Reclamation reports that the licenses are transferrable to the Authority, and that the revenue stream would revert to the Authority following execution of title transfer. The Authority would have the latitude to alter the conditions and charges for the licenses, subject to the limitations of their existing terms.

**Table 3 – Summary of Revenues**

<table>
<thead>
<tr>
<th>Revenue Basis</th>
<th>Source</th>
<th>Approximate Annual Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utility Crossing</td>
<td>EZ Angus Ranch</td>
<td>$325</td>
</tr>
<tr>
<td>Utility Crossing</td>
<td>Southern California Edison</td>
<td>$725</td>
</tr>
<tr>
<td>Bear Mtn. Tower</td>
<td>Bear Communications</td>
<td>$7,182</td>
</tr>
</tbody>
</table>
5.9 Liability Implications

5.9.1 Liability for Damages

During title transfer pursuit discussions, a concern has been expressed that the Authority's exposure to liability for damages could increase following transfer. Temporary Reclamation Manual CMP TRMR-120 states in the Introduction section that title transfer “… divests Reclamation of responsibility for the operation, maintenance, management, regulation of, and liability for Federal interests in lands and project facilities.” In the After Title Transfer section, CMP TRMR-120 states “Effective on the date of conveyance of any eligible facility under this D&S, the United States will not be held liable by any court for damages of any kind arising out of any act, omission, or occurrence relating to the eligible facility, other than damages caused by acts of negligence committed by the United States or by agents or employees of the United States prior to the date of the conveyance. Nothing in this section increases the liability of the United States beyond that currently provided in chapter 171 of title 28, United States Code (commonly known as the Federal Tort Claims Act)." Similarly, the Draft MOU states under General Provisions that “The title transfer agreement will address the transfer of liability of the Project Works from the United States to the Authority."

The Authority has specifically examined the concern of whether title transfer increases their liability exposure by asking special counsel to perform an analysis. That analysis is summarized in an April 26, 2018 memorandum from special counsel to the Authority’s board and managers based on prevailing statutes, contract language, and a brief study of the canal failure at the Newlands Project in Nevada. The analysis concludes that as the operating entity for the FKC, the Authority will be responsible for liability stemming from their failure to properly maintain the FKC, even though the United States holds title. If, however, liability occurs as a result of a proven latent design or construction defect, the United States would be responsible for damages. If the Authority accepts title to the FKC, as the owner, it would be responsible for damages resulting from a failure of the facility. Given the age of the FKC and the Authority’s lengthy tenure of operating and maintaining the facility, it would be possible—but likely very difficult—to recover a remedy from the United States if the damages are a result of the Authority’s negligence prior to transfer.

5.9.2 Liability for Canal Crossing Infrastructure

During title transfer discussions, a concern has been expressed that the Authority’s exposure to liability for damages stemming specifically from canal crossing malfunctions or failures could be exacerbated. There are a number of factors to consider when assessing liability implications in this area, including whether the crossing design and construction was approved solely by Reclamation, solely by the Authority, or jointly; whether the design, or construction, or both, were defective; whether canal operation was a factor; and a myriad of other factors. Similar to the arguments under the general liability concerns section above, there is no basis upon which to indicate that the liability exposure associated with canal crossing performance is increased by title transfer.

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10 Estimated by Reclamation, as the license agreement remains under negotiation between Reclamation and Verizon.
5.10 Insurance

The Authority is insured through the Joint Powers Insurance Authority (JPIA) of California, the entity that currently manages risk for over 100 cities and public agencies throughout the state. The adequacy of coverage provided by the JPIA polices was the topic of a May 24, 2018 Agenda Report to the Authority Board of Directors from Don Davis and Timothy Colvig. The conceptual-level summary and analysis with respect to title transfer identified coverage issues suggested for further review, and recommended a more thorough coverage analysis. The Authority has since increased its umbrella liability coverage. The primary remaining coverage area to be further examined is chiefly earthquake coverage.

5.11 Impressions form Water User Organizations Receiving Title – Stantec Report

In response to assertions the operating entities having received title to federal facilities over the years have expressed remorse, and given the opportunity would return title Reclamation. In response, the Authority contracted with Stantec to interview entities previously taking title to solicit their feedback. Stantec submitted a report to the Authority on September 13, 2018. Key observations from the report include:

- Multiple participants reported that the costs of title transfer were less than the long-term savings provided by owning title. Thus, there was a net savings from title transfer after factoring in costs.
- Overall, most participants reported that post-transfer O&M costs remained the same, which was expected because they are mostly already transferred works (works where the district is responsible for O&M).
- All participants reported less oversight and fewer reporting requirements from Reclamation post-transfer.
- All participants stated that their relationship with regulatory agencies did not worsen post-transfer but either stayed the same or improved.
- Most importantly, when asked about whether they would agree to accept title again, given the benefit of hindsight, most of the districts said they would do title transfer again and recommend it to other districts.

5.12 Estimated Cost Difference Summary

As described in Section 5, the increased responsibilities the Authority would assume following title transfer appear at this point to be only marginal. Cost increases can be more accurately estimated as detailed discussions with Reclamation proceed if the title transfer MOU is executed, but based on the information provided thus far, Authority managers indicate that the additional effort will require less than one additional FTE to fulfill.

Reclamation currently estimates that the revenues from crossings and licenses transferrable to the Authority will total approximately $33,232–$38,232 per year. Revenues associated with Warren Act contracts will yield an additional estimated $500,000 per year in most years. As mentioned in earlier sections, the Authority would be obligated to pay Reclamation the computed present worth of these revenue streams, subject to negotiation. A comparison of the present worth payment amount, plus the present worth of any additional FTE costs, to the present worth of the actual revenue stream assumed by the Authority, obviously cannot be made at this point.
5.13 Efficiency Gains

Similar to statements made to Stantec representatives when gathering information from water user entities having previously received title to former Reclamation facilities, Authority representatives indicate that there are efficiency gains to be realized after receiving title. While most water user entities would characterize their working relationship with Reclamation as being cordial and even productive, compliance with Reclamation's various statutory, policy, administrative, and technical requirements are often arduous and time consuming, causing delays, consuming staff time, and increasing costs.

The cost savings to be realized from eliminating Reclamation oversight are difficult if not impossible to estimate accurately given the many variables, but Authority managers are very confident of the benefit. No longer having to comply with Reclamation's requirements alone may fully offset the marginal increase in staff time and effort necessary to assume Reclamation's former role in many of the functional areas described in earlier sections.
References

Governing statues and policies (listed on page 8)

Various online sources and documents from previous title transfers


John D. Dingell, Jr. Conservation, Management, and Recreation Act, Public Law 116-9, 116th Congress (March 12, 2019), Title VIII

November 19, 2019 email from Ginger Fodge of Madrone Ecological Consulting providing the U.S. Army Corps of Engineers determination on the Friant-Kern Canal conveying Waters of the US for permitting purposes


Reclamation Manual Policy Incidental Revenues (PEC P03)

Reclamation Manual Directives and Standards PEC 03-01 Crediting Requirements for Incidental Revenues

Engineering and O&M Guidelines for Crossings, Bureau of Reclamation, Technical Service Center, April 2008

Agreement to Transfer the Operation, Maintenance and Replacement and Certain Financial and Administrative Activities Related to the Friant-Kern Canal and Associated Works (Contract No. 8-07-20-X0356)
## Appendix A - Title Transfers to Date

<table>
<thead>
<tr>
<th>Project/Facility</th>
<th>State</th>
<th>Year Transferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rio Grande</td>
<td>New Mexico/Texas</td>
<td>1996</td>
</tr>
<tr>
<td>Vermejo</td>
<td>New Mexico</td>
<td>1996</td>
</tr>
<tr>
<td>Boulder City Pipeline</td>
<td>Nevada</td>
<td>1996</td>
</tr>
<tr>
<td>San Diego Aqueduct</td>
<td>California</td>
<td>1997</td>
</tr>
<tr>
<td>Oroville Tonasket Unit</td>
<td>Washington</td>
<td>1998</td>
</tr>
<tr>
<td>Canadian River Project</td>
<td>Texas</td>
<td>1999</td>
</tr>
<tr>
<td>Burley</td>
<td>Idaho</td>
<td>2000</td>
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<tr>
<td>Clear Creek CVP</td>
<td>California</td>
<td>2001</td>
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<td>Palmetto Bend</td>
<td>Texas</td>
<td>2001</td>
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<tr>
<td>Griffith</td>
<td>Nevada</td>
<td>2001</td>
</tr>
<tr>
<td>Nampa Meridian</td>
<td>Idaho</td>
<td>2001</td>
</tr>
<tr>
<td>Carlsbad</td>
<td>New Mexico</td>
<td>2001</td>
</tr>
<tr>
<td>Colorado Big Thompson (partial)</td>
<td>Colorado</td>
<td>2002</td>
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<tr>
<td>Middle Loup</td>
<td>Nebraska</td>
<td>2002</td>
</tr>
<tr>
<td>Sugar Pine</td>
<td>California</td>
<td>2003</td>
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<tr>
<td>Sly Park</td>
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<td>2003</td>
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<td>Harquahala Valley</td>
<td>Arizona</td>
<td>2004</td>
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<td>Fremont Madison</td>
<td>Idaho</td>
<td>2004</td>
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<tr>
<td>Carpinteria</td>
<td>California</td>
<td>2006</td>
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<td>Provo River (partial)</td>
<td>Utah</td>
<td>2006</td>
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<tr>
<td>Welton Mohawk (partial)</td>
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<td>2007</td>
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<td>2008</td>
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<td>Colorado Big Thompson</td>
<td>Colorado</td>
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<td>Palo Verde Diversion</td>
<td>Arizona/California</td>
<td>2008</td>
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<td>Yakima Tieton</td>
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<td>Mc Gee Creek</td>
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<td>Montecito</td>
<td>California</td>
<td>2010</td>
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<td>Provo River (partial)</td>
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<td>2014</td>
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<td>Strawberry Valley Project Power Distribution</td>
<td>Utah</td>
<td>2015</td>
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<tr>
<td>Humboldt (partial)</td>
<td>Nevada</td>
<td>2016</td>
</tr>
</tbody>
</table>
This Memorandum of Understanding (MOU) is made pursuant to the Act of Congress approved June 17, 1902 (32 Stat. 388), and acts amendatory thereof or supplemental thereto, between the United States of America, acting through the South-Central California Area Office, Bureau of Reclamation, Department of the Interior, hereinafter referred to as “Reclamation,” and the Friant Water Authority, organized under the laws of the State of California, with its principal place of business in Fresno County, hereinafter referred to as “Authority.”

WHEREAS, Title VIII of the John D. Dingell, Jr. Conservation, Management and Recreation Act (Dingell Act) authorizes the Secretary of the Interior to convey to a qualifying entity all right, title, and interest of the United States in and to any eligible facility; and

WHEREAS, Reclamation and the Friant Water Users Authority on March 1, 1998 entered into an Agreement to Transfer the Operation, Maintenance and Replacement and Certain Financial and Administrative Activities Related to the Friant-Kern Canal and Associated Works, Contract No. 8-07-20-X0356 (O&M Agreement); and

WHEREAS, the Authority was assigned the O&M Agreement on June 30, 2004; and

WHEREAS, the Authority, as a qualifying entity, is seeking transfer of all right, title and interests of the United States of America in the Friant-Kern Canal (FKC) system of the Central Valley Project (CVP), hereinafter referred to as the “Project Works;” and

WHEREAS, the Project Works are defined pursuant to Article 1(f) and Exhibit A, as amended, of the O&M Agreement; and

WHEREAS, CVP contractors on the FKC system will still be responsible for their respective share of annual operation and maintenance costs and fixed costs of the CVP; and

WHEREAS, all other terms from the long-term renewal contract, repayment contract, or other water service contract, for each respective CVP contractor on the FKC system will remain in effect; and

WHEREAS, Reclamation is ultimately responsible for complying with all applicable federal laws, including, but not limited to, the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), the Endangered Species Act (ESA), and its own
adopted guidelines for preparation of any required environmental analyses for the proposed title transfer; and

WHEREAS, Reclamation represents to the Authority that, at this time, Reclamation has no funds appropriated for paying costs associated with this proposed title transfer; and

WHEREAS, by entering into this MOU, Reclamation and the Authority agree to cooperate in a joint effort, in consultation with any existing water contractor potentially affected by the title transfer, to proceed with the proposed title transfer process in accordance with the Dingell Act, Reclamation’s 1995 Framework for the Transfer of Title, as updated, and Reclamation Manual Directives and Standards, CMP 11-01, Title of Transfer for Reclamation Project Facilities.

NOW THEREFORE, the Parties hereby agree as follows:

1. Areas of mutual responsibility and agreement. Reclamation and the Authority will:
   a. each appoint representatives to coordinate the title transfer process and commit to providing resources necessary to proceed as expeditiously as possible.
   b. cooperate to conduct the title transfer process in an open and transparent manner with all appropriate and legally required public and stakeholder participation.
   c. identify the lands, facilities, and assets to be transferred, and determine the legal, institutional, and financial terms and conditions surrounding the transfer of title.
   d. prepare a quitclaim deed(s) as appropriate, to transfer title of all relevant facilities, real property, and rights-of-way from the United States to the Authority.
   e. cooperate to ensure all third-party agreements with assignment clauses are assigned to the Authority, and those without assignment clauses are amended to assign the agreement to the Authority.
   f. provide that any of the responsibilities depicted for either Party can become the responsibility of the other Party if agreed to in a writing signed by both Parties,
   g. enter into a Letter of Agreement (LOA) to cover Reclamation’s administrative costs for processing the title transfer. All issues concerning costs and Reclamation’s authority to perform work under this MOU and to expend funds in relation to this work will be addressed in the LOA. Any payments, advanced to Reclamation under the LOA for Reclamation incurred costs or completion of any or all aspects of this MOU, do not guarantee that the title transfer will be approved by Reclamation.
   h. refund to the Authority, after completion or termination of the title transfer activities, any funds advanced to Reclamation under the LOA that are not expended or obligated by Reclamation.
   i. make efficient and effective use of any previous work completed, including activities associated with NEPA, NHPA, and ESA, facility inspections, and property title analysis, ensuring that all work is up to date and inclusive of all current regulations and requirements.

2. Reclamation will be responsible for the following:
a. Work with the Authority in the planning and completion of required federal environmental compliance and land disposal regulations and requirements to implement the federal action when that action is determined. If scoping is required under NEPA, Reclamation will assist the Authority with planned scoping meetings and in producing a final scoping report.
b. Review the environmental documentation developed by the Authority and/or any consultants engaged by the Authority for compliance with federal laws and regulations, including NEPA, NHPA, ESA and Reclamation’s internal standards.
c. As lead agency for NEPA compliance, make the final determination of the appropriate level of NEPA compliance and take all action necessary to complete the NEPA process.
d. Consult with the U.S. Fish and Wildlife Service and National Marine Fisheries Service pursuant to Section 7 of the ESA, as necessary.
e. Conduct an evaluation of Indian Trust Assets and consult with Tribes, as necessary.
f. Consult with the State Historic Preservation Officer pursuant to Section 106 of the NHPA, as necessary.
g. As necessary, inspect the Project Works to identify any hazardous wastes, contamination, or public hazards, and develop and implement a remediation plan for any known or discovered hazardous waste sites, unless both parties otherwise agree in writing.
h. At the Authority’s request, provide copies of drawings, photos, memoranda, deeds, easements, licenses, legal documents, and other related documents currently in Reclamation’s possession associated with lands, facilities, and rights to be included in the title transfer to the extent not otherwise exempt under federal law.
i. Determine whether any payment is required, and the amount of any such payment, to be made by the Authority to Reclamation, upon transfer of title, to ensure that the Authority pays the net present value of the income stream(s) that the United States derives from the lands, facilities, and assets to be considered for transfer.
j. Perform other technical or administrative tasks associated with the proposed title transfer as mutually agreed to by both Parties.
k. As requested, provide a quarterly accounting of charges against any funds contributed by the Authority pursuant to the LOA to help finance Reclamation’s work on the title transfer.

3. Authority will be responsible for the following:
   a. Complete the analyses, surveys, and reports as required under NEPA, NHPA and ESA at Reclamation’s direction and subject to approval by Reclamation.
b. Arrange for all public involvement, including, but not limited to, meeting spaces, notifications, handouts, exhibits, facilitation, and meeting notes, as appropriate.
c. Establish a reimbursement account pursuant to the proposed LOA and deposit in advance Reclamation’s estimated reasonable costs for executing its responsibilities under this MOU.
d. Obtain the necessary certificates of title, title insurance, or other assurance of title for the land and rights-of-way to be transferred. Any land surveys needed for the transfer of the Project Works shall be at the expense of the Authority.

e. Undertake all property transaction activities related to the transfer including, but not limited to, recordation of any quitclaim deeds with the appropriate County Clerk-Recorder, notification of easement, license and right-of-way holders, assignment of third-party agreements with assignment clauses, and amendment of third-party agreements without assignment clauses.


a. The Parties shall work together in good faith to achieve a prompt and fair completion of the title transfer process outlined in this MOU and in the Dingell Act. In the event that disagreement on any particular matter cannot be promptly resolved, the Parties shall continue to work cooperatively and in good faith on those matters for which there is no disagreement.

b. The title transfer agreement will address the transfer of liability for the Project Works from the United States to the Authority.

c. This MOU shall become effective on the date of the last signature hereto and, unless extended by mutual agreement of the Parties, shall terminate 5-years after the effective date. This MOU may only be modified in a writing signed by both Parties. Either Party may terminate this MOU at any time upon 30-days written notice to the other Party.
IN WITNESS WHEREOF, the Parties hereto have executed this Memorandum of Understanding as of the last date written below.

__________________________________________  
Jason Phillips  
Chief Executive Officer  
Friant Water Authority  

__________________________  Date  
__________________________________________  
Michael Jackson  
South-Central California Area Manager  
Bureau of Reclamation  

__________________________________________  Date  

Prepared for: Friant Water Authority
Appendix C Contra Costa Letter of Agreement

United States Department of the Interior
BUREAU OF RECLAMATION
Mid-Pacific Region
South-Central California Area Office
1243 N Street
Fresno, CA 93721-1813

Mr. Jerry Brown
General Manager
Contra Costa Water District
1331 Concord Ave
Concord, CA 94520

Subject: Letter of Agreement (LOA) – Request for Funds Associated with the Bureau of Reclamation’s (Reclamation) Administrative Review of the Proposed Title Transfer of Contra Costa Canal System – Contra Costa Water District (CCWD) – Delta Division – Central Valley Project

Dear Mr. Brown:

As a result of Public Law 116-9, the Secretary of Interior is authorized and directed to offer to convey and assign to CCWD all right, title, and interest of the United States in and to the Contra Costa Canal, the acquired land, and all interests reserved and developed for the Contra Costa Canal in the acquired land. In May 2019, Reclamation and CCWD executed a Memorandum of Understanding (MOU) outlining each entity’s respective responsibilities in the title transfer process.

This LOA, entered into pursuant to Section 1(j - k) of the MOU, identifies the work and funding responsibilities for evaluating the title transfer process. In accordance with 43 Code of Federal Regulations Part 429.17, the Sundry Civil Expenses Appropriations Act of 1922 (also known as the Contributed Funds Act), and Public Law 116-9, the entity requesting title transfer (CCWD) is responsible for advancing to Reclamation the estimated Administrative Costs and ultimately paying, in full, the actual Administrative Costs incurred by Reclamation to prepare, review and offer to convey title.

Administrative Costs include, but are not limited to, review of the Project pursuant to the National Environmental Policy Act, the Endangered Species Act, the National Historic Preservation Act, administrative and general overhead costs, including travel, meetings, consultations, research and other activities required to effect the title transfer and to ensure compliance with state and Federal law. The title transfer process can be complex, and dependent on factors and variables that may not immediately evident, especially when taking into consideration the amount of land and miles of facilities within the scope of this inquiry. As such, all stake-holders involved should anticipate a process that may include an evolving scope and cost estimates needing to be refined accordingly.

In accordance with the Anti-Deficiency Act (31 U.S.C. § 1341 et seq.), funds must be provided to Reclamation in advance of activities performed by Reclamation personnel. Based upon our initial review of the title transfer proposal, Reclamation estimates the total Administrative Costs to be
approximately $300,000. Attachment A to this LOA provides the basis for the scope of work and the estimated Administrative Costs. CCWD will be responsible for advancing to Reclamation an initial deposit, and additional amounts on a quarterly or “as-needed” basis to cover anticipated ongoing costs and paying, in full, the actual costs incurred by Reclamation. Upon request by CCWD, Reclamation will provide quarterly accounting of costs incurred by Reclamation.

CCWD will deposit with Reclamation the initial advance in the amount of $50,000, which will be used to finance the start of Reclamation’s tasks as outlined in the Enclosed. CCWD agrees to maintain a balance in the account of not less than $10,000. If it appears that the account balance will fall to meet the required minimum, CCWD will be notified and requested to provide additional funds. Quarterly deposits into the account by CCWD may vary and the amount can be negotiated in consideration of which tasks are expected to be performed during that particular quarter. Any unexpended account balance remaining on deposit at the completion of the activities associated with the title transfer will be refunded to CCWD.

Reclamation and CCWD are seeking to complete the title transfer by July 2021. Consistent with Public Law 116-9, Reclamation will provide a report to Congress on the status of the title transfer by March 2020.

If you agree with the above, please sign this LOA and return, with your deposit, to the Bureau of Reclamation, 1243 “N” Street, Fresno, California 93721-1813; attention: Michael Inthavong, SCC-105. Please make the check for the initial $50,000 deposit, payable to “Bureau of Reclamation.”

If you have any questions regarding this matter, please contact me at (559) 262-0305, (800) 877-8339 for the hearing impaired, or my electronic mailing address at minthavong@usbr.gov.

Sincerely,

Michael Inthavong
Chief, Lands Management Division

Jerry Brown
General Manager

Enclosure

cc: Jeff Quinby
    Director of Planning
    Contra Costa Water District
    1331 Concord Ave
    Concord, CA 94520

9/27/19
Date

APPROVED AS TO FORM

DISTRICT COUNSEL
DATE: February 27, 2020

TO: Board of Directors

FROM: Don Willard, CFO

SUBJECT: Update on San Luis Delta-Mendota Water Authority O&M Water Rates & Reserves for Water Year 2020

SUMMARY:

The SLDMWA Board of Directors met on February 6, 2020 and approved Water Year 2020 O&M Water Rates (Rates). The SLDMWA Board approved the WY 2020 O&M Water Rates as represented in the WY 2020 column of the attached Schedule 2. These rates assume a 25% allocation by the USBR for WY 2020. These rates include the funds required for the USBR financing on the first unit completed in the JPP Rewind project, (Unit #6). The second unit, (Unit #2), was self-financed through the WY 2019 O&M Water Rates. The WY 2020 O&M Water Rates do not include any funding for the next unit in the Rewind Project. SLDMWA is currently pursuing financing for this unit through the USBR and anticipates such financing will be in place by May of 2020 and would not require any debt repayment until after completion of the work on that unit, which would likely be in 2021. The rates that apply to the Exchange Contractors do not include any component for the DMC/CA Aqueduct Intertie. The primary factor behind the increase in O&M Water Rates from 2019 to 2020 is the reduction in the USBR water allocation.

The WY 2019 Rates, related to FWA / Exchange Contractors, that were approved last year, based on a 50% Ag Allocation, were as follows:

(Rates ended up at $15.18 and $17.73 respectively after the allocation increases during the year).

The Approved WY 2020 Rates, based on a 25% Ag allocation, are as follows:


DISCUSSION:

In conjunction with the issuance of SLDMWA O&M Water Rates, FWA Staff is directed by the “Friant Water Authority O&M Fund Cost Recovery and Reserve Policy” to review the SLDMWA Cash Flow Reserve. After completing this review, it is evident that an increase in the Reserve may be necessary should the USBR water allocation remain at or below 25%. The current Reserve amount is $3.0M. The attached schedule of “Cash Flow by Month with SLDMWA Adopted 2020 Rates”, indicates that an increase in the Reserve of $600,000 is appropriate to meet the requirements of the Policy, for a balance that is “based upon current maximum
anticipated monthly payment by the Authority to the SLDMWA”. The highlighted line for July is the basis for this determination.

RECOMMENDED ACTION:

Staff’s current recommendation is to defer action on the potential Reserve increase until there is additional information on the USBR allocation as the Reserve requirement could go up or down based on the actual allocation.

ATTACHMENTS:

SLDMWA - WY 2020 O&M Water Rates

Cash Flow by Month with 2020 Rates
San Luis & Delta-Mendota Water Authority
Proposed WY20 O&M Rates - @ 25% ALLOCATION

<table>
<thead>
<tr>
<th>WATER SUPPLY</th>
<th>WY 2020 Rate 3/1/20-2/28/21</th>
<th>WY 2019 Rate 3/1/19-2/29/20</th>
<th>Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Proposed WY2020</td>
<td>Current WY2019</td>
<td></td>
</tr>
<tr>
<td>Irrigation</td>
<td>25%</td>
<td>75%</td>
<td>-50%</td>
</tr>
<tr>
<td>M&amp;I</td>
<td>50%</td>
<td>100%</td>
<td>-50%</td>
</tr>
<tr>
<td>Refuge</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>Exchange/Water Rights</td>
<td>100%</td>
<td>100%</td>
<td>0%</td>
</tr>
<tr>
<td>RATES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper DMC</td>
<td>$22.69</td>
<td>$17.56</td>
<td>$5.13</td>
</tr>
<tr>
<td>Upper DMC - Exchange/Wtr Rts</td>
<td>$18.53</td>
<td>$15.18</td>
<td>$3.35</td>
</tr>
<tr>
<td>Lower DMC/Pool</td>
<td>$27.45</td>
<td>$20.11</td>
<td>$7.34</td>
</tr>
<tr>
<td>Lower DMC/Pool - Exchange/Wtr Rts</td>
<td>$23.29</td>
<td>$17.73</td>
<td>$5.56</td>
</tr>
<tr>
<td>San Felipe</td>
<td>$27.57</td>
<td>$20.26</td>
<td>$7.31</td>
</tr>
<tr>
<td>SLC Above Dos Amigos</td>
<td>$55.60</td>
<td>$29.76</td>
<td>$25.84</td>
</tr>
<tr>
<td>SLC Below Dos Amigos</td>
<td>$71.99</td>
<td>$37.91</td>
<td>$34.08</td>
</tr>
<tr>
<td>Volta Wells</td>
<td>$47.16</td>
<td>$31.93</td>
<td>$15.23</td>
</tr>
<tr>
<td>San Luis Drain</td>
<td>$0.34</td>
<td>$0.17</td>
<td>$0.17</td>
</tr>
</tbody>
</table>
## Forecasted Cash Flow by Month - SLDMWA Adopted 2020 Water Rates

<table>
<thead>
<tr>
<th>Month</th>
<th>AF from 2019 Water Schedule</th>
<th>2020 Proposed Rates</th>
<th>SLMWA Reserves</th>
<th>Cash (Shortage)</th>
<th>SJR Releases Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>March</td>
<td>33,163</td>
<td>772,366</td>
<td>772,366</td>
<td>772,366</td>
<td>$23.29</td>
</tr>
<tr>
<td>April</td>
<td>50,500</td>
<td>1,176,145</td>
<td>3,000,000</td>
<td>1,823,855</td>
<td>$7.73</td>
</tr>
<tr>
<td>May</td>
<td>107,055</td>
<td>2,493,311</td>
<td>3,000,000</td>
<td>506,689</td>
<td>$7.73</td>
</tr>
<tr>
<td>June</td>
<td>130,241</td>
<td>3,033,313</td>
<td>3,000,000</td>
<td>(33,313)</td>
<td>$7.73</td>
</tr>
<tr>
<td><strong>July</strong></td>
<td><strong>153,847</strong></td>
<td><strong>3,583,097</strong></td>
<td>3,000,000</td>
<td>(583,097)</td>
<td><strong>$23.29</strong></td>
</tr>
<tr>
<td>August</td>
<td>132,852</td>
<td>3,094,123</td>
<td>3,000,000</td>
<td>(94,123)</td>
<td>$7.73</td>
</tr>
<tr>
<td>September</td>
<td>40,219</td>
<td>936,701</td>
<td>3,000,000</td>
<td>2,063,299</td>
<td>$7.73</td>
</tr>
<tr>
<td>October</td>
<td>24,286</td>
<td>565,621</td>
<td>3,000,000</td>
<td>2,434,379</td>
<td>$7.73</td>
</tr>
<tr>
<td>November</td>
<td>27,720</td>
<td>645,599</td>
<td>3,000,000</td>
<td>2,354,401</td>
<td>$7.73</td>
</tr>
<tr>
<td>December</td>
<td>7,117</td>
<td>165,755</td>
<td>3,000,000</td>
<td>2,834,245</td>
<td>$7.73</td>
</tr>
</tbody>
</table>
CVP Final Cost Allocation Study
February 2020
Outline

• Background
• Methodology
• Public Participation
• Changes in Costs Allocated
• Next Steps
Background

• The current CVP cost allocation is an interim allocation (1975)

• Purpose and Need of a Final Cost Allocation Study
  • Public Law 99-546
  • Reclamation Policy (PEC-P01)
  • Changes over time to the CVP

• Two-Period Cost Allocation (equal weights)
  • First Period based on 1975 allocation – Historic Benefits
  • Second Period based on prospective modeling analysis – Existing/Future Benefits
Public Participation

• Reclamation held Public Meetings between 2010 and 2019:
  • Receive input on approach and methodology
  • Review draft results

• Draft Cost Allocation Study Report:
  • 90 Day Public Comment: January 2019 – April 2019
  • ~120 comments received from Water, Power, and NGO Stakeholders
  • Listening sessions (8/21-23) w/ power, water & NGOs
    • Reduce 120 comments to critical issues
    • Obtain stakeholder support for completion
  • Completed Final Cost Allocation (January 2020)
Cost Allocation Methodology (SCRB)

Separable Costs Remaining Benefits (SCRB)

1) Estimate Benefits
2) Estimate Single Purpose Alternative
3) Establish Justifiable Expenditure (lesser of 1 & 2)
4) Subtract Separable Costs
5) Compute Remaining Benefit % (Joint Cost Factors) (#3 less #4)
6) Allocate Joint Costs (based on joint cost factors #5)
7) Add Separable and Joint Costs = Total Allocated Costs (SCRB)
8) Allocate Direct Assigned Costs (based on SCRB results)
## Final Cost Allocation Results

### Table 11-3. Summary of Repayment Obligations – Construction (Excludes IDC and OM&R)

<table>
<thead>
<tr>
<th>Category</th>
<th>Period 1 ($)</th>
<th>Period 1 (%)</th>
<th>Period 2 ($)</th>
<th>Period 2 (%)</th>
<th>Period 2 (Change from P1)</th>
<th>Final Cost Allocation ($)</th>
<th>Final Cost Allocation (%)</th>
<th>Final Cost Allocation (Change from P1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation</td>
<td>$1,206,266,266</td>
<td>30.93%</td>
<td>$1,096,668,702</td>
<td>28.12%</td>
<td>($109,597,564)</td>
<td>$1,151,467,486</td>
<td>29.52%</td>
<td>($54,798,780)</td>
</tr>
<tr>
<td>M&amp;I</td>
<td>$108,528,674</td>
<td>2.78%</td>
<td>$143,976,175</td>
<td>3.69%</td>
<td>$35,447,501</td>
<td>$126,252,427</td>
<td>3.24%</td>
<td>$17,723,753</td>
</tr>
<tr>
<td>Commercial Power</td>
<td>$730,180,976</td>
<td>18.72%</td>
<td>$665,824,189</td>
<td>17.07%</td>
<td>($64,356,787)</td>
<td>$698,002,584</td>
<td>17.90%</td>
<td>($32,178,392)</td>
</tr>
<tr>
<td>Repayment Contracts</td>
<td>$597,617,151</td>
<td>15.32%</td>
<td>$597,617,151</td>
<td>15.32%</td>
<td>$0</td>
<td>$597,617,152</td>
<td>15.32%</td>
<td>$0</td>
</tr>
<tr>
<td>Non-reimbursable</td>
<td>$739,347,602</td>
<td>18.96%</td>
<td>$877,854,513</td>
<td>22.51%</td>
<td>$138,506,911</td>
<td>$808,601,061</td>
<td>20.73%</td>
<td>$69,253,459</td>
</tr>
<tr>
<td>CVPIA</td>
<td>$340,872,120</td>
<td>8.74%</td>
<td>$340,872,120</td>
<td>8.74%</td>
<td>$0</td>
<td>$340,872,120</td>
<td>8.74%</td>
<td>$0</td>
</tr>
<tr>
<td>Authorized Deferred Use</td>
<td>$56,875,000</td>
<td>1.46%</td>
<td>$56,875,000</td>
<td>1.46%</td>
<td>$0</td>
<td>$56,875,000</td>
<td>1.46%</td>
<td>$0</td>
</tr>
<tr>
<td>SOD – Not in Repayment</td>
<td>$120,512,509</td>
<td>3.09%</td>
<td>$120,512,509</td>
<td>3.09%</td>
<td>$0</td>
<td>$120,512,509</td>
<td>3.09%</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$3,900,200,298</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>$3,900,200,359</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>NA</strong></td>
<td><strong>$3,900,200,339</strong></td>
<td><strong>100.00%</strong></td>
<td><strong>NA</strong></td>
</tr>
</tbody>
</table>

*P1 = Period 1  
SOD = Safety of Dams  
* Reflects construction costs as of FY-2013
Next Steps

• Utilize Final Cost Allocation in 2021 Water Rates
  • Updated with plant-in-service costs through FY-2019
  • Integrate results into O&M cost allocation

• Update Interest During Construction (IDC)
  • Based on updated allocation factors for M&I and commercial power
  • Period 2 only
Final Cost Allocation Study Report Available Online:
SUMMARY:
The Water Blueprint for the San Joaquin Valley (Group) will hold its most recent Large Group meeting on February 20th. The Group is made up of approximately 70 participants that include directors of Farm Bureaus, Water Authorities, Districts, Growers, Trade Associations, Fresno State, GSAs and white land interests. The Group is continuing to develop a comprehensive and collaborative plan that the San Joaquin Valley (broad coalition) can support and advocate for that focuses on solutions in coordination with key stakeholders. The Group is working with state representatives to include the Blueprint into the Governor’s Water Resiliency Plan (WRP). The Group submitted a comment Brochure for the Governor’s Water Resiliency Portfolio on September 27th and submitted comments to the Draft WRP on the February 7th deadline.

The Project Manager (Tal Eslick) has prepared an annual summary that will be sent to participants that will highlight the completion of Phase 1 of the Socio-Economic Report and reengaging the Steering Committee for Phase II. The Group and the following committees listed are pursuing the goals of Blueprint, including funding opportunities and working in conjunction with other stakeholders.

Socio-Economic Impact Analysis: up to 1,000,000 acres may be fallowed in the San Joaquin Valley over a period of 2-3 decades as a result of reduced ground and surface water availability. Approximately $1 billion of tax revenue will be lost in the SJV. Roughly 20% of farms will be eliminated in the SJV. The revenue loss associated with this fallowing would be up to $7.2 billion per year, and the lost net income to farmers would be up to $1.9 billion per year. A roll out plan which includes engagement with media, elected, stakeholders and key figures in the administration is being implemented. Costa, Gray and 7 other state and federal elected met with the Governor’s COS and 4 cabinet secretaries and 2 deputies to review the current results of the EIA. There was acknowledgement that these impacts are critical and need to be addressed.

Project Implementation Status: Blueprint will require several activities to be executed in a coordinated fashion over the next 20 years. The next phases of activities will require Planning and Engineering services to support the development, evaluation, and selection of activities that will be pursued with the support of the Blueprint entity, including: Implementation of SGMA in the San Joaquin Valley, Development of a water supply plan to minimize loss of working lands, degradation of groundwater quality, loss or jobs, and other regional economic impacts, Development of an environmental plan to manage land use changes for agricultural lands that unavoidably must come out of production, and Develop safe, clean affordable water supplies for disadvantages communities.
**Water Resiliency Portfolio:** The Draft WRP was circulated the first week of January and the Blueprint submitted comments. Overall, the Blueprint requested focus on addressing SGMA in the Valley and planning for the impacts associated with land conversion. There remains a focus on reiterating the need for the Blueprint and real solutions to the crisis before us as highlighted by the Economic Report.

The Committees are working on the following matters:

1) **Regional Representation & Technical Support:** The committee is working on engaging technical experts Stantec and MBK to provide project and cost estimates. Technical Committee continues to meet and discuss the project list and related matters. The Group is looking to circulate a solicitation to GSAs for their involvement. Blueprint is looking for additional technical funding sources through BOR and DWR.

2) **Engagement and Outreach (i.e. Disadvantaged Communities, Environmental Organizations & Urbans).** The committee is continuing to set up meetings with eNGOs, State and Federal Representatives and Brattle Group to go over the Socio-economic Study. It continues to meet with organizations and entities to educate them and pursue their engagement in the Blueprint. Self-Help has identified a possible pilot project to work on together in line with the Blueprint.

3) **Funding, Finance & Governance:** Blueprint will be circulating 2020 invoices and an annual summary of the progress and milestones accomplished since its formation last year. An updated draft budget has been prepared for 2020 to reflect the governance structure, project management, the economic report as well as related services.

4) **Advocacy & Public Relations:** A communications plan is being established and the members will meet regularly with advocacy assets to discuss priorities, which include the WRP, Governor’s budget, Bonds and additional support. Blueprint and Committee members have met with elected in Sacramento and key Administration officials about the details and implementation of the Blueprint. It is looking for possible bond or budget funding opportunities. It will continue to work with other key stakeholders and the administration to fold the Water Blueprint into the governor’s Water Resiliency Plan and possible Bonds and funding.

**RECOMMENDED ACTION:**

- There is no recommended action at this time. The Board gave initial direction to pursue this collective effort and periodically report back on its status.

**BUDGET IMPACT:**

- None

**ATTACHMENTS:**

- Blueprint Economic Impact Analysis: Phase One Results
Introduction and Summary of Results

This report describes the results of an economic analysis of water supply restrictions affecting growers in the San Joaquin Valley. The economic analysis considers two types of restrictions: i) limitations on groundwater pumping implemented as part of the Sustainable Groundwater Management Act (SGMA), and ii) future reductions in surface water supplies available to farmers in the San Joaquin Valley resulting from several regulatory processes initiated by the State of California and the federal government.

Based on an analysis of SGMA and other anticipated water supply restrictions, we conclude that up to one million acres may be fallowed in the San Joaquin Valley over a period of 2-3 decades as a result of reduced ground and surface water availability. This amount of fallowing is approximately one-fifth of all acres currently under cultivation in the Valley. The farm revenue loss associated with this fallowing is $7.2 billion per year.

The changes in water availability considered here will have a dramatic effect on the labor market in the San Joaquin Valley. We calculate that the direct employment losses from SGMA plus anticipated surface water reductions will total 42,000 jobs on average. These employment losses include direct farm employment and agricultural service sector jobs, and are distributed across all employee classes and compensation levels of workers engaged in farming. Direct employee
compensation losses (e.g., wages and salaries) total $1.1 billion annually in the San Joaquin Valley.

Reducing production in San Joaquin Valley agriculture impacts other parts of the California economy in downstream sectors like transportation and food processing (e.g., indirect losses), and more generally as farmers and unemployed workers have less income to spend on household purchases (e.g., induced losses). Counting indirect and induced job losses together with direct losses, the SGMA and future surface water restrictions will result in as many as 85,000 lost jobs and $2.1 billion in lost employee compensation annually.

Because ground and surface water usage are not evenly distributed across counties in the Valley, the economic impacts of SGMA and surface water reductions are also concentrated in certain areas. In particular, Fresno, Tulare and Kern Counties see the largest losses in employment and employee compensation. These counties, plus Kings County, see the largest reductions in harvested acreage and farm operating income. In this report, we show impacts at the Census tract level, and conclude that the impacts of the water supply restrictions considered here will be disproportionately large in the Valley’s lowest-income communities.

Water Supply Restrictions

SGMA requires local groundwater users to bring groundwater use to sustainable levels by the early 2040s. Estimates of SGMA-related groundwater pumping restrictions are uncertain at present since local agencies are still developing plans. For purposes of this economic analysis, we adopt estimates of groundwater pumping reductions developed by the Public Policy Institute of California (PPIC) in February 2019. PPIC reviewed the prior 30 years of pumping and assumed that average overdraft would need to be eliminated as a result of SGMA. We note, however, that groundwater extraction was significantly higher in the latter half of the 30-year period examined by PPIC, averaging 2.4 million acre-feet annually for the San Joaquin Valley. We use this figure in our analysis since it incorporates current operating criteria and demand levels, and is thus more relevant.
Estimated overdraft is broken down across five sub-regions in the San Joaquin Valley: Northeast, Northwest, Southeast, Southwest and Kern. Each region is a composite of several groundwater sub-basins as defined by the California Department of Water Resources. The largest reductions in groundwater overdraft will need to be accomplished in the southern portions of the Valley.

We conduct two versions of our preliminary economic analysis: in one version we limit future water use reductions to those required by SGMA, and in the other we include SGMA together with anticipated reductions in surface water deliveries to farmers in the San Joaquin Valley. These reductions in surface deliveries were provided by Walter Bourez of MBK Engineers and incorporate the effects of the following measures:

- Full implementation of San Joaquin River Restoration Plan,
- remand of 2019 BiOps and return to 2008/09 BiOps for Delta exports,
- climate-induced sea level rise, and
- rejection of Voluntary Agreements and implementation of State Board staff recommendations for Phases 1 and 2 assuming 45% Sacramento River Basin and Delta outflow unimpaired flow requirement and 40% unimpaired flow for San Joaquin River tributaries.

Note that these changes are broadly consistent with the assumptions used to develop the draft California Water Resilience Portfolio released in January 2020. Taken together, these measures would reduce surface water deliveries to San Joaquin Valley farmers by an average of 838,000 acre-feet per year relative to current levels. Note again that these water supply reductions are in addition to the SGMA-imposed restrictions on groundwater pumping.

Data

We base our economic analysis of ground and surface water restrictions on land use data compiled by Land IQ under contract to DWR. This is the same source of land use data used by PPIC in their February 2019. We use crop consumptive use (i.e., evapotranspiration, or ET) estimates compiled by Cal Poly researchers under contract to the State Water Resources Control Board. Crop acreages together with ET estimates give estimates of total agricultural water demand. We base our estimates of crop economics (e.g., yield, revenue and costs of production)
on the most current cost and return studies produced by UC Davis. We examine six crop types: nut crops, vines, fruit, corn, hay and pasture and field crops.

As part of our land use analysis, we worked with the Blueprint steering committee members to identify so called “white areas” that are defined as areas that are exclusively serviced by groundwater. It is in the white areas that SGMA is anticipated to have the largest effect. In total, we estimate that there are just over 820,000 acres of white areas in the San Joaquin Valley – a somewhat smaller estimate than has been offered by other groups including PPIC. While the location of the white areas helps to determine where SGMA is expected to have the largest economic impact, it should be noted that the correlation is not perfect. There are many other areas where farmers have access to both ground and surface water supplies, and groundwater basins are still out of balance. Thus, the impacts of SGMA extend far beyond the white areas.

**Economic Impacts on Farms and Other Businesses**

We consider three basic measures of economic impacts on farms and other businesses: acres fallowed, crop revenues and operating income. Revenues are equivalent to crop sales and operating income is revenue above costs of production (e.g., wages, depreciation and cost of goods sold). The annual losses we estimate are based on current market conditions and production technologies, and incorporate current patterns of surface water trading. That said, the two scenarios we model are both based on the assumption that there is no trading of groundwater. In future work, we will evaluate the potential for groundwater markets to reduce the economic costs of water supply restrictions.

In the SGMA-only scenario, we conclude that farmers in the San Joaquin Valley can expect to experience the following impacts:

- Change in Crop Acreage: -798,000
- Change in Crop Revenue: -$5.9 Billion
- Change in Farm Operating Income: -$1.6 Billion
Adding the effect of anticipated reductions in surface water deliveries to farmers, expected effects are larger:

- Change in Crop Acreage: -992,000
- Change in Crop Revenue: -$7.2 Billion
- Change in Farm Operating Income: -$1.9 Billion

For context, note that there are roughly 5 million acres of irrigated farmland in the San Joaquin Valley. Thus, these estimates imply that with existing infrastructure, future restrictions on ground and surface water use in the region may reduce the scale of farming in the Valley by roughly one-fifth. Farm revenues and net income fall by similar percentages. It is worth repeating, however, that Valley-wide impacts mask the effect of SGMA and surface water supply reductions on the southern portions of the San Joaquin Valley where impacts are proportionally larger.

Tables 1 and 2 display the county-level impacts of SGMA and surface water reductions on harvested acreage and farm operating income. These impacts include direct, indirect and induced effects of changes in farming activity. That is, they include the effects of fallowing on farm employment, output and profitability; the effects on downstream and upstream industries such as agricultural services, transportation and food processing; and the effects of reductions in household income that depress spending and economic activity generally.
Harvested acreage declines by roughly 1 million acres. The largest impacts are in Fresno, Tulare, Kings and Kern Counties. Nut crops experience the largest anticipated acreage losses, with over 327 thousand acres (or 33 percent of the total decline) coming out of production.

| Table 2: Change in Operating Income from SGMA Plus Surface Water Restrictions |
|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Hay and Pasture | Tree Nuts | Tree Fruits | Vines | Corn | Vegetables | Field Crops and Grains | Total |
| Madera | -1 | -35 | -27 | -3 | -1 | -2 | 0 | -69 |
| Fresno | -7 | -154 | -287 | -27 | -5 | -182 | -9 | -671 |
| Merced | -3 | -33 | -9 | -1 | -3 | -18 | -2 | -69 |
| San Joaquin | 0 | -7 | -15 | 0 | 0 | -5 | 0 | -29 |
| Stanislaus | -3 | -35 | -4 | -1 | -4 | -3 | -1 | -50 |
| Tulare | -11 | -42 | -181 | -11 | -30 | -4 | -7 | -286 |
| Kings | -5 | -43 | -16 | -1 | -7 | -35 | -17 | -123 |
| Kern | -21 | -195 | -227 | -29 | -7 | -134 | -28 | -641 |
| SJV Direct | -51 | -545 | -767 | -72 | -57 | -383 | -64 | -1,940 |
| SJV Indirect | -32 | -246 | -334 | -46 | -51 | -146 | -32 | -887 |
| Other CA | -21 | -109 | -149 | -73 | -38 | -89 | -28 | -507 |
| Total | -105 | -899 | -1,251 | -192 | -146 | -618 | -124 | -3,334 |

Different crops have different levels of revenue per acre and profitability. Table 2 shows the change in operating income from the acreage losses shown in Table 1. This table consists of two parts. The top portion shows direct operating income losses by crop and county from SGMA and surface water supply reductions. Tree nuts, tree fruits and vegetables experience the largest declines in operating income, and together account for nearly 90 percent of the total direct loss in operating income. Fresno and Kern Counties are the most impacted by SGMA plus surface water reductions with over $600 million in lost farm income in each of these counties annually; Tulare County is third with over $280 million in lost operating income annually.

The second part of Table 2 displays indirect and induced impacts as well as the total direct operating income losses. These indirect and induced impacts are calculated using the IMPLAN input-output model maintained by the Minnesota IMPLAN Group; note that source material for IMPLAN’s employment and labor income estimates that we report are the Bureau of Labor.
Statistics (BLS) Census of Employment and Wages. We separate these secondary impacts into those occurring in the San Joaquin Valley and those occurring statewide. Looking across all crops, total operating income losses are $3.3 billion annually. Of this total, $1.9 billion is direct losses (i.e., losses experienced by farmers in the Valley), roughly $900 million is indirect and induces losses experienced in the San Joaquin Valley, and $500 million is experienced outside the Valley.

Labor Market Impacts

This section highlights the impacts of SGMA and anticipated surface water reductions on workers employed in farming in the San Joaquin Valley, as well as on the indirect and induced labor market impacts experienced in the Valley and statewide. Direct losses include those who are directly employed on farm, those employed by farm labor contractors, and those providing agricultural services such as pesticide applicators, crop consultants and custom harvesters. It does not include downstream impacts to the trucking and food processing industries, among others, nor does it include induced impacts to the broader economy of the Valley due to changes in income and consumer demand resulting from direct and indirect employment impacts. These indirect and induced effects are reported separately in the lower half of Table 3.

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<th>Table 3: Change in Employment from SGMA Plus Surface Water Restrictions</th>
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7
Table 3 displays the number of full-time equivalent jobs lost in the farm sector as a result of SGMA and surface water supply reductions. Total job losses are roughly 42,000 annually. These job losses occur in each of the study counties, and are concentrated in Fresno, Tulare and Kern Counties. Kern County is especially impacted, with nearly 17,000 farm jobs lost.

Because agriculture is linked to the broader economy of the San Joaquin Valley and the State of California, it is natural to expect that job losses will not be limited to farming. The lower half of Table 3 shows that there will be over 23,000 lost jobs in the Valley in addition to direct farm impacts; these impacts include both losses in downstream sectors as well as losses caused by reductions in income. Outside the San Joaquin Valley, roughly 20,000 jobs will be lost annually as a result of reduced agricultural activity resulting from SGMA and surface water reductions. Total job losses exceed 84,000 annually. Note that these losses are permanent, barring implementation of mitigation measures.

Table 4 shows changes in employee compensation (i.e., wages and salaries) in the San Joaquin Valley and statewide. The total loss in employee income is over $2.1 billion annually, of which slightly more than half is direct (i.e., on farm) losses. The largest direct impacts occur in Fresno, Tulare and Kern Counties. Note that these employee income losses occur across the spectrum of farm sector jobs since the water supply reductions modeled are permanent changes that will result in a large percentage of farms ceasing operation. That is, the changes in water supply are too large to be accommodated by marginal changes in existing farms.

Total lost employee compensation in the San Joaquin Valley is $1.7 billion annually, counting direct, indirect and induced effects. Outside the Valley, wages and salaries are expected to decline by $400 million each year on average as a result of SGMA and surface water supply cuts.
Downscaling Results to Conduct Community-Level Analysis

Statewide models of the economy are useful tools for evaluating the costs and benefits of proposed policies to California. However, state level results provide little information about how policies will affect individual communities. In particular, the distributional component of costs and benefits will have broad implications with respect to policy impact and must be considered in order to ensure that vulnerable communities do not bear more than their share of the costs. Examples of past studies that directly considered policy impacts on disadvantaged communities include the Economic Assessment of SB350 commissioned by the California ISO and the Economic Analysis of California’s Long-Term Energy Strategy for the California Energy Commission.\(^1\) To date, there has been little disaggregated economic analysis of this type conducted in California pertaining to water policy.

Here we use an approach to downscaling statewide economic impacts similar to the previous studies cited above, focusing in this study on detailed income and employment effects. For this assessment, we draw upon the latest version (3.0) of CalEnviroScreen to identify disadvantaged communities.

communities, updating Census level data used to calibrate community shares. We hope our approach will further develop the template for future analysis of more detailed water policy impacts on communities in California.

In order to identify communities that are disadvantaged with respect to selected economic and environmental criteria, the California Environmental Protection Agency (CalEPA) worked with the Office of Environmental Health Hazard Assessment (OEHHA) to develop a tool called CalEnviroScreen (CES) that evaluates economic and environmental conditions of every Census tract in California. The most recent version, CalEnviroScreen 3.0, was released in January 2017 and takes into account factors such as environmental conditions, health outcomes, and socioeconomic status to construct a score for each Census tract, which can then be used to identify vulnerable communities likely to be sensitive to changing policies. Disadvantaged Communities (DACs) are commonly defined using this tool as Census tracts in the top 25th percentile of CES scores. By this definition, there are currently 2,022 Census tracts designated as disadvantaged communities in California.

The communities that are designated as disadvantaged using this approach are burdened by a combination of low income, high exposure to environmental hazards, and poor health outcomes. To illustrate the importance of this combination of factors, Figure 1 highlights the relationships between pollution exposure, poverty, and CES score. Each point represents a Census tract in California and the axes show poverty and pollution exposure. CES score is represented by color. DACs are concentrated in the upper right corner of the figure where both pollution exposure is high and income is low. The figure highlights the fact that most Census tracts that are very poor, but exposed to low levels of pollution are not designated as disadvantaged by CalEnviroScreen 3.0. Similarly, wealthy communities exposed to high levels of pollution do not qualify as disadvantaged in this classification system. It is the combination of hazardous environmental exposure and socioeconomic status (and high health costs) that results in a community being designated as disadvantaged.
The regional distribution of DAC communities is apparent from Figure 2. While there are disadvantaged communities throughout the state, they are highly concentrated in two regions: the Central Valley and Los Angeles. In fact, approximately half of the disadvantaged communities are in Los Angeles County alone. This includes 51% of disadvantaged Census tracts representing 46% of the disadvantaged population. Another 20% of disadvantaged communities are located in the Central Valley (21% Census tracts, 23% of disadvantaged population) so collectively these two regions comprise nearly 75% of all disadvantaged communities. While Los Angeles County and the Central Valley are distinct in many ways, both areas include poor air quality and substantial populations of low-income residents, the qualities that designated disadvantaged status for the purpose of evaluating California environmental policy. The remaining disadvantaged communities are mostly spread across, however, none of the regions besides Los Angeles and the Central Valley contain more than 10% of the disadvantaged communities or population.
Figure 2

Los Angeles County and the Central Valley Contain Nearly 75% of All California DACs

The spatial distribution of disadvantaged communities (DACs) in the state (left), Los Angeles County (middle), and the Central Valley (right).

Naturally, disadvantaged communities are less well-off economically than non-disadvantaged communities and these differences show up across the spectrum including lower income, education, and asset ownership. Across the state, households in DAC communities average 53% lower per capita income than their non-disadvantaged counterparts and are 93% more likely to live below the poverty line.²

Overall DAC households are substantially more likely to be employed in the agricultural sector (4.3% vs 1.8%), however, this discrepancy is particularly stark in the Central Valley where more than 15% of DAC households are in the agricultural sector compared to less than 7% of non-DAC households. DACs also skew more heavily towards unskilled labor such as manufacturing (11.4% vs 9.3%), retail (12.0% vs 10.8%) and transportation (6.3% vs 4.2%)

Downscaling Employment Results

Directly modeling the economic impact of statewide policies at the DAC level would require complete data on economic activities for every Census tract in California. Since these data do not

² Source: Authors’ calculations combining ACS 5-year average income estimates with CES 3.0 DAC designations.
exist we instead utilize state-wide impacts disaggregated to the Census tract level and then highlight impacts in those Census tracts designated as disadvantaged. The process of disaggregating statewide results to the Census tract level is different for each outcome and these processes are described in detail below.

Our land retirement scenarios produce job impact estimates measured as total jobs by sector and county. Jobs impacts are downscaled from the county to the Census tract using occupational and sector employment information in the American Community Survey (ACS). We use ACS 5-year estimates (2011-2015) of the share of number of households with residents employed in each sector and each occupation. We rely on the assumption that changes in jobs are uniformly spatially distributed across the state within sector and occupations so total job changes at the county level are allocated evenly across households within that county and sector.

Direct employment is distinguished from indirect and induced employment using employment intensities for the sectors directly impacted by the land retirement scenarios. These direct effects are then netted out to determine the indirect and induced employment impacts of a given scenario.

Figure 3 shows the distribution of direct job losses by Census tract. Areas highlighted with red borders are disadvantaged communities and the remainder are highlighted in yellow. It is apparent that the largest lost FTE occur in communities near farming regions in the southern part of the San Joaquin Valley, which are the areas with the largest water supply losses from SGMA and surface water reductions.
Figure 3
Job Losses by Census Tract

Figure 4 shows a count of direct job losses by Census tract in the San Joaquin Valley. Figure 5 shows the same information in percentage terms where the denominator is the total number of FTE jobs in the Census tract. In both figures, the data are separated by DAC status. The left panel of Figure 4 shows the distribution of job losses for disadvantaged communities, while the right panel shows the same data for other Census tracts. The data reveal that 224 DAC and 235 non-DAC communities experience job losses from SGMA and surface water reductions in the San Joaquin Valley, with higher percentage losses in DACs. Figure 5 reveals that a total of 57 DAC and 19 Non-DAC Census tracts lose more than 5% of their existing jobs. Displacement is
about equally distributed when losses are below 1%, but DACs are twice as likely to have higher rates, and 16 times as many DACs see displacement over 10% of the existing labor force.

Figure 4

Number of Communities with Direct Job Losses

Figure 5

Direct Job Losses as a Percent of the Local Community Labor Force
Figure 6 displays job losses in the most economically disadvantaged Census tracts defined as those with a poverty headcount over 75% (e.g., communities where 75% of the population lives below the California poverty line). As shown by the color coding, these communities appear in dark blue, meaning that they are the same ones with the largest numbers of direct job losses from SGMA and surface water reductions.

**Figure 6**

Direct Job Losses in the Most Economically Disadvantaged Census Tracts
State and Local Tax Revenues

Reducions in economic activity imply changes in state and local tax collection. Based on the changes in farm acreage and output estimated in this report, we calculate that lost state and local tax revenues from SGMA and surface water supply reductions are $535 million annually. Of this amount, $293 million is lost state tax revenue, while $242 million is revenue lost by county and city governments. We note that the significant unemployment that will result from these water supply limitations will place additional burdens on local governments throughout the San Joaquin Valley. We do not calculate the size of these increased expenditures, but reserve an examination of this question for later research.

Conclusions and Future Work

Reducing the scale of agricultural production impacts nearly every sector of the San Joaquin Valley economy. Farming is one of the principal industries in the region, and those directly engaged in farming patronize other local businesses. In this way, lost farm income translates into losses in other sectors as household spending is curtailed. Further, farm products are inputs into downstream industries such as transportation and food processing.

In future work we will examine the ability of water markets to reduce the economic impacts of water supply restrictions. It is expected that water markets will not have a large impact on the number of acres fallowed, but can cushion lost revenue and net income by concentrating fallowing on lower-valued crops. While groundwater markets have theoretical appeal, we note that in many basins where groundwater trading is allowed and in fact encouraged (e.g., Chino Basin, Central and West Coast Basins), only a negligible amount of trading actually occurs.

Finally, in Phase Two of this project we will also examine the potential of certain infrastructure investments to mitigate the negative socioeconomic impacts of SGMA and surface water supply reductions. These investments will be spelled out in the Blueprint and focus on creating additional opportunities for storing and conveying water within the San Joaquin Valley to maximize the efficiency of water use.
DATE: February 27, 2020
TO: Board of Directors
FROM: Alex Biering, Government Affairs and Communications Manager
Johnny Amaral, Chief of External Affairs
SUBJECT: External Affairs Update

SUMMARY:
Update on State and Federal legislation and communications activities.

RECOMMENDED ACTION:
None; informational only.

SUGGESTED MOTION:
None; informational only.

DISCUSSION:
State Affairs

The California Legislature returned to session Jan. 6. New bills can be introduced until Feb. 21.

The Newsom Administration released their version of the 2020 natural resources and climate resiliency bond (attached) on Feb. 1. Total spending in the bond is $4.75 B, with $2.952 B dedicated to water-related projects and programs, including:

- $1 B for projects and competitive grants or loans to support regional and inter-regional water resilience programs and projects including conveyance.
- $395 M for competitive grants for projects that support sustainable groundwater management implementation specifically for critically overdrafted groundwater basins.
- $360 M for competitive grants for clean drinking water projects.
- $610 M to DWR for State-Federal flood control projects or multibenefit flood projects in the Central Valley and Delta.
- $220 M to the CNRA for Salton Sea restoration.
- $200 M for projects and competitive grants for “healthy soils, water efficiency, nutrient management, habitat restoration and other conservation practices on farms and ranches.” Priority given to “small and medium” sized farms and ranches and projects that benefit DACs.
- $140 M for “projects and competitive grants for projects that enhance or restore native fish species habitat.”
Federal Affairs

On Feb. 4 the U.S. Bureau of Reclamation released its Fiscal Year 2020 Distribution of Additional Funding plan. The plan details how BOR will spend funds appropriated by Congress in the Further Consolidated Appropriations Act, 2020 (Public Law 116-94), and it includes $11 million for subsidence repair work on the Friant-Kern Canal. This is in addition to $2.35 million that Congress designated to fix the canal’s sinking and leaking sections.

Jason Phillips provided testimony on Jan. 28 before House Subcommittee on Water, Oceans, and Wildlife on the Valley’s water balance, the Friant-Kern Canal’s capacity limitations, and the benefits of HR. 5316 by Rep. TJ Cox. Video is available at https://www.youtube.com/watch?v=sj2XevruRoA&feature=youtu.be. (Written testimony is attached.)


On Feb. 19, President Trump held an event in Bakersfield during which he announced the signing of the Record of Decision for the Reinitiation of Consultation on Long-term Operations for the CVP and SWP and also signed a Presidential Memorandum on “Developing and Delivering More Water Supplies in California,” (attached). Video is available at https://youtu.be/1d_i1no0SiY.

Communications and Recent News

The eWaterline was distributed to email list on Jan. 29. If you aren’t getting these, or want to add others to the email list, please contact any member of the FWA team or email information@friantwater.org.


Other Activities

FWA submitted a comment letter to the Newsom Administration on its Draft Water Resilience Portfolio on Feb. 7, 2020, and a comment letter to Reclamation on the CVPIA True-up and Business Practice Guidelines on Feb. 14. (Both letters attached.)
BUDGET IMPACT:
None.

ATTACHMENTS:
Newsom Administration’s proposed language for the “Safe Drinking Water, Wildlife Prevention, and Natural Resources Protection Bond Act of 2020” (Feb. 1, 2020); Testimony from Jason Phillips on HR 5316 (Jan. 28, 2020); Presidential Memorandum on Developing and Delivering More Water Supplies in California (Feb. 19, 2020); FWA comment letter on Newsom Administration’s Draft Water Resilience Portfolio (Feb. 7, 2020); FWA comment letter on CVPIA True-up and Business Practice Guidelines (Feb. 14, 2020).
THE PEOPLE OF THE STATE OF CALIFORNIA DO ENACT AS FOLLOWS:

SECTION 1. Division 47 (Commencing with Section 80200) is added to the Public Resources Code, to read:

DIVISION 47.

SAFE DRINKING WATER, WILDFIRE PREVENTION, AND NATURAL RESOURCES PROTECTION BOND ACT OF 2020


80200. This division shall be known, and may be cited, as the Safe Drinking Water, Wildfire Prevention, and Natural Resources Protection Bond Act of 2020.

80201. The people of California find and declare the following:

(a) California’s changing climate creates increased risks of drought, floods, catastrophic wildfire, severe heat events, intense rain events, and sea level rise that will affect California’s residents, agriculture, water supply, water quality, and the health of our forests, watersheds, fish and wildlife, biodiversity, and economy.

(b) Climate change threatens and undermines the state’s ability to provide access to clean, safe, and reliable drinking water.

(c) These risks and impacts vary by region and can overwhelm the resources of local governments and communities that must cope with changing conditions and severe climate change-related events.

(d) Dedicated funding is needed to provide disadvantaged and vulnerable communities benefit from adaptation and resilience investments.

(e) Reducing vulnerability to fire, flood, drought, and other climate change-related events requires investments to save lives and increase the climate resilience of communities and natural systems.

(f) An integrated statewide investment that increases resilience to climate change impacts will save Californians billions of dollars by preventing or reducing the amount of damage that would otherwise occur.

(g) The investment of public funds pursuant to this division will result in public benefits that will address the most critical statewide climate resilience needs and priorities for public funding while saving billions of dollars.

80202. (a) In the appropriation and expenditure of funding authorized by this division, priority shall be given to projects that reduce the impacts of climate change to people, nature, and built infrastructure; leverage private, federal, and local funding; and/or achieve multiple benefits.

(b) To the extent practicable, a state agency allocating funds available pursuant to this division shall prioritize projects that advance the state’s resilience principles, as
established by the State of California’s Integrated Climate Adaptation and Resiliency Program, which include:

(1) Prioritize integrated climate actions, those that both reduce greenhouse gas emissions and build resilience to climate impacts, as well as actions that provide multiple benefits.

(2) Prioritize actions that promote equity, foster community resilience, and protect the most vulnerable. Explicitly include communities that are disproportionately vulnerable to climate impacts.

(3) Prioritize natural and green infrastructure solutions to enhance and protect natural resources, as well as urban environments. Preserve and restore ecological systems (or engineered systems that use ecological processes) that enhance natural system functions, services, and quality and that reduce risk, including but not limited to actions that improve water and food security, habitat for fish and wildlife, coastal resources, human health, recreation and jobs.

(4) Avoid maladaptation by making decisions that do not worsen the situation or transfer the challenge from one area, sector, or social group to another. Identify and take all opportunities to prepare for climate change in all planning and investment decisions.

(5) Base all planning, policy, and investment decisions on the best-available science, including local and traditional knowledge, including consideration of future climate conditions out to 2050 and 2100, and beyond.

(6) Employ adaptive and flexible governance approaches by utilizing collaborative partnership across scales and between sectors to accelerate effective problem solving. Promote mitigation and adaptation actions at the regional and landscape scales.

(7) Take immediate actions to reduce present and near future (within 20 years) climate change risks for all Californians; do so while also thinking in the long term and responding to continual changes in climate, ecology, and economics using adaptive management that incorporates regular monitoring.

(c) Administering agencies shall be guided by the following implementation principles:

(1) Invest in actions that, to the extent practicable, advance the state’s resilience principles pursuant to section 80202 (b).

(2) Reduce administrative complexity of bond-funded programs; utilize and align existing programs and mechanisms where possible to achieve existing state goals.

(3) Build regional resilience recognizing that climate threats differ widely across the state.

(4) Leverage other funding through use of bond proceeds; require funding matches where appropriate to attract important federal, local and philanthropic resources.
(5) Increase collaboration among administering agencies by organizing funds around the type or types of risks and requiring where possible multi-agency development, review and selection of projects.

(d) To the extent practicable, a project that receives funding pursuant to this division may include signage informing the public that the project received funding from the Safe Drinking Water, Wildfire Prevention, and Natural Resources Protection Bond Act of 2020.

80203. For the purposes of this division, the following definitions apply:

(a) “Committee” means the Safe Drinking Water, Wildfire Prevention, and Natural Resources Protection Bond Act of 2020 Finance Committee created pursuant to Section 80282.

(b) “Council” is the California Strategic Growth Council established pursuant to Public Resource Code Section 75121.

(c) “Disadvantaged Community”, unless otherwise specified, means a community with a median household income less than 80 percent of the statewide average.

(d) “Fund” means the Safe Drinking Water, Wildfire Prevention, and Natural Resources Protection Bond Act of 2020 Fund created pursuant to Section 80214.

(e) “Local coastal program” has the same meaning as in Public Resources Code Section 30108.6.

(f) “Local hazard mitigation plan” means the plan adopted in accordance with the federal Disaster Mitigation Act of 2000 (P.L. 106-390) as part of the safety element of a city, county, or city and county’s general plan.

(g) “General plan” has the same meaning as in Government Code Section 65302.

(h) “Natural infrastructure” means using natural ecological systems or processes to reduce vulnerability to climate change related hazards, or other related climate change effects, while increasing the long-term adaptive capacity of coastal and inland areas by perpetuating or restoring ecosystem services. This includes, but is not limited to, the conservation, preservation, or sustainable management of any form of aquatic or terrestrial vegetated open space, such as beaches, dunes, tidal marshes, reefs, seagrass, parks, rain gardens, and urban tree canopies. It also includes systems and practices that use or mimic natural processes, such as permeable pavements, bioswales, and other engineered systems, such as levees that are combined with restored natural systems, to provide clean water, conserve ecosystem values and functions, and provide a wide array of benefits to people and wildlife.

(i) “Protection” means those actions necessary to prevent harm or damage to persons, property, or natural resources or those actions necessary to allow the continued use and enjoyment of property or natural resources and includes acquisition, development, restoration, preservation, and interpretation, as defined by Public Resources Code Section 75005.
(j) (1) “Restoration” means the improvement of physical structures or facilities, and, in the case of natural systems and landscape features, includes, but is not limited to, any of the following:

(A) The control of erosion.
(B) Stormwater capture, treatment, reuse and storage, or to otherwise reduce stormwater pollution.
(C) The control and elimination of invasive species and harmful algal blooms.
(D) The planting of native species.
(E) The removal of waste and debris.
(F) Fuel hazard reduction.
(G) Fencing out threats to existing or restored natural resources.
(H) Improving instream, riparian, or wetland habitat conditions.
(I) Other plant and wildlife habitat improvement to increase the natural system value of the property, or coastal or ocean resources.
(J) Activities described in subdivision (b) of Section 79737 of the Water Code.

(2) “Restoration” also includes activities, such as the planning, permitting, monitoring, and reporting that are necessary to ensure successful implementation of the restoration objectives.

(k) “Water Board” means the State Water Resources Control Board.

(l) “Socially disadvantaged farmer or rancher” means as defined in Food and Agricultural Code Section 512.

(m) “Tribe” means a federally recognized Native American Tribe or a nonfederally recognized Native American Tribe listed on the California Tribal Consultation List maintained by the Native American Heritage Commission located in California.

(n) “Vulnerable Communities” means communities that experience heightened risk and increased sensitivity to climate change and have less capacity and fewer resources to cope with, adapt to, or recover from climate impacts. These disproportionate effects are caused by physical (built and environmental), social, political, and/or economic factors, which are exacerbated by climate impacts.

80204. An amount not more than 5 percent of the funds allocated for a grant program pursuant to this division may be used to pay the administrative costs of that program.

80205. (a) Except as provided in subdivision (b), up to 10 percent of funds allocated for each program funded by this division may be expended for planning and monitoring necessary for the successful design, selection, and implementation of the projects authorized under the program. This section shall not otherwise restrict funds ordinarily used by an agency for “preliminary plans,” “working drawings,” and “construction” as defined in the annual Budget Act for a capital outlay project or grant project. Planning
may include studies. Monitoring may include monitoring of climate risk reduction and resilience measures associated with program expenditures under this division to ensure successful implementation of such measures.

(b) Funds used for planning and monitoring of programs that benefit disadvantaged communities or socially disadvantaged farmers or ranchers may exceed 10 percent of the funds allocated if the state agency administering the moneys determines that there is a need for the additional funding.

(c) At least 35 percent of the funds available pursuant to this division shall be allocated for projects benefiting disadvantaged communities or socially disadvantaged farmers or ranchers.

80206. (a) Administering agencies may provide funding pursuant to this division through programs that match or leverage federal funding.

(b) A state agency administering funds pursuant to this division may make a grant to a federal agency if the state agency determines a grant is the most efficient way to implement the intent of this division on federally managed lands.

80207. Subject to section 11019 of the Government Code, for grants awarded for projects that serve a disadvantaged community or socially disadvantaged farmers or ranchers, the administering entity may provide advanced payments up to 25 percent of the grant award to the recipient to initiate the project in a timely manner. If the administering entity provides advanced payments, it shall adopt additional requirements regarding the distribution and use of advanced payments to ensure that the moneys are used properly for grant-funded work, including repayment if the funds are not used.

80208. Up to 10 percent of the funds available pursuant to each chapter of this division may be allocated for technical assistance for disadvantaged communities or socially disadvantaged farmers or ranchers.

80209. Unless otherwise specified, eligibility for funding under this division shall be determined by the administering agencies in the guideline development process specified in Section 80211.

80210. (a) To be eligible for funding under this division, a project proposed by a public utility that is regulated by the Public Utilities Commission or a mutual water company shall have a clear and definite public purpose and shall benefit the customers of the water system and not the investors.

(b) Tribes are eligible recipients of funds available pursuant to this division.

80211. (a) Prior to disbursing grants or loans pursuant to this division, each state agency that receives an appropriation from the funding made available by this division to administer a competitive grant or loan program under this division shall develop and adopt project solicitation and evaluation guidelines. The guidelines shall include monitoring and reporting requirements and may include a limitation on the dollar
amount of grants or loans to be awarded. An agency may use or modify existing program guidelines to be consistent with this division.

(b) Prior to adopting guidelines, the state agency shall conduct public meetings and consider public comments. The state agency shall publish the draft guidelines on its internet web site at least 30 days before the public meetings.

(c) Prior to approving grant guidelines, the state agency shall make the following finding in a report to the Council:

Grant guidelines developed by the administering entity, to the extent practicable, advance the resilience principles pursuant to Section 80202(b) and the Safe Drinking Water, Wildfire Prevention, and Natural Resources Protection Bond Act of 2020 objectives pursuant to Section 80214(a).

(d) Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code does not apply to the development and adoption of program guidelines and selection criteria adopted pursuant to this division.

(e) Division 13 of the Public Resources Code does not apply to the development and adoption of program guidelines and selection criteria adopted pursuant to this division.

(f) The Council will work in collaboration with all departments and agencies that administer expenditures under this division to develop overarching guidance on bond expenditures.

80212. (a) Nothing in this division determines or alters water rights or water right priorities.

(b) Nothing in this division is a limitation on the authority of the Natural Resources Agency, the Water Board, entities under the Natural Resources Agency, or the Department of Finance under any other law, including any authority to transfer an appropriation of funds made available by this division to another state department or entity for use by the department or entity if doing so will be administratively efficient and consistent with both this division and the code section from which they were allocated.

(c) Funds provided by this division shall not be used to acquire land via eminent domain.

80213. (a) The Department of Finance shall provide for an independent audit, as it determines necessary, of any entity receiving funds pursuant to this division. The audit shall determine the entity’s compliance with this division, including fiscal activities and performance metrics or deliverables. Such audit may be provided for through contracting with other entities. The Secretary of the Natural Resources Agency shall publish a list of all program and project expenditures pursuant to this division not less than annually, in written form, and shall post an electronic form of the list on an Internet Web site in a downloadable spreadsheet format. The publication shall include:

(1) Information about the location of each funded project, the project’s objectives, the status of the project, anticipated outcomes, any matching moneys provided for the
project by the grant recipient, and the applicable chapter of this division pursuant to which the grant recipient received moneys.

(2) Information identifying that the administering entity made one or more of the following findings for each grant program:

(A) The expenditure is anticipated to reduce the risk of flood, drought, wildfire, sea level rise, extreme heat, or other danger that is associated with, or exacerbated by, climate change.

(B) The expenditure will increase the resilience of a community’s residents, workers, visitors, businesses, built infrastructure, and/or a natural system to the risks of flood, drought, wildfire, sea level rise, extreme heat, or other danger that is associated with or exacerbated by climate change.

(C) The expenditure will help a community recover from the impacts of flood, drought, wildfire, sea level rise, extreme heat, or other climate-related events, or help restore a natural system, natural infrastructure, from the impacts of flooding, drought, wildfire, extreme heat, or other climate-related events.

(D) The expenditure will help improve the resilience of a community’s water supplies or provide safe drinking water or clean water benefits in light of California’s changing climate.

(b) The state agency issuing any grant with funding authorized by this division shall provide oversight of the grant funding and shall require periodic reporting of the grant expenditures and progress of the grant deliverables.

(c) Each state agency that receives an appropriation of funding made available by this division shall be responsible for establishing metrics of success and reporting the status of projects and all uses of the funding on the state’s bond accountability Internet Website.

(d) Notwithstanding any provision of this division, the full costs associated with the publications, audits, statewide bond tracking, cash management, and related oversight activities provided for in this section shall be funded from this division. These costs shall be shared proportionally by each program through this division. Actual costs incurred to administer non-grant programs authorized by this division shall be paid from the funds authorized in this division. The provisions of Section 10295 and Sections 10335 to 10381, inclusive, of the Public Contract Code shall not apply to agreements entered into by the Department of Finance in connection with the provision of an independent audit pursuant to this section.

80214. (a) The proceeds of bonds issued and sold pursuant to this division, exclusive of refunding bonds issued and sold pursuant to Section 80293, shall be deposited in the Safe Drinking Water, Wildfire Prevention, and Natural Resources Protection Bond Act of 2020 Fund, which is hereby created in the State Treasury. Moneys in the fund are available upon appropriation by the Legislature.
(b) Proceeds of bonds issued and sold pursuant to this division shall be allocated according to the following schedule:

(1) Two billion nine hundred twenty-five million dollars ($2,925,000,000) for Chapter 2 (Commencing with Section 80220).

(2) Seven hundred fifty million dollars ($750,000,000) for Chapter 3 (commencing with Section 80230).

(3) Five hundred million dollars ($500,000,000) for Chapter 4 (commencing with Section 80240).

(4) Three hundred twenty-five million dollars ($325,000,000) for Chapter 5 (commencing with Section 80250).

(5) Two hundred fifty million dollars ($250,000,000) for Chapter 6 (commencing with Section 80260).

80215. The Legislature may enact legislation necessary to implement programs funded by this division.

CHAPTER 2. Supporting Safe Drinking Water and Resilience to Flood and Drought

80220. (a) The sum of two billion nine hundred twenty-five million dollars ($2,925,000,000) shall be available, upon appropriation by the Legislature, for providing safe and clean drinking water and resilience to flood and drought.

(b) Projects funded pursuant to this chapter may use the services of the California Conservation Corps or certified community conservation corps, as defined in Section 14507.5 of the Public Resources Code.

(c) Funds provided by this chapter shall not be expended to pay the costs of the design, construction, operation, mitigation, or maintenance of Delta conveyance facilities.

80221. Of the funds made available by Section 80220, one billion dollars ($1,000,000,000) shall be available, upon appropriation by the Legislature, to the Department of Water Resources and the Water Board, for projects and competitive grants or loans to support regional and inter-regional water resilience programs and projects. Funding allocated pursuant to this section shall support the regional approach identified in the Water Resilience Portfolio. This funding will support various water management programs and projects with a focus on regional and inter-regional water projects, including but not limited to: Integrated Regional Water Management; multi-benefit stormwater management; wastewater treatment; water reuse and recycling; drinking water treatment and distribution; water use efficiency and water conservation; water storage; water conveyance; watershed protection, restoration, and management; and water quality.
80222. Of the funds made available by Section 80220, three hundred ninety-five million dollars ($395,000,000) shall be available to the Department of Water Resources in collaboration with the Water Board, upon appropriation by the Legislature, for competitive grants for projects that support sustainable groundwater management implementation. These funds are dedicated to supporting local groundwater sustainability agencies implementing projects and programs related to the groundwater sustainability plans for critically overdrafted basins.

80223. Of the funds made available by Section 80220, three hundred sixty million dollars ($360,000,000) shall be available to the Water Board, upon appropriation by the Legislature, for competitive grants or loans for the purposes described in Chapter 5 (commencing with Section 79720) of Division 26.7 of the Water Code to help provide clean, safe and reliable drinking water to all Californians.

80224. Of the funds made available by Section 80220, three hundred forty million dollars ($340,000,000) shall be available, upon appropriation by the Legislature, to the Department of Water Resources for flood infrastructure projects. These funds will support flood risk reduction and provide the state cost share for priority United States Army Corps of Engineers projects.

80225. Of the funds made available by Section 80220, two hundred seventy million dollars ($270,000,000) shall be made available, upon appropriation by the Legislature, to the Department of Water Resources for Central Valley and Sacramento-San Joaquin Delta multi-benefit flood control projects. These funds shall support multi-benefit flood risk reduction and ecosystem restoration efforts.

80226. Of the funds made available by Section 80220, two hundred twenty million dollars ($220,000,000) shall be made available, upon appropriation by the Legislature, to the Natural Resources Agency for restoration activities identified in the Salton Sea Management Program Phase I: 10 Year Plan, dated March 2017, the final management plan report, and restoration activities identified in any subsequent revisions to this plan.

80227. (a) Of the funds made available by Section 80220, two hundred million dollars ($200,000,000) shall be made available, upon appropriation by the Legislature, to the Department of Food and Agriculture for projects and competitive grants to support environmental farming projects. The Environmental Farming Incentive Program would fund grants for incentives, demonstration projects and technical assistance to enhance agricultural lands for soil health, water quality and efficiency, biodiversity, resiliency and habitat benefits. Eligible projects include, but are not limited to, healthy soils, water efficiency, nutrient management, habitat restoration and other conservation practices on farms and ranches.

(1) For the purposes of this section, a minimum of 35 percent of funds shall go to projects that benefit socially disadvantaged farmers or ranchers or disadvantaged communities. “Disadvantaged Community” means a community identified pursuant to Health and Safety Code Section 39711 or 39713.

(2) Priority shall be given to small and medium sized farms.
80228. Of the funds made available by Section 80220, one hundred forty million dollars ($140,000,000) shall be made available, upon appropriation by the Legislature, to the Department of Fish and Wildlife for projects and competitive grants for projects that enhance or restore native fish species habitat. Projects include, but are not limited to enhanced stream flows, improved fish passage, reconnection of riverine and floodplain habitat, and other actions to help fish adapt to climate change.

CHAPTER 3. Wildfire Resilience Through Forest Health and Community Preparedness

80230. The sum of seven hundred fifty million dollars ($750,000,000) shall be available, upon appropriation by the Legislature, for wildfire resilience.

80231. Of the funds made available by Section 80230, two hundred fifty million dollars ($250,000,000) shall be available for the Department of Forestry and Fire Protection, upon appropriation by the Legislature, for competitive grants for projects that reduce the risk of wildfire and provide long-term forest health benefits, including, but not limited to reforestation; activities that promote long-term carbon storage; and upper watershed, riparian, mountain meadow and inland wetland restoration.

80232. (a) Of the funds made available by Section 80230, five hundred million dollars ($500,000,000) shall be made to the Office of Emergency Services to be managed in coordination with the California Natural Resources Agency and the Department of Forestry and Fire Protection, upon appropriation by the Legislature, for competitive grants for hardening critical community infrastructure.

(b) These funds shall be allocated for projects that make critical infrastructure and facilities more resistant to wildfires and cascading climate impacts aligned with the State of California Hazard Mitigation Plan. This funding allocation may serve as matching funds for other non-state funding sources where allowable to support project implementation. Projects can include, but are not limited to, hardening of drinking/waste water infrastructure, emergency shelters, communication and warning systems, evacuation routes, emergency power and public medical facilities.

80233. Notwithstanding Section 80210, investor-owned utilities are not eligible to receive funds allocated in Sections 80231 and 80232.

CHAPTER 4. Minimizing Threats Posed to Coastal Resources and Communities from Sea Level Rise and Changing Ocean Conditions

80240. The sum of five hundred million dollars ($500,000,000) shall be available, upon appropriation by the Legislature, for competitive grants to the Ocean Protection Council for adapting to sea level rise and protecting coastal resources and communities from changing ocean conditions such as increasing ocean temperatures and acidification.

80241. Of the funds made available by Section 80240, three hundred twenty million dollars ($320,000,000) shall be available, upon appropriation by the Legislature, for projects and for competitive grants for projects that restore coastal wetlands.
80242. Of the funds made available by Section 80240, one hundred thirty million dollars ($130,000,000) shall be available, upon appropriation by the Legislature, for competitive grants for projects that use nature-based solutions to address climate change impacts to California’s ocean ecosystems, including, but not limited to, kelp forests, seagrass habitat, eelgrass beds, and marine protected areas.

80243. Of the funds made available by Section 80240, fifty million dollars ($50,000,000) shall be available, upon appropriation by the Legislature, for competitive grants for demonstration projects protecting critical infrastructure that is vulnerable to sea level rise and flooding, including, but not limited to, roads, railways, ports, sewage treatment plants, and power plants.

CHAPTER 5. Mitigating Extreme Heat

80250. The sum of three hundred twenty-five million dollars ($325,000,000) shall be available, upon appropriation by the Legislature, for mitigating extreme heat impacts.

80251. Of the funds made available by Section 80250, two hundred million dollars ($200,000,000) shall be available, upon appropriation by the Legislature, to the Natural Resources Agency for competitive grants for urban greening and forestry projects. These funds will support projects that mitigate urban heat island impacts. Eligible projects may include, but are not limited to, investments that support urban forestry projects and an expanded urban greening program that supports the creation of green recreational parks in park poor communities.

80252. (a) Of the funds made available by Section 80250, one hundred twenty-five million dollars ($125,000,000) shall be available, upon appropriation by the Legislature, to the Council in collaboration with the Department of Transportation for competitive grants to support projects that provide for cool surface materials. This includes but is not limited to:

(1) Projects that support the installation of cool surfaces, including building, roofing and active transportation/roadway surfaces, at affordable housing developments, public spaces, and transit stations.

(2) Projects that support the installation of innovative pavement materials and pavement treatments on roadways and parking lots to mitigate heat island impacts.

(b) Notwithstanding subdivision (c) of section 80203, for the purpose of the allocation and use of funds available under this section, “Disadvantaged Community” means a community identified pursuant to Health and Safety Code Section 39711 or 39713.

CHAPTER 6. Supporting Community Resilience

80260. (a) The sum of two hundred fifty million dollars ($250,000,000) shall be available, upon appropriation by the Legislature, to the Council for community resilience.

(b) In the implementation of the programs included in this chapter, the Council shall collaborate with all relevant agencies to develop grant guidelines.
80261. Of the funds made available by Section 80260, two hundred twenty-five million dollars ($225,000,000) shall be available, upon appropriation by the Legislature, to the Council for competitive grants for the development of community resilience centers, including but not limited to those on fairgrounds.

80262. (a) Of the funds made available by Section 80260, twenty-five million dollars ($25,000,000) shall be available, upon appropriation by the Legislature, to the Council for competitive grants that support community resilience planning efforts.

(b) In the implementation of this section, the Council shall:

(1) Develop guidelines to awards funds to advance local adaptation planning, specifically focused on preparing local community infrastructure and natural systems to the impacts of climate change;

(2) Support the updating of local plans, including General Plans consistent with Government Code Section 65032, Local Coastal Programs, Local Hazard Mitigation Plans, and other local planning efforts.


80280. (a) Bonds in the total amount of four billion seven hundred fifty million dollars ($4,750,000,000), not including the amount of any refunding bonds issued in accordance with Section 80293, or so much as is necessary, may be issued and sold to provide a fund to be used for carrying out the purposes expressed in this division and to reimburse the General Obligation Bond Expense Revolving Fund pursuant to Section 16724.5 of the Government Code. The bonds, when sold, issued, and delivered, shall be and constitute a valid and binding obligation of the State of California, and the full faith and credit of the State of California is hereby pledged for the punctual payment of both the principal of, and interest on, the bonds as the principal and interest become due and payable.

(b) The Treasurer shall cause the issuance and sell the bonds authorized by subdivision (a) and in the amount determined by the committee to be necessary or desirable pursuant to this section. The bonds shall be issued and sold upon the terms and conditions specified in one or more resolutions to be adopted by the committee pursuant to Section 16731 of the Government Code.

80281. The bonds authorized by this division shall be prepared, executed, issued, sold, paid, and redeemed as provided in the State General Obligation Bond Law (Chapter 4 (commencing with Section 16720) of Part 3 of Division 4 of Title 2 of the Government Code), as amended from time to time, and all of the provisions of that law, except subdivisions (a) and (b) of Section 16727 of the Government Code apply to the bonds and to this division and are hereby incorporated in this division as though set forth in full in this division.

80282. (a) Solely for the purpose of authorizing the issuance and sale of the bonds authorized by this division, pursuant to the Safe Drinking Water, Wildfire Prevention, and
Natural Resources Protection Bond Act of 2020 Finance Committee is hereby created. For purposes of this division, the Safe Drinking Water, Wildfire Prevention, and Natural Resources Protection Bond Act of 2020 Finance Committee is the “committee” as that term is used in this division and in the State General Obligation Bond Law.

(b) The committee consists of the Director of Finance, the Treasurer, and the Controller. Notwithstanding any other law, any member may designate a representative to act as that member in that member’s place for all purposes, as though the member were personally present.

(c) The Treasurer shall serve as the chairperson of the committee.

(d) A majority of the committee may act for the committee.

80283. The committee shall determine by resolution whether or not it is necessary or desirable to issue and sell bonds authorized by this division in order to carry out the actions specified in this division and, if so, the amount of bonds to be issued and sold. Successive issues of bonds may be authorized and sold to carry out those actions progressively, and it is not necessary that all of the bonds authorized to be issued be sold at any one time.

80284. For purposes of this division and the State General Obligation Bond Law, “board,” as defined in Section 16722 of the Government Code, means the Secretary of the Natural Resources Agency.

80285. There shall be collected each year and in the same manner and at the same time as other state revenue is collected, in addition to the ordinary revenues of the state, a sum in an amount required to pay the principal of, and interest on, the bonds becoming due and payable each year. It is the duty of all officers charged by law with any duty in regard to the collection of the revenue to do and perform each and every act that is necessary to collect that additional sum.

80286. Notwithstanding Section 13340 of the Government Code, there is hereby continuously appropriated from the General Fund in the State Treasury, for the purposes of this division, and without regard to fiscal years an amount that will equal the total of the following:

(a) The sum annually necessary to pay the principal of, and interest on, bonds issued and sold pursuant to this division, as the principal and interest become due and payable.

(b) The sum that is necessary to carry out the provisions of Section 80289.

80287. The board may request the Pooled Money Investment Board to make a loan from the Pooled Money Investment Account in accordance with Section 16312 of the Government Code for the purpose of carrying out this division. The amount of the request shall not exceed the amount of the unsold bonds that the committee has, by resolution, authorized to be sold for the purpose of carrying out this division, excluding refunding bonds authorized pursuant to Section 80292, less any amount loaned and not
yet repaid pursuant to this section and withdrawn from the General Fund pursuant to
Section 80289 and not yet returned. The board shall execute those documents required
by the Pooled Money Investment Board to obtain and repay the loan. Any amounts
loaned shall be deposited in the fund to be allocated in accordance with this division.

80288. Notwithstanding any other provision of this division, or of the State General
Obligation Bond Law, if the Treasurer sells bonds pursuant to this division that include a
bond counsel opinion to the effect that the interest on the bonds is excluded from gross
income for federal tax purposes under designated conditions or is otherwise entitled to
any federal tax advantage, the Treasurer may maintain separate accounts for the
investment of bond proceeds and for the earnings and the investment of earnings on
those proceeds, and may use or direct the use of those proceeds or earnings to pay
any rebate, penalty, or other payment required under federal law or take any other
action with respect to the investment and use of those bond proceeds, as may be
required or desirable under federal law in order to maintain the tax-exempt status of
those bonds and to obtain any other advantage under federal law on behalf of the
funds of this state.

80289 For the purposes of carrying out this division, the Director of Finance may
authorize the withdrawal from the General Fund of an amount or amounts not to
exceed the amount of the unsold bonds that have been authorized by the committee
to be sold for the purpose of carrying out this division, excluding refunding bonds
authorized pursuant to Section 80292, less any amount loaned pursuant to Section
80287 and not yet repaid and any amount withdrawn from the General Fund pursuant
to this section and not yet returned to the General Fund. Any amounts withdrawn shall
be deposited in the fund to be allocated in accordance with this division. Any moneys
made available under this section shall be returned to the General Fund, with interest at
the rate earned by the moneys in the Pooled Money Investment Account, from
proceeds received from the sale of bonds for the purpose of carrying out this division.

80290. All moneys deposited in the fund that are derived from premiums and accrued
interest on bonds sold pursuant to this division, in excess of any amount of premium
used to pay the costs of issuing the bonds, shall be reserved in the fund and shall be
available for transfer to the General Fund as a credit to expenditures for bond interest,
except that amounts derived from premiums may be reserved and used to pay the
cost of bond issuance before any transfer to the General Fund.

80291. Pursuant to the State General Obligation Bond Law, the cost of bond issuance
shall be paid or reimbursed out of the bond proceeds, including premiums, if any. To
the extent the cost of bond issuance is not paid from premiums received from the sale
of bonds, these costs shall be allocated proportionally to each program funded
through this division by the applicable bond sale.

80292. The bonds issued and sold pursuant to this division may be refunded in
accordance with Article 6 (commencing with Section 16780) of Chapter 4 of Part 3 of
Division 4 of Title 2 of the Government Code, which is a part of the State General
Obligation Bond Law. Approval by the voters of the state for the issuance of the bonds under this division shall include approval of the issuance, sale or exchange of any bonds issued to refund any bonds originally issued under this division or any previously issued refunding bonds. Any bond refunded with the proceeds of a refunding bond as authorized by this section may be legally defeased to the extent permitted by law in the manner and to the extent set forth in the resolution, as amended from time to time, authorizing that refunded bond.

80293. The proceeds from the sale of bonds authorized by this division are not “proceeds of taxes” as that term is used in Article XIII B of the California Constitution, and the disbursement of these proceeds is not subject to the limitations imposed by that article.

SEC. 2. If any provision of this act or the application thereof is held invalid, that invalidity shall not affect other provisions or applications of this act that can be given effect without the invalid provisions or applications, and to this end the provisions of this act are severable.

SEC. 3. Section 1 of this act shall take effect upon approval by the voters of the Safe Drinking Water, Wildfire Prevention, and Natural Resources Protection Bond Act of 2020.

SEC. 4. Section 1 of this act shall be submitted to the voters at the November 3, 2020 statewide general election in accordance with the provisions of the Government Code and Elections Code governing the submission of a statewide measure to the voters.

SEC 5. This act is a bill providing for appropriations related to the Budget Bill within the meaning of subdivision (e) of Section 12 of Article IV of the California Constitution, has been identified as related to the budget in the Budget Bill, and shall take effect immediately.
My name is Jason Phillips, and I am the Chief Executive Officer of the Friant Water Authority in California. The Friant Water Authority (Authority or Friant) is a public agency formed under California law in part to operate and maintain the Friant-Kern Canal, a component of the Central Valley Project (CVP) owned by the Bureau of Reclamation (Reclamation).

Thank you to Congressman Cox, Chairman Huffman, and Ranking Member McClintock for inviting me to speak. Friant is particularly well positioned to comment on the “Move Water Now Act,” H.R. 5316, the topic of this hearing, given: (1) our role as the local operator and responsible agency for the Friant-Kern Canal, and (2) the significant water-related challenges Friant and others face in the San Joaquin Valley (Valley) and elsewhere in California. The Friant Division footprint also includes more than 50 disadvantaged communities who will be disproportionately affected by future reductions in water supply without an aggressive and coordinated effort at the local, state, and federal levels.

My testimony will discuss our experiences maintaining the Friant-Kern Canal and its relationship to the Valley’s water imbalance, how H.R. 5316 will facilitate completion of urgent repairs to this federal facility, and what the Valley’s future might look like without action.

Background on the Friant Division

The 152-mile-long Friant-Kern Canal and the 36-mile-long Madera Canal, together with Friant Dam and Millerton Lake on the San Joaquin River, form the Friant Division of the CVP. On average, the Division delivers 1.2 million acre-feet of irrigation water annually to more than 15,000 farms on over a million acres of the most productive farmland in the world. Friant Division deliveries also are vital to meeting the domestic water needs of many small communities in the San Joaquin Valley, as well as larger metropolitan areas, including the City of Fresno – California’s fifth-largest city.

Built between 1945 and 1951, the Friant-Kern Canal (Canal) carries water south from Millerton Lake along the foothills of the Sierra Nevada Mountains on the eastern edge of the San Joaquin Valley to its terminus at the Kern River, four miles west of Bakersfield. The canal is lined by concrete for most of its length and has an initial capacity of 5,300 cubic feet per second (cfs) at the San Joaquin River that gradually decreases to 2,500 cfs at the Kern River; although, as I will later explain, a significant amount of this capacity has been lost. The width of the Canal ranges from 128 feet where it starts to 64 feet at its lower end.

The 32-mile Madera Canal carries water north from Millerton Lake on the San Joaquin River to the Chowchilla River. Completed in 1945, the Madera Canal has an initial capacity of 1,275 cfs that decreases to
750 cfs at its terminus.

The Friant Division was designed and is operated as a conjunctive use project, meaning it conveys surface water in wetter years for direct beneficial uses, such as irrigation and municipal supplies, to help recharge groundwater basins for use in drier years. Relative to the amount of water runoff into Millerton Reservoir, which is about 1.8 million acre-feet per year, the operational surface storage capacity of Friant Dam is minimal – only about 385,000 acre-feet.

The ability to move significant water through the Friant Division’s canals in wetter years to store in groundwater recharge basins is critically important for the project to work as intended. The system delivers two classes of water: Class 1, which is the first 800,000 acre-feet of “firm” supply; and Class 2, which is up to an additional 1.4 million acre-feet of supply available only during wetter years. Historically, the Friant Division has received a combination of Class 1 and Class 2 water totaling about 1.2 million acre-feet annually. A majority of the Class 2 water is directed to groundwater basins which are the primary source of drinking water for nearly all cities, towns, and rural communities on the Valley’s East side.

San Joaquin Valley Water Imbalance and Groundwater Sustainability

The San Joaquin Valley is home to about 5 million acres of productive, irrigated farmland and includes four of the top five agriculture-producing counties in the United States. More than half of all produce and nuts grown in the United States come from the Valley. The Valley’s economy is largely centered around agriculture.

For the past one hundred years, the San Joaquin Valley has relied on more groundwater than is replenished every year, and as a result has seen massive declines in its groundwater reserves. It is for this reason that projects such as the Friant Division were constructed in the mid-1900s to help replenish these groundwater reserves. However, all of the projects envisioned to offset this deficit were not completed, and over the past 30 years, increasingly stringent environmental regulations have redirected water away from the Valley in an attempt to aid struggling fish populations dependent on the Sacramento-San Joaquin River Delta (Delta). This has resulted in a continued persistent overdraft condition in the Valley, and as water exports through the Delta declined, even more San Joaquin Valley water users have increased reliance on groundwater supplies to maintain economic viability for their communities. Until recently, California has not regulated groundwater uses, meaning there were no regulations in place to control the overuse of groundwater and the impacts that causes. This changed in 2014, when the State of California imposed new groundwater regulations – the Sustainable Groundwater Management Act (SGMA) – that will severely restrict future use of this supply, including during droughts.

This week, California is hitting a critical milestone for SGMA implementation. January 31, 2020 is the deadline for all local groundwater sustainability agencies in the state’s most overdrafted basins, the majority of which are in the Central Valley, to submit their groundwater sustainability plans to the state for review. By 2040, the entire Valley is required to achieve groundwater sustainability, meaning that less groundwater is extracted from aquifers than is replaced, either naturally or through groundwater recharge projects that are supplied by facilities like the Friant-Kern Canal.

Collectively, we estimate that these factors will lead to water demand by the Valley’s residents and businesses outstripping available supply by about 2.5 million acre-feet per year.
Effects of Water Imbalance on Communities

In a region of water scarcity, the most direct way to achieve a water balance is to reduce water demand. This means that, left unaddressed, the water imbalance is likely to lead to large-scale fallowing of the most productive agricultural land in the world, cause severe economic hardships, and impact drinking water supplies for some of California’s most vulnerable and disadvantaged communities.

The resulting human impacts looming on the horizon are nothing short of catastrophic. A forthcoming study by Dr. David Sunding, Thomas J. Graff Professor in the College of Natural Resources at the University of California, Berkeley, estimates that the Valley’s water imbalance will result in retirement of up to 1 million acres of currently productive farmland. As a result, the state is poised lose 85,000 jobs annually, with 45,000 of those losses occurring to Valley farmworkers, farm managers, and people in the agricultural service sector. This is equivalent to an increase in the regional unemployment rate of about 4% per year. The associated annual wage loss is estimated at $2.1 billion. Annual farm revenue losses are estimated at $7.2 billion. Dr. Sunding estimates these impacts will be disproportionately large in the Valley’s lowest-income communities. This bears repeating: these impacts will occur every single year in perpetuity to Californians in an area of our state that cannot afford it.

Effects of Water Imbalance on Infrastructure

Unlike the human effects, the physical effects of the Valley water imbalance aren’t just projections for the future; they’ve already permanently degraded both our infrastructure and our ability to achieve long-term sustainability.

From 2012-2015, the Valley’s water imbalance problem was compounded as California weathered its worst drought on record, and many farms and communities faced severe cutbacks to their available surface water supplies. This left the San Joaquin Valley in a state of extreme groundwater overdraft, which occurs when groundwater is extracted faster than it is replenished over the long term.

The effect of overdraft in the Valley during the 2010s has been to cause the land elevations to drop dramatically – in some areas by a foot or more per year. This phenomenon, called subsidence, has reduced conveyance capacity of three major canals serving the Valley: the Friant-Kern and Delta-Mendota canals, which are both part of the CVP, and the California Aqueduct, which is part of the State Water Project. The reduced deliveries mean that less surface water is delivered to the farms and communities who rely on it.

In the case of the Friant-Kern Canal, a portion of the facility sunk more than three feet from 2013 through 2017 due to land subsidence, and we’ve now lost 60% of our ability to deliver water past this point. The canal is a gravity-fed facility and does not rely on pumps to move water, which means small changes in elevation can have major impacts for water delivery. Subsidence has caused parts of the canal to sink in relationship to other parts. As a result, the canal must be operated at a lower flow-stage to ensure that water doesn’t overflow its banks or wash out several bridge crossings.

In 2017, this subsidence prevented 300,000 acre-feet of water from being delivered through the southernmost third of the canal. Most, if not all, of this would have been used to support groundwater recharge – a desperately needed and critical function the canal was designed to achieve. It’s also an equivalent amount of water to what could support 50,000-100,000 acres of crop production. Finally, by

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reducing the canal’s ability to deliver water to aquifers in the south Valley, the conveyance constriction will also worsen existing water supply and water quality problems in dozens of rural and disadvantaged communities who rely entirely on groundwater. While these losses are recoverable if the canal is repaired, time is of the essence.

The overdraft situation in the Valley is entering a crisis stage and action must be taken now to ensure greater access to surface water through the Friant-Kern Canal and other conveyance facilities. For more than three years, we have worked on the planning, design, and permitting for a project to restore the conveyance capacity of the most-severely affected portion of the canal. Current engineering cost estimates are in the range of $350 million simply to address only this problem; addressing other, less-critical conveyance restrictions in the canal could cost another $200 million. But since the canal plays an important role in supplying recharge water and thus mitigating the severe human effects from SGMA and other regulations, not repairing the canal isn’t an option. And, compared to the human and economic costs estimated by Dr. Sunding, this seems like a relatively reasonable investment to make in the Valley and its people.

**Funding Challenges for the Friant-Kern Canal and the Role of H.R. 5316**

At nearly 70 years old, the Friant-Kern Canal is among Reclamation’s oldest facilities in California. Since taking over the responsibility for the operation and maintenance of the canal in 1986, Friant Water Authority has taken an aggressively proactive approach to maintenance and repairs and we are very proud of our track record. Despite those efforts, however, the water-carrying capacity of the canal has gradually diminished over time, partly because of natural “settling” but mostly because of land subsidence resulting from over-pumping of the groundwater in the Valley, as described above.

Under our “transferred work” contract with Reclamation, the Federal government retains ownership of the canal and its appurtenant works, and Reclamation administers the contracts governing the purchase and delivery of CVP water in the Friant Division. The Authority is responsible for all aspects of the Canal’s operation, maintenance and replacement (OM&R) as well as all costs related to those activities. The Friant Division contractors have paid these costs, and also have paid off the initial federal construction loan for the full cost of the canal.

The Friant-Kern Canal is a unique facility: it is locally-funded, federally-owned, and used to support state policies and requirements for clean drinking water and groundwater sustainability. But the shared responsibility and interest introduces difficulties for funding and financing repairs.

Friant Water Authority supports H.R. 5316, the “Move Water Now Act,” which, if passed and funded, would represent a significant step in helping to prevent some of the severe economic hardships and human suffering that could result from the Valley’s water imbalance. It would dedicate $200 million in cost-shared federal funding toward repairing water conveyance facilities at Reclamation’s transferred works that have lost more than 50% of their conveyance capacity and supply water for groundwater recharge purposes, such as the Friant-Kern Canal does. It also requires a 50% non-federal cost-share component, and we are actively working with local agencies in the Valley and the State of California to develop a source for the non-federal cost-share for the project, should federal funding authorized by H.R. 5316 become available.

Additionally, H.R. 5316 authorizes the federal government to make important investments toward implementing the San Joaquin River Restoration Program (SJRRP) and achieving the goals of the stipulation of settlement in *NRDC vs. Rodgers*. The San Joaquin River Restoration Settlement Act (PL 111-11) recognized the link between achieving the settlement’s Water Management Goal and restoring the
capacity of the Friant-Kern Canal, and authorized the Secretary to implement such a project if it’s found to be feasible.

The effort to support the Valley’s communities and ecosystems must not end with H.R. 5316. We urge the Members of this Subcommittee and your colleagues to support an appropriation of funds to ensure the support you’ve shown in this bill becomes a reality.

Even with H.R. 5316 and the infrastructure improvements and programs it supports, more must be done. The Friant-Kern Canal represents only a small fraction of the overall solution to this larger crisis in the Valley. But, in order to reach a more lasting, comprehensive solution for the water woes that are plaguing the San Joaquin Valley, it will require bigger, bolder, and broader thinking.

A Strategic Path Forward

Since early 2019, a large and diverse group of stakeholders, made up water districts, agricultural groups, elected officials, representatives of disadvantaged communities, and academia, have been working together to establish the size of the Valleys water supply deficit, and identify a suite of solutions to close the gap. The Water Blueprint for the San Joaquin Valley, as the group and effort is known, presents a comprehensive and strategic plan that, if implemented among partners, would result in a long-term water balance in the San Joaquin Valley in a way that minimizes retirement of agricultural lands and allows the region’s communities and economy to thrive in the future.

Foundational to the Blueprint is the development of a set of projects and associated operations that would bring the San Joaquin Valley into balance while avoiding as much land retirement as possible. This plan includes a comprehensive look at local, regional, and statewide activities and investments that, collectively, aim to resolve 2.5 million acre-feet per year or more of regional overdraft. Given the magnitude of the problem being addressed, this plan looks ambitiously beyond the range of projects that have previously been contemplated for the region.

Without an effort of this nature, the San Joaquin Valley will unfortunately never really be able to balance its water usage without drastically impacting the economy, jobs, and water quality for communities that depend on both surface water and groundwater for their residents.

Attached to this testimony are informational brochures on the Friant-Kern Canal’s subsidence and the Water Blueprint for the San Joaquin Valley for the hearing record.

Thank you again for this Subcommittee’s support for H.R. 5316 and for the opportunity to provide our perspective and thoughts on this critical topic.

Jason Phillips, Chief Executive Officer
Friant Water Authority
MEMORANDUM FOR THE SECRETARY OF THE INTERIOR
THE SECRETARY OF COMMERCE
THE CHAIR OF THE COUNCIL ON ENVIRONMENTAL QUALITY

SUBJECT: Developing and Delivering More Water Supplies in California

By the authority vested in me as President by the Constitution and the laws of the United States of America, I hereby direct the following:

Section 1. Policy. For decades, many of our Federal western water infrastructure investments have been undermined by fragmented and outdated regulatory actions. In a memorandum dated October 19, 2018 (Promoting the Reliable Supply and Delivery of Water in the West), I directed the Secretary of the Interior and the Secretary of Commerce to work together, to the extent practicable and consistent with applicable law, to complete the review of the long-term coordinated operations of the Central Valley Project (CVP) and the California State Water Project (SWP), and subsequently to issue an updated Plan of Operations (Plan) and Record of Decision (ROD). It is the policy of the United States to modernize our Federal western water infrastructure to deliver water and power in an efficient, cost-effective way.
Sec. 2. Enhancing Water Supplies While Appropriately Protecting Species and Habitats. In response to my memorandum, a Plan and ROD were issued today. The new framework set forth in these documents is expected to deliver more water to communities while using science and investments appropriately to protect affected species and their habitats. This is a good first step, but I believe more can be done. Therefore, I direct the Secretary of the Interior and the Secretary of Commerce to build upon the success of the Plan and ROD by supplementing the resulting operations, consistent with applicable law, to make deliveries of water more reliable and bountiful. To help develop and deliver water supplies in the Central Valley of California, I direct those Secretaries to coordinate efforts to:

(a) implement the relevant authorities of subtitle J of the Water Infrastructure Improvements for the Nation Act (Public Law 114-322), which include provisions focused on (1) developing water storage, (2) capturing more water during storm events, and (3) giving agricultural and municipal water users more regulatory certainty;

(b) fully implement, with respect to future agency actions, recent Administration improvements to management of programs established pursuant to the Endangered Species Act of 1973 (Public Law 93-205); and

(c) provide quarterly updates to the Chair of the Council on Environmental Quality and, at the request of other components of the Executive Office of the President, to each such component, regarding progress in carrying out sections 2(a) and (b) of this memorandum.

Sec. 3. General Provisions (a) Nothing in this memorandum shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or
(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This memorandum shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This memorandum is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

(d) The Secretary of the Interior is hereby authorized and directed to publish this memorandum in the Federal Register.

DONALD J. TRUMP
February 7, 2020

Ms. Nancy Vogel  
Director of the Governor’s Water Portfolio Program  
California Natural Resources Agency  
1416 Ninth Street, Suite 1311  
Sacramento, CA 95814

Subject: Comments on the January 2020 Draft Water Resilience Portfolio

Dear Ms. Vogel:

On behalf of Friant Water Authority (FWA), thank you for the opportunity to comments regarding the California Natural Resources Agency’s, the California Environmental Protection Agency’s and California Department of Food and Agriculture’s draft Water Resilience Portfolio (Draft Portfolio).

FWA is a public agency that operates and maintains the Friant-Kern Canal, which supplies San Joaquin River water stored at Millerton Lake to more than 30 irrigation districts and cities, and to 15,000 family farms on more than one million acres of irrigable farm land on the eastside of the southern San Joaquin Valley. The 152-mile-long Canal is a major feature of the Central Valley Project (CVP).

The Draft Portfolio elegantly catalogues a comprehensive suite of actions that State of California could pursue to achieve climate resilience related to managing water and related resources. It is the result of more than eight months of work and hundreds of hours of stakeholder and public engagement by Newsom Administration officials and their staff. FWA directors and staff were also involved in multiple separate efforts to provide recommendations for the Draft Portfolio. The resulting product clearly emphasizes the Administration’s commitment to water resilience, for which we and others in the California water community are thankful.

In particularly, the Draft Portfolio includes recommendations that acknowledge some of the severe and urgent challenges the San Joaquin Valley, specifically, faces as a result of regulatory, climate-driven, and other pressures in the future.
Impacts from Groundwater Regulation and Other Reduced Supplies in the Valley. The Draft Portfolio includes nine specific recommendations related to the implementation and effects of California’s Sustainable Groundwater Management Act of 2014 (SGMA), which could trigger a social, economic, and cultural transformation in the Valley in the coming years.

The San Joaquin Valley is home to about 5 million acres of productive, irrigated farmland and includes four of the top five agriculture-producing counties in the United States. More than half of all produce and nuts grown in the United States come from the Valley. The Valley’s economy is largely centered around agriculture.

For the past one hundred years, the San Joaquin Valley has relied on more groundwater than is replenished every year, and as a result has seen massive declines in its groundwater reserves. It is for this reason that projects such as the Friant Division were constructed in the mid-1900s to help replenish these groundwater reserves. However, all of the projects envisioned to offset this deficit were not completed, and over the past 30 years, increasingly stringent environmental regulations have redirected water away from the Valley in an attempt to aid struggling fish populations dependent on the Sacramento-San Joaquin River Delta (Delta). This has resulted in a continued persistent overdraft condition in the Valley, and as water exports through the Delta declined, even more San Joaquin Valley water users have increased reliance on groundwater supplies to maintain economic viability for their communities. Until recently, California has not regulated groundwater uses, meaning there were no regulations in place to control the overuse of groundwater and the impacts that causes. This changed in 2014, when the State of California imposed new groundwater regulations – SGMA – that will severely restrict future use of this supply, including during droughts.

Last week, California reached a critical milestone for SGMA implementation. January 31, 2020, was the deadline for all local groundwater sustainability agencies in the state’s most overdrafted basins, the majority of which are in the Sacramento and San Joaquin valleys, to submit their groundwater sustainability plans to the state for review. By 2040, the entire Valley is required to achieve groundwater sustainability, meaning that less groundwater is extracted from aquifers than is replaced, either naturally or through groundwater recharge projects that are supplied by facilities like the Friant-Kern Canal.

Collectively, we estimate that these factors will lead to water demand by the Valley’s residents and businesses outstripping available supply by about 2.5 million acre-feet per year. In a region of water scarcity, the most direct way to achieve a water balance is to reduce water demand. This means that, left unaddressed, the water imbalance is likely to lead to large-scale fallowing of the most productive agricultural land in the world, cause severe economic hardships, and impact drinking water supplies for some of California’s most vulnerable and disadvantaged communities.

The resulting human impacts looming on the horizon are nothing short of catastrophic. A forthcoming study by Dr. David Sunding, Thomas J. Graff Professor in the College of Natural Resources at the University of California, Berkeley, estimates that the Valley’s water imbalance will result in retirement of up to 1 million acres of currently productive farmland. As a result, the state
is poised lose 85,000 jobs annually, with 45,000 of those losses occurring to Valley farmworkers, farm managers, and people in the agricultural service sector. This is equivalent to an increase in the regional unemployment rate of about 4% per year. The associated annual wage loss is estimated at $2.1 billion. Annual farm revenue losses are estimated at $7.2 billion. Dr. Sunding estimates these impacts will be disproportionately large in the Valley’s lowest-income communities. This bears repeating: these impacts will occur every single year in perpetuity to Californians in an area of our state that cannot afford it. Some of these impacts can be reduced, but it will likely take actions even more aggressive than those in the Draft Portfolio.

**Importance of Regional Conveyance.** FWA appreciates the Draft Portfolio’s acknowledgement of the role regional conveyance facilities play in not only sustaining communities but also assisting in long-term groundwater sustainability.

Since 1986, Friant Water Authority has operated and maintained the Friant-Kern Canal under contract with the Federal government, the full cost of which has been paid by the Friant Division contractors. The Friant Division of the CVP was designed and is operated as a conjunctive use project, meaning it conveys surface water in wetter years for direct beneficial uses, such as irrigation and municipal supplies, to help recharge groundwater basins for use in drier years.

For nearly 70 years, the Friant Division successfully kept groundwater tables stable on the Valley’s Eastside. This provided a sustainable source of water for farms and for thousands of Californians in dozens of small, rural, or disadvantaged communities who rely entirely on groundwater for their household water supplies. But unsustainable groundwater pumping in the valley has reduced the Friant-Kern Canal’s ability to deliver water to all who need it. Land elevation subsidence means that not all of the supplies stored at Friant Dam can be conveyed through the canal. In some areas, the canal can carry only 40 percent of what it’s designed to deliver, and in 2017 this issue resulted in a loss of more than 300,000 acre-feet that were not delivered to regions of the south San Joaquin Valley.

**Concerns and Additional Needs for the Portfolio**
In addition to those above and many other thoughtful recommendations in the Draft Portfolio, FWA has identified several goals and proposed actions that represent concerns for us or which we feel require additional detail and refinement to implement successfully, as described in the sections that follow.

1. **Sustainable Groundwater Use (Goal 3):** “Help regions secure groundwater supplies by supporting the transition to sustainable use.”

FWA appreciates the substantial number of recommendations under this goal that aim to help communities comply with the regulations enacted under SGMA, including proposed actions 3.2, 3.3, 3.4, and 3.5 ("Create an interagency team...to address the economic, environmental, and social effects...", “Provide targeted support to local planning efforts...”, “Explore ways to further streamline groundwater recharge and banking efforts...”, and “Make funding available for groundwater recharge projects with multiple benefits.”).
These actions recognize forthcoming transformational changes expected in the San Joaquin Valley under SGMA and existing water regulations. However, they lack the urgency and firm financial and policy commitments that would indicate the Administration is ready to help the Valley confront the monumental challenges ahead.

The Draft Portfolio must directly acknowledge how the significant impacts of SGMA will worsen for areas such as the San Joaquin Valley without developing surface supplies for recharge, as well as the fact that the only substantive supply of surplus water for recharge for the Valley is from the Delta. Any other recommendations in the Draft Portfolio related to minimizing use of Delta supplies are incompatible with easing the transition to SGMA compliance for rural Valley communities.

Given the Draft Portfolio’s emphasis on regional planning and solutions, it should also reference the Water Blueprint for the San Joaquin Valley, a regional coalition that is focused on developing plans for closing the gap between the Valley’s water needs and its water supplies, including through development of surface supplies for recharge and implementation of several conveyance and groundwater storage projects that can take advantage of flood water when it is available. The State of California needs to work with the Blueprint group to finalize and help implement a plan to balance water supplies Valleywide, including a specific amount of land retirement that will be required and commitments for funding fallowing programs either through the budget or a proposed 2020 climate resilience bond.

2. **Stream Flows (Goal 9):** “Help regions better protect fish and wildlife by quantifying the timing, quality, and volume of flows that they need.”

While multiple sections and recommendations in the Draft Portfolio acknowledge comprehensive and multi-benefit solutions to restore and protect species and their habitat, this goal’s sole focus on flow is concerning and at odds with the Draft Portfolio’s overall endorsement of efforts such as the voluntary agreements that also include the non-flow measures that support essential ecosystem needs critical for fish and wildlife. The State of California needs to immediately reconsider all regulatory recommendations that would redirect water supplies away from current beneficial uses to the Ocean without first identifying specifically where that water will come from and the impacts of the action, particularly for rural and vulnerable communities in the Valley and elsewhere.

3. **Demonstration of Reduced Reliance on the Delta (Proposed Action 18.3):** “Add a requirement to the water management plans which urban and agricultural suppliers submit to the state every five years that mandates districts that receive water from Delta-based projects to demonstrate how they are reducing reliance on those supplies.”

Reducing reliance on the Delta is a requirement of the Sacramento-San Joaquin Delta Reform Act of 2009. California Water Code Section 85021 describes this requirement in terms of state and regional investments in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water
supply efforts. It does not mention the actions of individual water districts; such a change may require additional direction by the Legislature and also seems incongruous with the Draft Portfolio's emphasis on regional approaches to achieving resilience. Finally, as discussed above, the largest source of supplies for recharge projects that can partially mitigate the effects of SGMA in the San Joaquin Valley is Delta exports; strengthening existing requirements to reduce reliance on the Delta will only further harm Valley communities by making SGMA compliance even more challenging.

4. **Regional Conveyance (Goal 19):** “Modernize inter-regional conveyance to help regions capture, store, and move water.”

As noted above, FWA strongly supports the inclusion of conveyance-related proposed actions in the Draft Portfolio. Proposed actions 19.2, 19.3 and 19.4 (“conduct a feasibility analysis,” “continue studies of subsidence effects,” and “Direct the Water Commission to assess a state role in financing regional conveyance projects,” respectively) do not go far enough in terms of making a State commitment to investing in conveyance facilities of statewide importance, including the Friant-Kern Canal, California Aqueduct, and Delta-Mendota Canal. These facilities, all of which have been compromised as a result of subsidence caused by regional groundwater over-pumping, are critical for conveying surface water in areas of the State that face significant challenges for implementing SGMA and achieving the state’s clean drinking water goals. The impact of SGMA in the San Joaquin Valley, for example, could result in up to one million acres of land being taken out of agricultural production and tens of thousands of jobs being lost in some of our State’s most vulnerable disadvantaged communities, underscoring the need to restore lost capacity for delivering surface water in these areas.

Regardless of ownership, these are locally funded facilities that form the backbone of California’s water infrastructure network, taxpayer investments in which previous Governors and the Legislature have acknowledged as legitimate fiscal and policy objectives. For example, in 2009, over two-thirds of the Legislature voted to include $350 million in SB 7X-2, the first version of the water bond that ultimately became Proposition 1, for local and regional conveyance projects (California Water Code Section 79723). While that provision was not included in 2014 when the bond was downsized before the voters approved it as Proposition 1, the provision shows that the State already acknowledged that State funding assistance was appropriate to address these conveyance needs. Additionally, Senator Melissa Hurtado’s SB 599 (2019), which would have authorized a State investment in restoring lost capacity on the Friant-Kern Canal, passed out of all policy committees either unopposed or with a majority of members supporting it. FWA recommends that Goal 19 be revised to strengthen its commitment to action and funding for these critical facilities, either via budget appropriations or as part of the proposed 2020 climate resilience bond.

5. **Water Rights (Proposed Action 27.2):** “Support California Water Plan planning-area scale analysis of future flood risk, water demand, supply reliability, and water for the environment for a range of climate and growth scenarios. Integrate future water supply and demand
analyses into the water right priority system and incorporate climate change forecasts into permitting processes.”

Examining a range of future water supply and demand conditions is an integral part of robust scenario planning to inform climate adaption actions. However, we believe there may be serious technical, legal, or policy challenges with integrating such analyses in the water rights priority system. The second sentence of this recommendation should be revised to “...Develop future water supply and demand forecasts for this range of scenarios and assess the feasibility and implications of incorporating forecasts into permitting processes.”

6. Improved Runoff Estimates (Proposed Action 27.4): “Support utilization of emerging technologies and partnerships to better estimate severity of future flood and drought conditions, including seasonal snowpack and runoff that generate most of California’s water supply.”

Since 2013 the State of California has partnered with local and regional water agencies to help fund aerial snow surveys (the Airborne Snow Observatory) a handful of central Sierra Nevada watersheds representing one-third of our state’s major snow-covered areas. The data and information produced as a result of these surveys has been relied upon heavily by DWR’s flood forecasting group to provide runoff estimates that are up to 98 percent accurate almost two weeks before a flood event occurs. The Sierra Nevada Conservancy is also using high-quality aerial imagery from the surveys to develop forest management plans with the U.S. Forest Service. FWA recommends a stronger commitment to long-term support, including funding, for this technology as an augmentation of California’s snow survey program. Implementation of this proposed action would provide benefits across multiple areas in the Draft Portfolio, including for assessing the health and resilience of forests in upper watersheds.

Thank you, again, for the tremendous work which you and other Administration officials and staff undertook through 2019 to produce this plan. We look forward to working with you on its implementation. Please do not hesitate to contact me at 559-562-6305 or jphillips@friantwater.org.

Sincerely,

Jason Phillips
Chief Executive Officer
Friant Water Authority
February 14, 2020

Mr. Wilson Orvis
Bureau of Reclamation
Denver, Colorado
Via email at worivs@usbr.gov

Ms. Heather Casillas
Bureau of Reclamation
Sacramento, California
Via email at hcasillas@usbr.gov

Subject: CVPIA True-Up

Dear Mr. Orvis and Ms. Casillas:

Thank you for the opportunity to comment on the CVPIA True-Up and Business Practice Guidelines released for review on November 21, 2019. We also appreciate your willingness to meet with us and our growers over the past several months. These are complex issues and your efforts are extremely appreciated and have not gone unnoticed.

As we have discussed, below are Friant Water Authority’s (FWA) written comments and questions for your consideration, which articulate fundamental questions regarding the True-Up process and CVPIA Business Process Guidelines (BPGs). It is our hope that while Reclamation is reviewing and evaluating our comments and questions, that the dialogue we have begun over the past several months continues. We further ask that before any final decisions are made, there is an opportunity to discuss the Bureau of Reclamation’s (Reclamation) responses to our questions below. We have broken our comments into several major categories with a discussion and specific questions.

1. Interpretation of 3406(b)(1)¹

The proposal lacks clarity on what is being charged under paragraph 1 of section 3406(b)(1) – the “fish doubling goal.” It is especially difficult to understand what activities are for reimbursable project-related mitigation and restoration

¹See also “Big Picture Issues” under point 4 of this letter.
required or authorized under the Central Valley Project Improvement Act (CVPIA), versus more
general ecosystem health activities required or authorized under various other federal authorities
(e.g., CALFED, federal Endangered Species Act (ESA), Clean Water Act (CWA), National Environmental
Policy Act (NEPA), and Water Infrastructure Investments for the Nation (WIIN) Act). For example,
$22.7 million in funds from the Central Valley Project Fund (CVPRF, or Restoration Fund) is identified
as for various fish restoration and monitoring activities in the Draft Fiscal Year (FY) 2019 CVPIA
Annual Workplan without a clear reference to CVPIA authorities. Additionally, $3.5 million is slated
for 14 full-time equivalent (FTE) U.S. Fish and Wildlife Service biologists, again, without clear
reference to CVPIA authorities. It appears some of these activities and charges could be justified for
compliance under multiple federal laws absent the CVPIA – some of which may have different, or
even no, reimbursable components.

Our ability to understand how these actions are being allocated is hampered by missing documents
and reports from Reclamation’s CVPIA Webpage²: Financial Reports (none since FY2015 (dated
September 2016)); Draft Annual Work Plans (none since FY2015 (undated)); “Accomplishment”
Reports (none since FY2014 (dated August 2016)). Although some draft plans and reports can be
found via various web search engines, it is not clear whether all data can be found. Lack of such
documents leads to many questions related to program charges and changes, such as the status of
the Anadromous Fish Restoration Program (AFRP) Restoration Plan and current activities listed under
the Science Integration Team (SIT) and Core Team priorities noted in the FY2019 Draft Work Plan.³

Prior CVPIA Work Plans list many specific CVPIA provisions contributing to the fish doubling goal. For
example, the Draft FY2014 Work Plan notes:

*The following provisions contribute to accomplishing the goal of the AFRP (b)(1) program:
(b)(1)(B), (b)(2), (b)(3), (b)(5), (b)(9), (b)(10), (b)(12), (b)(15), (b)(16), (b)(19), (b)(21), and
3406 (g).*

The corresponding FY2014 CVPIA Annual Report⁴ identifies $13.45 million attributed to non-specific
(b)(1) activities ($7.8 million for AFRP, $1.5 million for the habitat restoration program, and $4.2
million for Bay-Delta Activities), and then lists additional funding by other relevant and specific CVPIA
3406(b) provisions contributing to the (b)(1) fish doubling goal (e.g., 3406(b)(2), 3406(b)(3), etc.).⁵

The current FY2019 draft work plan does not include the above level of specificity as provided in
earlier reports. This makes it difficult to understand how program level funding ties back to CVPIA

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²Available at [https://www.usbr.gov/mp/cvpia/docs_reports/index.html](https://www.usbr.gov/mp/cvpia/docs_reports/index.html).
³There appear to be no CVPIA final annual report or accomplishment reports for FY2016, FY2017,
FY2018, FY2019, which in prior years could be used to track work outlined in public draft Work Plans.
There also appears to be no Draft Work Plan available for FY2020. However, the U.S. Fish and Wildlife
Service has published several CVPIA fisheries investigations annual progress reports since 2015.
⁵The Central Valley Project Improvement Act Program Activity Review Report (CPAR), dated August 25,
2009, also notes “actions and efforts to be undertaken specifically for 3406(b)(1)” for the fish doubling
goal (p. 9). It further notes that most on-going fish and wildlife activities are funded through Resource
Management Appropriations, part of the Department of the Interior, Environment, and Related
Appropriations Acts.
provisions requiring reimbursement and how costs are included in CVPIA Expenditures, Credits, and Offsets (ECO) reports. For example, roughly $82 million was attributed to the general AFRP (b)(1) line item as of FY2011 (over 19 years of program funding), but an additional $68.2 million has been added to that line item as of FY2017, just six years later. Without “annual” (or “accomplishment”) reports it is difficult to understand how these cost allocations and activities compare. It also raises the question as to whether, and if so how, the AFRP cost allocation treatment for individual activities not listed has changed since the 2011 ECO Report.6

These issues raise a variety of other questions, such as those outlined below. These questions stem from a desire to protect Central Valley Project (CVP) water and power users’ long-term financial interests and a need for more certainty and clarity as to what costs will be (and have been) passed on to water and power users under the (b)(1) fish doubling goal authority. Specifically, there is concern that increasingly more funding is being allocated to general (b)(1) AFRP and Habitat Restoration Program (HRP) activities and deemed to require reimbursement than previously, and which may be more fairly allocated to general (regional) ecosystem health, fisheries enhancement, or other non-reimbursable purposes. These concerns also stem from the knowledge that many factors beyond CVP construction, operations, and management have contributed to fisheries decline over the past several decades.

**Related Questions for Reclamation:**

A. Has Reclamation changed since the last AFRP Restoration Plan and/or the 1993 – FY2011 ECO Report the definitions of activities included in the general (non-specified) (b)(1) accounting category – which appears generally to be broken into AFRP, “other CVP Impacts,” and sometimes HRP? If so, how do the definitions differ?

B. How does Reclamation distinguish between activities authorized under paragraph 1 of section 3406(b)(1), the fish doubling goal, and activities necessitated by other federal laws (e.g. CALFED, state water quality requirements under CWA, ESA, etc.)?

C. How do the recommendations from the SIT and the Core Team referenced in the Draft FY2019 CVPIA Work Plan correspond to earlier activities identified in the Final Restoration Plan for the Anadromous Fish Restoration Program (AFRP Restoration Plan)? Is there a crosswalk of AFRP and these activities and how they relate to specific CVPIA authorities and cost-shares as identified in earlier work plans? (This is important as earlier specified activities tied to CVPIA provisions have specific and different reimbursable components as noted in ECO reports and elsewhere.)

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6The overall allocation to water and power users was reduced from 100% to 85.6%; however, it is not clear if all funding within this category should be treated as reimbursable as shown.
D. Do recommended SIT and Core Team priority activities include more general Bay-Delta ecosystem health and other activities not identified in the most recent AFRP Restoration Plan?\(^7\)

E. Where can one find the data for all (b)(1) AFRP activities and corresponding charges or expenditures?

F. Given that there are potentially multiple authorities that could be used for many of these transactions, what is Reclamation’s legal and policy justification for determining which authority to use in allocating costs for reimbursement when there are no records to support any such determination?

2. Treatment of Water and Power Costs/Reimbursements (“Process for Identifying and Allocation of Costs and Recovery of Outstanding Obligations” (p. 17, proposed BPG, point 7).)

The proposed BPGs note different methods for treating outstanding credits for CVP water and power contractors. Point 6 notes that any credit will be applied toward future CVPIA obligations attributable to the water pool. Point 7 notes the same, adding that power credits may also be applied towards power customers’ CVP construction repayment obligations.

There is no explanation why water and power pool credits might be treated differently with respect to CVP repayment. If power credits may be applied to repayment, it seems water credits should also be afforded that option.

**Related Questions for Reclamation:**

A. What is the rationale for treating water and power credits toward repayment obligations differently?

B. Does Reclamation intend to seek legislation to change the CVP power allocation?

3. Fish Screens Costs Allocated to “All Project Purposes”??

There are inconsistencies in how expenditures for 3406(b)(21) [original act] have been, and are proposed to be, allocated. A listing for (b)(21) activities in the CVPIA ECO report for FY1993-FY2017 (2017 ECO Report) of $140 million (Anadromous Fish Screen Program) shows 85.6% being allocated to water and power users. This is also reflected in the proposed BPGs allocation of (b)(21) [WIIN Act (b)(19)] costs being allocated to “all project purposes.” The FY1993-FY2011 ECO report in contrast shows Anadromous Fish Screen Program (b)(21) expenditures allocated as 50% to water and power contractors and 50% to “Other.”

\(^7\)The most recent AFRP Restoration Plan found online, which is referred to in multiple CVPIA Fiscal Year Work Plans, appears to be 2001; however, it is not clear if the AFRP Restoration Plan has been updated since that time. It is also not clear how recent recommendations of the SIT and Project Work Team, and Core Team Priorities, relate to the AFRP Restoration Plan and whether if it has officially been superseded by such work.
These cost allocations also do not appear consistent with the statutory language in section 3406(b)(21) of CVPIA. The plain language of the statute implies costs should be split between the federal government (the Secretary of the Interior) and the State of California or other non-federal parties: the “Secretary’s share of costs...shall not exceed 50 percent of the total cost of any such activity.”8 The “Secretary’s costs” implies that this is not a reimbursable cost. Other fish screen diversion costs specifically noted prior to this subsection (e.g., 3406(b)(4), 3406(b)(5), and 3406(b)(20)), and which are specific to CVP-related project facilities.9 These costs range from 37.5% reimbursable as main project features/37.5% non-reimbursable/25% state share (Tracy Pumping Plant screens and Contra Costa Canal Pumping Plant No. 1), to 75% non-reimbursable federal share/25% state share (Glenn Colusa Irrigation District’s Hamilton City Pumping Plant).

It appears from the language in 3406(b)(21) that Congress made a distinction in the treatment of costs between CVP project-related fish screens and helping the State of California with efforts to avoid juvenile anadromous fish losses elsewhere in the Sacramento, San Joaquin, and Delta watersheds. As noted above, certain CVP-related fish screens were treated as main project features with corresponding reimbursement noted in the authorizing subsections, while no such language is included in (b)(21). Instead, the statutory language of 3406(b)(21) indicates that fish screens identified by the State of California – presumably non-CVP related facilities – should not be reimbursable by CVP water and power contractors, but rather split between the federal and state governments with no more than 50% shared by the federal government (i.e., Secretary). The specificity in surrounding sections leads one to conclude that if Congress had meant for the Secretary’s portion in (b)(21) to be reimbursable, it would have said so.

Related Questions for Reclamation:

A. Do expenditure totals under the (b)(21) Anadromous Fish Screen Program include both CVP project-related and non-CVP related fish screens? If so, what cost-shares or reimbursable formulas are applied to each?

B. What specific projects did the $140 million referenced in the 2017 ECO Report fund?

C. GAO reported in June 2015 that as of FY2014, approximately $83.7 million had been expended from the CVPRF (Restoration Fund) for various fish screen projects and programs identified in CVPIA sections 3406(b)(4), 3406(b)(5), 3406(b)(20), and 3406(b)(21). Most of this funding ($75.5, or 90%) supported the “Anadromous Fish Screen Program” authorized in section 3406(b)(21).

8P.L. 102-575, Title 34; Section 3406(b)(21).
9As of June, 2015, GAO reported expenditures from the CVPRF of $75.5 million for the 3406(b)(21) “Anadromous Fish Screen Program,” $3.2 million for 3406(b)(4) Tracy Pumping Plant; $0.009 million for 3406(b)(5) Contra Costa Canal Pump; and zero expenditures for 3406(b)(20) Glenn-Colusa Irrigation District’s Hamilton City Pump Plant. (See: U.S. Government Accountability Office, June 4, 2015 letter to the Honorable Mike Simpson, Chairman, Subcommittee on Energy and Water Development and Related Agencies Committee on Appropriations, U.S. House of Representatives, “Bureau of Reclamation: Financial Information for Three California Water Programs,” p. 15.)
i. Was this funding, and any subsequent funding under the 3406(b)(21) authority, charged to water and power users at a 50% cost share as indicated in the 2011 ECO report, or at the 85.6 percent allocation shown in the 2017 ECO Report? How has Reclamation dealt with such differences in the final cost allocation and CVPIA True-up process?

ii. Was this CVPRF funding identified by GAO used to support both CVP-related and non-CVP related fish screens?

iii. Would the cost allocated to water and power contractors be credited back given that funds came from the CVPRF to which contractors already contributed?

4. Big Picture Issues and Overlap Among Multiple Federal Authorities (e.g. CALFED, CWA, ESA, NEPA, and Reclamation Law)

Overlap with Other Federal Laws

The extensive geographic coverage of the CVP makes it difficult to separate CVP-related actions from other federal project and program authorities, particularly actions of the Environmental Protection Agency (EPA), FWS, and National Marine Fisheries Service (NMFS) to carry out responsibilities under the federal CWA, and federal ESA, and CALFED. The body of “Reclamation Law” accumulated since 1902 also complicates application of CVPIA cost allocation requirements.

There appear to be several instances in the 2017 ECO report and proposed BPGs that classify “investigations” (e.g., sections 3406(d)(6) and (e)), studies (e.g., 3406(b)(9)), and data collection as reimbursable expenditures, even where the CVPIA statute is silent on cost allocations or notes that costs “shall be reimbursable pursuant to existing statutory and regulatory procedures” (e.g., 3406(b)(1)(D), and elsewhere).

One example of a statutory requirement existing at the time CVPIA was enacted and relevant to multiple CVPIA sections outside of 3406(b)(1) umbrella is P.L. 92-149 (85 Stat. 416). This 1971 act specifies that funds appropriated for investigations and surveys of a broad class of projects, and certain other studies (including general engineering and research studies) “shall be non-reimbursable.” Reclamation’s Directives and Standards (D&S) published in the Reclamation Manual also reference P.L. 92-149\(^{10}\) and appear at odds with classification of investigations under the 2017 ECO Report and the BPGs proposal. (See also D&S LND-01-01 re: P.L. 89-72 and reference to 75% federal cost share for fish and wildlife enhancement facilities.)

Earlier BPGs for the CVPIA, Business Practices Guidelines for Central Valley Project Improvement Act Program Accounting and Cost Recovery (BRC 03-01 Sept. 29 2003) note that “Reclamation has no authority to recover costs associated with non-project activities or non-reimbursable project activities” and references “Mid-Pacific Region Business Practices Guidelines, Determinations of

\(^{10}\)D&S for General Investigations, BGT 01-03, available at https://www.usbr.gov/recman/bgt/bgt01-03.pdf.
Reimbursability, February 14, 2002," which could not be found on Reclamation’s primary website or the region’s webpages. It is not clear if this document has been updated or revised consistent with the current proposal, or how the proposed approach differs from the 2002 guidance.

Additionally, there appears to be inconsistent treatment of activities related to Reclamation’s obligation to comply with state water quality requirements under the federal CWA and the 1986 Coordinated Operations Agreement (COA).

**Related Questions for Reclamation:**

A. What is the rationale for not using various D&S cost allocation methods per direction in P.L. 92-149, P.L. 89-72, other laws such as various Fish and Wildlife Coordination Acts, and earlier BPGs for assigning CVPIA costs where specific provisions are silent and/or fall both outside and within the umbrella of 3406(b)(1)(D)?

B. Does Reclamation distinguish between CVP-wide (b)(1) actions authorized under CVPIA and actions required to implement major federal environmental laws such as CWA, ESA, and NEPA? If so, how?

C. Related to Question B, how does Reclamation ensure water and power contractors are not paying for non-project related activities?

D. How did Reclamation derive the $21.1 million in CVPIA administrative charges listed in the 2017 ECO Report? Are these solely for CVPRF administration, which is the relevant CVPIA section referenced (section 3407)? Or, does the line item include administration of large programs, or those with mixed reimbursability requirements or non-reimbursable requirements?

**Overlap with CALFED**

The FY1993-2017 ECO report notes CALFED as the source of $72 million in CVPIA expenditures. The majority of the CALFED line item contributions are aligned with cost allocations to all project purposes with an 85% share allocated to water and power contractors. However, the CALFED authorization (P.L. 108-361) refers to the three-way (federal/state/other project and program beneficiaries) “beneficiary pays principle” embedded in the 2000 CALFED Record of Decision (Section 103(f)(4)(A)(iv)) and later specifies that federal costs shall not exceed 33.3% (Section 107). Section 103(f)(2)(B) of the CALFED authorization also states that $90 million in authorized expenditures for the Environmental Water account “shall be considered a nonreimbursable Federal expenditure in recognition of the payments of the contractors of the Central Valley Project to the Restoration Fund” created by CVPIA (this is the only reference to reimbursement in the Act). Lastly, House Report 109-474, *Energy and Water Development Appropriations*, FY2007 (p. 62) notes that funding for CALFED activities shall be non-reimbursable¹¹:

All program funds provided under the CALFED Bay-Delta program are to be considered non-reimbursable. The Committee also is aware that Reclamation is not providing all funds to project cooperators as outlined in last year’s bill and insists Reclamation provide the funds listed below in full for 2007. The Committee again urges the Administration to fund all program elements at the fully authorized levels in future budget requests and include all cooperating agency budgets related to CALFED Bay-Delta program activities under this account.

Related Questions for Reclamation:

E. How have CALFED appropriations been used and allocated in CVPIA projects and programs and how does such affect determinations of what is reimbursable?

F. Does the $72 million identified in the FY1993-FY2017 ECO) report represent 33% of expenditures attributable to non-federal and non-state beneficiaries, per the beneficiaries pay principle embedded in the CALFED program?

Overlap with Other Bay-Delta Restoration Authorities

Congress has authorized billions of dollars for ecosystem restoration activities throughout the country. The largest among these include activities related to the Chesapeake Bay, CALFED Bay-Delta Program, Everglades, Great Lakes, and Gulf Coast.

Related Questions for Reclamation:

G. How does cost-recovery for Bay-Delta expenditures – and specifically in-Delta expenditures not related to CVP diversion facilities and O&M – compare with ecosystem restoration costs elsewhere in the United States (e.g., Chesapeake Bay, Everglades, Great Lakes, Puget Sound, Coastal Louisiana).

H. Are costs being allocated consistently across all ecosystem restoration programs, or are water and power users being charged for activities that could, or possibly should, be non-reimbursable as fish and wildlife enhancement activities or activities benefitting the general public, as in other ecosystem restoration programs?

In sum, there is much overlap in federal responsibilities under various laws and requirements under CVPIA and little clarity in the CVP True-up documents that outline where CVPIA actions, particularly those under the AFRP, begin and end vis a vis actions required under federal authorities. Lack of clarification in supporting documents raises the larger question of what costs are being attributed to CVPIA that may more accurately be attributed to other federal laws with different cost allocations. This is particularly relevant where certain 3406(b)(1) subsections of CVPIA are silent and fall under the umbrella of 3406(b)(1)(D), which states that costs “shall be reimbursable pursuant to existing statutory and regulatory procedures.” In many cases, other existing statutory and regulatory procedures treat federal expenditures on behalf of ecosystem health as non-reimbursable expenditures.
Thank you for the opportunity to comment. FWA stands ready to meet with you and your team on these very important issues as necessary. We look forward to hearing from you in the near future.

Sincerely,

Jason Phillips
Chief Executive Officer

CC: bor-sha-CVPIA@usbr.gov
AGENDA REPORT

DATE: February 27, 2020

TO: Board of Directors

THROUGH: Ian Buck-Macleod, Water Resources Manager

FROM: Aaron Fukuda, Steve Collup, Bill Swanson

SUBJECT: Temperance Flat Reservoir Project Update on MOU Group Technical Modeling (Stantec)

SUMMARY:
A group of CVP water users in the Central Valley investigated potential water supply and water management benefits that the proposed Temperance Flat Reservoir (TFR) Project could provide. The study is complete, and a set of findings has been developed. This item is a brief presentation on the study and findings.

DISCUSSION/UPDATE: The following is a summary of the MOU Group activities:

Temperance Flat Reservoir has been under study by Reclamation for several years. A draft Feasibility Report and a Draft EIS were released for public comment in 2014. Since that time, the project was approved for funding by the California Water Commission under the Water Storage Investment Program, and Reclamation has continued to evaluate the project in coordination with FWA and other entities. As determinations of eligibility for State and Federal funding were progressing, a group was formed through a Memorandum of Understanding (MOU) to enable individual evaluations of potential interest in the TFR Project. The MOU Group included all Friant Division contractors, the Exchange Contractors, San Luis & Delta Mendota Water Authority and several South-of-Delta CVP contractors.

A numerical model was developed to allow each MOU group participant to evaluate their potential use of storage space in TFR. The model first represented the operational conditions of Millerton Lake, then identified inflow that would be available for storage in TFR. Each user specified the amount of storage, and how water supply that results from inflow through the coordinated management with other supplies would be managed in their account. A financial analysis tool was also developed to enable cost analysis of reservoir space in comparison to benefits provided to the user. Results from 12 separate account operations were combined to represent the combined operation of the TFR Project. A series of sensitivity evaluations (what-if analyses) were run to identify how the performance of the TFR Project would change under different demands, supplies available for storage, or supply from the Delta.

RECOMMENDED ACTION:
None.

ATTACHMENTS:
MOU Group Study Summary
Temperance Flat Reservoir Project

MOU Group Study Summary
Friant Water Authority Board Meeting
February 27, 2020

TFR Project Summary

Facilities
665 ft RCC Dam
1.26 MAF net storage
160 MW powerhouse

Project Representation for Analysis

Madera Canal Deliveries
Millerton Lake
Friant-Kern Canal Deliveries
Millerton Spills

SJRRP Releases
Temperance Flat Reservoir
### Initial Storage Accounts and Financial Assumptions

<table>
<thead>
<tr>
<th>Potential Investor Group Name</th>
<th>Initial Storage Account (TAF)</th>
<th>Financial Assumptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arvin-Edison WSD</td>
<td>90</td>
<td>Construction cost $2.79 M (2018 price) escalated at 3.5% to 2025</td>
</tr>
<tr>
<td>Chowchilla WD</td>
<td>100</td>
<td>Interest During Construction added</td>
</tr>
<tr>
<td>City of Fresno*, Fresno ID</td>
<td>150</td>
<td>No Federal or State funding / No upfront cash</td>
</tr>
<tr>
<td>Delano-Earlimart ID*, Shafter-Wasco ID, Southern San Joaquin MUD</td>
<td>75</td>
<td>50-year loan at 2.875%</td>
</tr>
<tr>
<td>Hills Valley ID*, Orange Cove ID, Lindsay Strathmore ID, Kaweah Delta WCD</td>
<td>20</td>
<td>Repayment begins after completion of construction</td>
</tr>
<tr>
<td>Kern-Tulare WD*, Lindmore ID</td>
<td>15</td>
<td><strong>Annual project cost = $187.6 M</strong></td>
</tr>
<tr>
<td>Lower Tule River ID*, Pixley ID, Tea Pot Dome WD, Exeter ID, Ivanhoe ID, Stone Corral ID</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>Madera ID</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>Terra Bella ID*, Porterville ID, Saucelito ID</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Tulare ID</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>SJR Exchange Contractors</td>
<td>100</td>
<td></td>
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<tr>
<td>CVP SOD Ag Contractors</td>
<td>100</td>
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<tr>
<td>Eastside</td>
<td>675</td>
<td></td>
</tr>
<tr>
<td>Westside</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>875</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Lead agency for the group

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### Take and Cost Comparison with Other TFR Evaluations

<table>
<thead>
<tr>
<th>Average Annual Take (TAF)</th>
<th>Unit Cost of Water, during repayment period ($/acre-foot)</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>2,000</td>
</tr>
<tr>
<td>220</td>
<td>1,800</td>
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<tr>
<td>240</td>
<td>1,600</td>
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<tr>
<td>260</td>
<td>1,400</td>
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<td>280</td>
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<td>320</td>
<td>800</td>
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<td>340</td>
<td>600</td>
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<tr>
<td>360</td>
<td>400</td>
</tr>
<tr>
<td>380</td>
<td>200</td>
</tr>
</tbody>
</table>

*All unit costs based on same cost estimate*

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13.J.I.3
Regardless of operation, yield from inflow typically ranges around 10% to 15% of storage capacity. Proportions are lower when account is managed primarily for drought protection.

Regardless of account size, total take from storage increases with greater use of account for puts.
### Combined Operations Scenarios

**Modify Demands** and **Increase Access to Delta Supply**

<table>
<thead>
<tr>
<th>Operating Conditions</th>
<th>Initial</th>
<th>2</th>
<th>2A</th>
<th>3</th>
<th>3A</th>
<th>3B</th>
<th>3C</th>
<th>3D</th>
<th>3E</th>
<th>3F</th>
<th>3G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Existing Millerton Operations</td>
<td>Included</td>
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<tr>
<td>Regulatory Conditions</td>
<td>COA Amendment</td>
<td>COA Amendment with ROConLTO</td>
<td></td>
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<tr>
<td>Friant Physical Facilities</td>
<td>Historical Demands</td>
<td>Historical Demands with Additional 3,000 cfs Demand</td>
<td></td>
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<tr>
<td>Unassigned Storage</td>
<td>Not Used</td>
<td>Whitelands</td>
<td>Outside Participant</td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Delta Surplus</td>
<td>Not Used</td>
<td>Used</td>
<td>Not Used</td>
<td>Used</td>
<td>Not Used</td>
<td>Used</td>
<td>Not used</td>
<td>Used</td>
<td></td>
<td></td>
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<tr>
<td>SOD Conveyance Physical Facilities</td>
<td>250 cfs</td>
<td>1,000 cfs</td>
<td>250 cfs</td>
<td>1,000 cfs</td>
<td></td>
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**Key:**
- cfs = cubic feet per second
- COA = Coordinated Operations Agreement
- Outside Participant = The storage was simulated as an account to represent a participant outside of CVP
- ROConLTO = Reinitiation of Consultation on Coordinated Long-Term Operations
- SOD = South of Delta
- Whitelands = The storage was simulated as an account to represent lands neighboring CVP Friant Division lands

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**Combined Operations Scenarios**

![Graph showing unit cost of water during repayment period against average annual take (TAF)](image)

**Modify Demands** and **Increase Access to Delta Supply**

- 2A: Add 3,000 cfs Friant Demand
- 3: 275 TAF Outside
- MOU Initial: Cost of 1,150 TAF
- 275 TAF Whitelands
- MOU Initial: Cost of 875 TAF in 1,150 TAF Reservoir
- 3D: ROConLTO
- 3E: Delta Surplus
- MOU Initial: Cost of 875 TAF in 1,150 TAF Reservoir
- 3G: 1,000 cfs SOD Conveyance

**Unit Cost of Water, after repayment period ($/acre-feet):**
- 240 to 340 TAF

**Average Annual Take (TAF):**
- 500 to 800
Findings

- TFR is less cost-effective if used primarily to capture additional San Joaquin River supply.
- TFR is more cost-effective if accounts are used to manage other water supplies through rescheduling of Friant Division supplies or exchanges.
- Development of additional Friant Delivery capability would reduce SJR yield but not significantly affect project use if additional Delta supplies are available and TFR is operated to support management of those supplies.
- Initial operations scenarios were based on water availability assumptions that could be considered minimum possible conditions.
- TFR Project cost-effectiveness would increase with greater access to Delta supplies and additional trans-valley conveyance capacity.
- Individual account operations would change under any of the evaluated scenarios, and take amounts likely would increase.

Discussion
Agenda Report

DATE: February 27, 2020

TO: Board of Directors

FROM: Ian Buck-Macleod, Water Resources Manager

SUBJECT: FKC Water Quality Plan

SUMMARY:

In response to concerns regarding the implementation of programs and projects on the Friant-Kern Canal which would introduce water of lesser quality, as compared to historic Millerton Lake water quality, the Friant-Kern Canal Water Quality Ad Hoc Committee (Ad Hoc Committee) is working to develop a comprehensive water quality policy to be adopted by the Friant Division. This document is paramount to completion of the environmental documents for the Long-Term Recapture and Recirculation of Restoration Flows (LTRRRF) Project for the San Joaquin River Restoration Program, as well as or the Friant-Kern Canal Reverse Pump-Back Project. The Ad Hoc Committee is made up of Friant Contractor directors and district managers from Arvin-Edison Water Storage District (AEWSD), Delano-Earlimart Irrigation District (DEID), Kern-Tulare Water District, Lindsay Strathmore ID (LSID), Lower Tule River ID, Pixley ID, Porterville ID (PID), Shafter-Wasco ID, Saucelito ID (SID), and Terra Bella ID (TBID). The Ad Hoc Committee also nominated a small working group made of district managers from AEWSD, DEID, LSID, PID, SID, and TBID to tackle technical topics and develop draft proposals for Ad Hoc Committee consideration.

The Ad Hoc Committee is proposing a Water Quality Mitigation Ledger mechanism to determine required mitigation for introducing water of lesser quality in the Friant-Kern Canal. The Water Quality Mitigation Ledger tracks and accounts for all inflows and diversions into and from the Friant-Kern Canal in order to determine appropriate mitigation for impacted water quality (attributable to the introduction (Put) and corresponding distribution thereof (Take)). A volume of additional surface water needed for mitigation, expressed as a percentage of the introduced (Put) water, is determined from an established mitigation rating curve of constituent concentrations. Mitigation rating curves are based on agronomic principles, focusing on leaching requirements in order to prevent constituent accumulation in the rootzone and resulting impacts to crops. This approach aims to balance concerns related to long-term groundwater quality with a multi-layered assessment of agronomic impacts as a durable solution.

Along with policy decisions, the Ad Hoc Committee is developing a Friant-Kern Canal water quality monitoring program for key constituents of concern, testing and reporting timelines, and communications protocols. To assist with forecasting and communicating canal water quality to districts, the Ad Hoc Committee has requested a water quality model be developed for the Friant-Kern Canal. The Friant-Kern Canal Water Quality Model will make short-term water quality forecasts to evaluate the effect (i.e., change in water quality) of proposed actions (e.g., forecasted operations) and will be used episodically during pump-in and pump-back operations.
CURRENT STATUS:

The *Water Quality Mitigation Ledger* continues to be developed by the Ad Hoc Committee and a small working group which met again on February 24. Remaining activities are focused on defining water quality thresholds and operations criteria and understanding potential impacts to existing and future programs and potential ways for reconciliation. In addition, remaining activities also include determining program administration, and finalizing a monitoring plan and the Friant-Kern Canal Water Quality Model. Stantec completed a *Draft Model Concept TM* in August. A preliminary model, documentation, and user dashboard will be completed in March for FWA use. The Ad Hoc Committee will present the current approach for the water quality plan and garner feedback from Friant water users at future workshops once these topics are resolved.
Operations & Maintenance Report
A compilation of current FWA operations and maintenance activities throughout the 152-mile canal system.
January 2020
OPERATION & MAINTENANCE REPORT
SAFETY, EDUCATION & TRAINING

Safety
• Operations and Maintenance staff attended their department’s monthly safety meeting and tailgate sessions.

Education & Training
• Employees discussed safety concerns with the upcoming mudjacking and sealant project to be performed for LSID. Employees completed an online course on First Aid; the course explains how to respond to injuries and illness. The one-hour Safety meeting was documented/filed and submitted to the personnel office.

Accidents & Injuries
• Friant staff has worked 1,452 days without a lost-time injury accident.

MAINTENANCE SUPERVISION
GENERAL SUPERINTENDENT REPORT

Subsidence
• Staff worked with Tulare County for scheduling coordination on five bridges in the subsidence area.
• Staff continued to work with Stantec on environmental compliance from MP 88.22 to MP 121.8 for the new canal alignment project and canal hydraulic modeling for the Water Quality program. Staff facilitated a property line dispute between a private landowner and USBR in the Delano section.
• Staff applied aquatic herbicide in the unlined section for the ongoing milfoil problem.

Personnel Items
• Staff worked on several personnel items, including annual reviews, policy conformance, and other matters.

CONSTRUCTION & MAINTENANCE
FOREMEN REPORTS: ORANGE COVE, LINDSAY, & DELANO MAINTENANCE

Weed & Pest Control
• The following is a summary of the chemical products used during the month by maintenance staff for weed and pest control on various canal sections and the product inventory on hand:
<table>
<thead>
<tr>
<th>PRODUCTS</th>
<th>UNITS</th>
<th>MAINTENANCE YARD USAGE</th>
<th>TOTAL USAGE</th>
<th>END OF MONTH ON-HAND</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Orange Cove</td>
<td>Lindsay</td>
<td>Delano</td>
</tr>
<tr>
<td>Clearcast</td>
<td>Gal</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Copper Sulfate - Old Bridge</td>
<td>Lbs.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Copper Sulfate - Chem One</td>
<td>Lbs.</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Argos Copper</td>
<td>Gal</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Captain XTR</td>
<td>Gal</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Deploy</td>
<td>Gal</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Diphenacine</td>
<td>Lbs.</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Diuron 4L - Loveland</td>
<td>Gal</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Diuron 4L - Drexel</td>
<td>Gal</td>
<td>392</td>
<td>290</td>
<td>0</td>
</tr>
<tr>
<td>Lifeline</td>
<td>Oz</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Weather Guard Complete</td>
<td>Oz</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Finale</td>
<td>Oz</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Milestone VM</td>
<td>Oz</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Nautique SePro</td>
<td>Gal</td>
<td>275</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Roundup - Custom</td>
<td>Gal</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Roundup - Pro Conc</td>
<td>Gal</td>
<td>0</td>
<td>35</td>
<td>4</td>
</tr>
<tr>
<td>Forfeit 280</td>
<td>Oz</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Sonar Genesis</td>
<td>Gal</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

- Delano weed and pest applicators continue the use of Roundup Custom as part of the annual weed control program in the Lake Woollomes Reservoir right-of-way areas.
- Delano weed and pest applicators continue the use of Roundup Pro concentrate as part of the annual weed control program in the Delano maintenance section.
- Delano applicators completed the use of Diuron, a pre-emergent herbicide to the inside banks and ROWS of the Delano Maintenance Section, as part of the annual pre-emergent weed control program.
- Lindsay maintenance staff continue the application of Diuron 4L for the pre-emergence weed control along the Friant Kern Canal and Right-Of-Ways.
- Lindsay maintenance staff continue the application of Roundup for the post-emergence control of grasses and broadleaf weeds along the canal and right-of-way.
- Lindsay maintenance staff continues the use of the GopherX unit for the control of California ground squirrels.
- Orange Cove maintenance staff continue the application of Roundup Pro as part of the annual weed control.
- Orange Cove maintenance staff continue the application of Diphacinone to the canal right-of-way for the control of California ground squirrel.
- Orange Cove maintenance staff continue the removal of accumulated vegetation from siphon inlets.
• Orange Cove maintenance staff continue the removal of woody vegetation from canal embankment and toe as directed in the most recent Operations and Maintenance exam.
• Orange Cove maintenance staff cleaned out several cross drainages filled with debris.

**Canal & Diversion Structures**

• Delano maintenance staff continue embankment maintenance to embankments and around blockhouses, turnouts, bridge abutments, etc. using a utility tractor, motor grader, and earth moving equipment. By backfilling eroded areas, and compacting and grading in materials, embankment maintenance will prevent erosion to the inside/outside banks, roads, gate structures, and concrete liner.
• Delano maintenance staff continues mowing tall annual grasses growing along the tops and lower ROW’S of the Friant Kern Canal.
• Delano maintenance staff continue painting bar gates, bollard posts, guard railings, warning signs, liner markers, structures, security fence wings, electrical panels, and blockhouse doors.
• Delano maintenance staff continue their structure gate maintenance for the year. Repairs made on radial and slide gates such as oil leaks, gearboxes, motor couplers, wire rope inspection, etc. Staff lubricated grease points and wire ropes, repaired metalwork, made security fence repairs, deck cleaning, touch up painting, buoy ball and wire rope replacement, and debris removal.
• Lindsay maintenance staff initiated the sandblasting/repair/painting of the dump boxes used for the slug application of copper sulfate in the Lindsay Maintenance Section of the FKC. The boxes were removed from their location, and the necessary repairs are being made, the units are sandblasted and then painted. When complete, the units will be reinstalled.
• Orange Cove maintenance staff continue to remove debris from the waterways and at check structures that have been blown or dumped into the canal.
• Orange Cove maintenance staff conducted inspections of the lining and made notes for areas needing repairs.
• Orange Cove maintenance staff built and repaired fencing in several locations.
• Orange Cove maintenance staff repaired or replaced several copper bins that had rotted out.
**O&M Roads**
- Lindsay maintenance staff completed the removal/replacement of the check structure gate motors and gearboxes. The motors/gearboxes are being replaced with a standardized motor/gearbox assembly.
- Delano maintenance staff continue the application of road base gravel and decomposed granite to various checks and turnout structures to prevent erosion and to ensure safe vehicle entry during wet conditions. Gravel base is ¾ inch crushed rock spread out with a dump truck and graded in using a utility tractor.
- Lindsay maintenance staff completed the repair/installation of the bar gate at Ave. 80. The gate had been hit by an unknown vehicle.
- Orange Cove maintenance staff continue road patching repairs on Friant-Kern Canal operation roadways.
- Orange Cove maintenance staff began grading the canal’s non-operational roadways and wide areas as necessary.
- Orange Cove maintenance staff continues to grade roadways to provide a safe road condition, promote proper drainage, and allow for a proper pre-emergent application.

**Yard & Building**
- Delano maintenance staff continue to perform their routine maintenance and repairs, such as yard cleaning, warehouse and shop housekeeping, vehicle and equipment fixes, facility improvements, and office duties.

**Right-of-Way Maintenance**
- Delano maintenance staff continue the removal of illegally dumped trash and debris from gate structures. All trash and debris removed from the Friant-Kern Canal right-of-way will be transported to the local solid waste/recycling facility.
• Delano maintenance staff continue bar gate and bollard post repairs and installations. Bar gates and bollard posts are necessary for the prevention of unauthorized vehicles from entering the Friant-Kern Canal right-of-way and structured areas.

• Delano maintenance staff continue to repair and install security fencing to prevent public access from entering the Friant-Kern Canal right-of-way and structured areas.

• Orange Cove maintenance staff continue to remove illegally dumped items along the right-of-way. Trash and debris were removed and transported to the local solid waste/recycling facility or stored for future disposal.

• Orange Cove maintenance staff repaired washouts and installed funnel drains, replaced several signs on the Friant-Kern Canal, and repaired several gates on the Friant-Kern Canal roads as well.

Vehicle & Heavy Equipment

The following is a summary of the vehicle and heavy equipment preventive maintenance services and repairs made by the technical services staff:

<table>
<thead>
<tr>
<th>DELANO, ORANGE COVE &amp; LINDSAY</th>
<th>TYPE</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-House Inspections</td>
<td>B – Semi-annual</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>C - Annual</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>E - Equipment</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>BIT - 90-Day Heavy Equipment</td>
<td>0</td>
</tr>
<tr>
<td>Outside Inspections</td>
<td>B – Semi-Annual</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>C - Annual</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Smog Test</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Smoke Test</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DELANO, ORANGE COVE &amp; LINDSAY</th>
<th>TYPE</th>
<th>QUANTITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-House Repairs</td>
<td>Light Vehicles</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Trucks</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Heavy Equipment</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Utility Equipment</td>
<td>0</td>
</tr>
<tr>
<td>Outside Repairs</td>
<td>Light Vehicles</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Trucks</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Heavy Equipment</td>
<td>0</td>
</tr>
</tbody>
</table>
ENGINEERING ACTIVITIES

ENGINEER AND ENGINEER TECHNICIAN REPORT

SENIOR ENGINEER

- Review plan for City of Shafter Sewer pipe and pedestrian bridge plans. The go over the canal at MP 145.96 adjacent and North side of the 7th Standard Road. Sent comments to USBR. USBR had approved the plans.
- Completed 2020 Structure Book data. I sent “Preliminary copies to our engineering partners P&P and Stantec. I’m still finalizing datum conversion from old 1940s plan data and newer subsidence elevations from Stantec.
- Monitoring Lindsay-Strathmore Irrigation District leak at Burr Drive, adjacent to the FKC at MP 82.71. The LSID is installing a new replacement pipe on the adjacent bridge this month.
- Installed a new HP 36” wide combination scanner/printer. We did have a large printer, but not a large scanner, and This will allow engineering to go paperless. Paperless allows easier access, back-up in case of fire, more room in offices, and preservation. The old paper files are decaying. The old printer will be stored for another use or sold later this year.
- Canal Reach Review.
  - Obtain HEC-RAS computer model for the entire canal from Stantec. The FWA engineer identified inconsistencies in plans with field conditions found so far. Will revise the model to match the inconsistencies to create a better model matching flow. This will help determine cost-effective solutions to increase flows is the upper reach.
- FWA Engineer revising scope on the Pump Back Project.
  - Obtaining financial agreement extensions from DWR and USBR into 2021
  - Revising the scope to two sites. This will make the Deer Creek #3 site an option until the parallel canal is final, and funding becomes available.
  - Revising the scope of the USBR 2016 pump back agreement to match the newer DWR agreement. There seems to be a non-verbal agreement to continue until full construction funding was provided. People on both sides of the project have changed. Thus, FWA wants ‘written’ agreements to match pass practices. So to pass an audit.
  - A scope revision task is also being revised to only require building the pump back sites until 100% funding is found. Currently, there is only enough for design.

ENGINEERING TECHNICIAN

- Training on web GIS, then purchase GIS Standard to create maps links to documents, data, google like street view of the canal and HEC-RAS integration and in compliance to use USBR, county/county maps that use GIS software.
- Installed GIS software.
- Technician currently training on GIS Pro.
OPERATIONS ACTIVITIES

OPERATIONS SUPERVISOR REPORTS

- Operations Staff during the month of December delivered 7,031 acre-feet. Total water delivered year-to-date to FKC Contractors was 1,497,632 acre-feet.
- Reported sump pump deliveries of 9 acre-feet and year to date total of 204 acre-feet.
- Staff installed new resistor board on Honeywell at Saucelito 3 and 56w.
- Staff Installed new Honeywell at E5.
- Staff removed propeller meter at Taylor for digital upgrade to FlowCom.
- Staff pumped venturi wells filled by the rain water.
- Staff Installed a new power board in the Exeter #5 Honeywell.
- Staff removed meter at DCTR and cleared the tumbleweeds and debris (x4).
- Staff restored power at Philips, E4, SW2.
- Staff reset the zero on the transmitter internally at OC5.
- Staff completed plumbing and repairs at 24E from venturi to transmitter.

SCADA

- Camera views inside the IOS System for viewing staff gauges and gates at all Checks have been reviewed and corrected to properly monitor on a daily basis.
- Continued to review the IOS program and send out TAC request for any errors for improvements on the IOS ordering system.
- The TID gate motors continued to bind up, causing the motor starters to trip. The brakes have been repaired so that the motors no longer bind.
- Upstream cable extension sensors for Dodge Avenue, Sand Creek, and White River have been calibrated for accurate readings at these sites.
- The level and power alarm antenna cable at Sand Creek has been replaced.
- Shaft measurements have been completed at Kings River Check, Kings River waste way, and Sand Creek Check.
- The 2 gates at TID have had the lower limits adjusted to properly set the gates down all the way.
- The transmitters at 1 East in Delano have been calibrated and lines have been bled.
- The downstream point to point sensor at White River has been repaired.
- The venturi communication lines at 24 East have been repaired. The damaged lines were cut out and shark bite valves were installed. Replaced all plumbing up to the transmitter.
- Gate 1 stem at #4 Ditch was pulled and the lifting nut for the gate 1 actuator was sent out for machining.
- Couplers have been ordered for the new gear motors for Sand Creek and Kings River waste way.
- The SCADAPack at TID has been reprogrammed for the use of the maple touchscreen controller. Programmed the controllers at all 14 checks and all open ditches to read the controller’s Ram battery status and board temperature. Created a mimic in ClearSCADA to display these status’s remotely for preventative maintenance.
For the calendar year 2020, staff committed to the goal of doing training in the technical and soft skills that are required to meet the new roles of administrative support a significant priority. Staff evaluated many sources of online training. The staff has chosen Udemy as the online training partner of choice. Udemy offers over four-thousand courses and administrative tools to assess training effectiveness.

In our continued commitment to improving the product produced by administrative support staff, has deployed Grammarly to improve staff writing and writing support provided to Authority staff. In January, Grammarly reviewed over sixty-one thousand words, and staff made five-hundred ninety-six modifications given Grammarly’s recommendation.

Information Technology Management

Staff spent a considerable amount of time working with Nutanix, Dell/EMC, and HP, evaluating hardware and software solutions for the Authority’s budgeted server replacement project. Staff provided vendors with pertinent system demand curves and projected growth evaluations. Staff attended several engineering calls with all three vendors. Staff is currently evaluating the proposals provided by the vendors.

As part of the server replacement project, staff is also evaluating the backup system utilized by the Authority. Currently, the Authority uses Barracuda backup services, which provide an on-premise appliance for local backups and cloud storage services where the Authority’s backup is replicated for offsite storage. Staff is evaluating Veeam, Unitrends, and Commvault solutions to ensure the Authority has the advantage of the best technology and services within the current solutions price point.
• Staff spent a considerable amount of time evaluating security technologies to harden the layers of protection the Authority deploys. Within the past year, the Authority has been targeted with phishing and spear-phishing attacks. The Authority's activities have broadened the threat services to Authority devices and staff. To defend the Authority against these threat vectors, the Authority is evaluating CrowdStrike Falcon endpoint security and Cisco Umbrella. Crowd strike endpoint security increases device threat defense by the nature of its architecture and reduces malware manipulation threats. Cisco Umbrella filters all outbound traffic and protects Authority staff in the event they click on malicious links within a phishing attack.

• Staff documented and resolved twenty end-user support cases in January.

SCADA / IOS

• The Automation of the Ditch Rider Report data gathered by the Canal System Operators is in the 4th week of testing. Staff is working on the implementation of mobile devices to the Delano and Orange Cove section Canal System Operators. The implementation of devices to all Canal System Operators, staff will be able to evaluate meter reading and reconciliation end of month activities.

• Staff worked with engineers from Nutanix and Intellisite to investigate latency experienced in the IOS application at district login. It was determined by Intellisite engineers that the AI (Artificial Intelligence) within the user authentication routine that predicts the information required to pre-load was attempting to pre-load a vast amount of data. Intellisite engineers adjusted the algorithm and resolved user login latency.

• Staff continues to work on the input of water orders within IOS.

• Staff continues to work with all stakeholders to identify issues within IOS and rectify those issues with the development team.

• Staff configured three laptops for operations staff.

• IOS TAC received and completed fifteen support cases in the month of January.

• Staff worked with DocuSign on a project that would allow for the electronic signature of timesheets and other signature required documents within the accounting processes.

• Staff is evaluating DocuSign’s process workflow technologies as a solution for the accounting department's requirements.

• Staff completed twenty hours of advanced Cisco network and routing training.

• Staff coordinated with Verizon Wireless to release the cell phone numbers of two Authority employees who are leaving the Authority.