VIA WEBEX AT MEETING LINK:

https://friantwater.webex.com/friantwater/j.php?MTID=m7258b135585891fd008d8f32d7841d43
and Phone access dial 1-415-655-0001

MEETING ACCESS CODE 133 281 0119 MEETING PASSWORD pKdwe382FTG (75393382 from phones)

In accordance with the Governor’s Executive Order (N-29-20) and the declared State of Emergency, including social distancing directives as a result of the threat of the COVID-19 virus, Committee members and FWA staff will be participating in this meeting remotely. There will not be a physical location for this meeting. Members of the public may participate in the meeting in the following way:

Meeting Link:
1. https://friantwater.webex.com/friantwater/j.php?MTID=m7258b135585891fd008d8f32d7841d43
2. Phone: WEBEX TELECONFERENCE: 1-415-655-0001
3. MEETING ACCESS MEETING CODE 133 281 0119 MEETING PASSWORD pKdwe382FTG (75393382 from phones)
4. Email: You may submit comments on a specific agenda item via email to tfaria@friantwater.org. Please send your email at least one hour prior to the start of the meeting.

1. CALL TO ORDER/ROLL CALL
2. APPROVAL OF THE AGENDA
3. PUBLIC COMMENT / PUBLIC PRESENTATIONS
   Public comment is welcome at this time on any matter within the jurisdiction of the Committee 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.
4. APPROVE THE MINUTES OF THE JUNE 27, 2019 MEETING
5. REVIEW OF PROPOSED FY-2021 BUDGET
6. REVIEW OF PROPOSED FY 2022 BUDGET
7. COMMITTEE COMMENTS
8. MEETING ADJOURNED

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.
O&M Committee Meeting Minutes

JUNE 27, 2019
1:00 PM
INTERNATIONAL AGRI-CENTER
4500 S. LASPINA ST, TULARE, CA

1. CALL TO ORDER/ROLL CALL
The meeting of Friant Water Authority (FWA) O&M Committee was called to order at 1:45 P.M. by Rick Borges: Committee Members Present; Rick Borges, Tulare ID; Cliff Loeffler, Lindsay-Strathmore ID; Michael Brownfield, Lindmore ID; Steve Kisling Saucelito ID; Harvey Bailey, Orange Cove ID. Other Attendees: Sean Geivet, Porterville ID, Saucelito ID & Terra Bella ID; Aaron Fukuda, Tulare ID; Eric Limas, Lower Tule River ID, Pixley ID, Tea Pot Dome WD; Scott Edwards, Lindsay-Strathmore ID; Jason Phillips, Chris Hickernell, Doug DeFlitch, Don Willard, Chris Hunter, FWA.

2. APPROVAL OF THE AGENDA
The O&M Committee agenda was approved as noticed. (m/ Kisling; s/ Brownfield)

3. PUBLIC COMMENT / PUBLIC PRESENTATIONS
There were no public comments or public presentations.

4. ACTION ITEMS (60 MINUTES)
   A. Review of Proposed FY-2020 Budget for Executive Committee Review and Board Action
      The Committee reviewed the FY 2020 and directed Staff to make the following adjustments:
      1. Remove the Tule River Radial Gates Replacement maintenance item, of $482.3K, from the Budget with the suggestion that an Engineering firm / Consultant be contracted in FY 2021, a dewater year, to conduct an evaluation of all gates and make a recommendation with respect to remaining life and need for replacement.
      2. Review the Water Supply Coordination & Monitoring budget item for staff related costs that may be associated with the non-O&M activities, (Biological Opinions, Coordinated Operations Agreement & Voluntary Settlement Agreements), mistakenly included in the justification write up. If there are related costs remove the amounts from the budget item.
      3. Adjust the Title Transfer expenses for cost related to the Madera Canal, approximately $120K.
B. Review of Proposed FY-2021 Budget for Executive Committee Review and Board Action.

1. Remove the Dodge Ave. Radial Gates Replacement maintenance item, of $531.8K, from the Budget with the suggestion that an Engineering firm / Consultant be contracted in FY 2021, a dewater year, to conduct an evaluation of all gates and make a recommendation with respect to remaining life and need for replacement.

M/S/C – Motion by Director Brownfield, seconded by Director Bailey that the O&M Committee approve and forward the FY 2020 and FY 2021 OM&R Budgets, with the caveat that the suggested adjustments are incorporated, to the Executive Committee with a recommendation that the Budgets be accepted and be sent on to Board of Directors. The motion carried.

5. GENERAL UPDATES
   A. Committee Comments – The Committee thanked Staff for their efforts in preparing the Budgets.

6. ADJOURNMENT
   The meeting adjourned at 2:50 p.m.
FRIANT WATER AUTHORITY

Operations & Maintenance Budget
FY 2021 – FY 2020
FRIANT WATER AUTHORITY
COMPARATIVE BUDGETED SPENDING BY CATEGORY
FY 2009 THROUGH FY 2022

### FY 2009 THROUGH FY 2022

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Normal Ops</td>
<td>$6,559</td>
<td>$7,416</td>
<td>$7,621</td>
<td>$7,174</td>
<td>$8,257</td>
<td>$6,406</td>
<td>$6,567</td>
<td>$7,523</td>
<td>$8,086</td>
<td>$7,971</td>
<td>$13,108</td>
<td>$15,053</td>
<td>$15,169</td>
<td>$15,441</td>
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<tr>
<td>Major Maint Projects</td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Non-Routine O&amp;M</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Asset Acquisitions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
FRIANT WATER AUTHORITY
ROUTINE O&M
FY 2021 PROPOSED BUDGET vs. FY 2020 BUDGET

2020 Budget $7,763
- Fuel prices $(53)
- Labor to Maj. Maint. $(91)
- Water coordination $330
- Other $9

2021 Budget $7,958

$ in thousands

BUDGET 2020

BUDGET 2021
FRIANT WATER AUTHORITY
MAJOR MAINTENANCE
FY 2021 PROPOSED BUDGET vs. FY 2020 BUDGET

<table>
<thead>
<tr>
<th>Category</th>
<th>2020 Budget</th>
<th>2021 Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>Concrete &amp; Framework</td>
<td>304</td>
<td>304</td>
</tr>
<tr>
<td>Aquatic Weed Control</td>
<td>245</td>
<td>245</td>
</tr>
<tr>
<td>Road Repair</td>
<td>135</td>
<td>135</td>
</tr>
<tr>
<td>Sand Blast &amp; Paint Metal Canal Struct.</td>
<td>220</td>
<td>220</td>
</tr>
<tr>
<td>Structure &amp; Gear Boxes</td>
<td>353</td>
<td>353</td>
</tr>
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</table>

2021 Proposed Budget

$1,256
FRIANT WATER AUTHORITY
NON-Routine O&M
FY 2021 PROPOSED BUDGET vs. FY 2020 BUDGET

<table>
<thead>
<tr>
<th>Title Transfer</th>
<th>Carry over from 2020 Budget</th>
<th>$600</th>
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<tbody>
<tr>
<td>Pump Back</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Middle Reach</td>
<td>5,000</td>
<td></td>
</tr>
<tr>
<td>GSA Engagement</td>
<td>537</td>
<td></td>
</tr>
<tr>
<td>Water Quality</td>
<td>100</td>
<td></td>
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</tbody>
</table>

2021 Budget $5,662
FRIANT WATER AUTHORITY
ASSET ACQUISITION
FY 2021 PROPOSED BUDGET vs. FY 2020 BUDGET

<table>
<thead>
<tr>
<th>Description</th>
<th>Location</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Utility Tractor</td>
<td>Delano</td>
<td>110</td>
</tr>
<tr>
<td>(1) one ton Flatbed Truck</td>
<td>Orange Cove</td>
<td>31</td>
</tr>
<tr>
<td>(1) Portable Compressor</td>
<td>Orange Cove</td>
<td>31</td>
</tr>
<tr>
<td>(1) Ford F-150 Pickup</td>
<td>Lindsay</td>
<td>24</td>
</tr>
<tr>
<td>(1) Ford F-150 Pickup</td>
<td>Orange Cove</td>
<td>24</td>
</tr>
<tr>
<td>(1) 1/2 Ton Foreman Pickup</td>
<td>Orange Cove</td>
<td>30</td>
</tr>
<tr>
<td>Sub-total</td>
<td></td>
<td>250</td>
</tr>
<tr>
<td>Various computers, accessories &amp; etc.</td>
<td></td>
<td>44</td>
</tr>
<tr>
<td>2021 Budget</td>
<td></td>
<td>$294</td>
</tr>
</tbody>
</table>

$$ in thousands

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>$712</td>
</tr>
<tr>
<td>2021</td>
<td>$294</td>
</tr>
</tbody>
</table>
FY 2021

ASSUMPTIONS & CONSIDERATIONS
Friant Water Authority
Proposed Fiscal Year 2021 Budget
for
Operation and Maintenance
Friant-Kern Canal and Supporting Facilities

Summary of Assumptions and Considerations

1. Labor
   A. Total staffing levels for FY 2021 are proposed as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Total Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chief Executive Officer</td>
<td>1</td>
</tr>
<tr>
<td>2. Chief Operating Officer</td>
<td>1</td>
</tr>
<tr>
<td>3. Chief of External Affairs</td>
<td>1</td>
</tr>
<tr>
<td>4. Director of Water Policy*</td>
<td>1</td>
</tr>
<tr>
<td>5. Governmental Affairs &amp; Communications Manager</td>
<td>1</td>
</tr>
<tr>
<td>6. Water Resources Manager</td>
<td>1</td>
</tr>
<tr>
<td>7. Business Administration Manager</td>
<td>1</td>
</tr>
<tr>
<td>8. Accounting Operations Administrator</td>
<td>1</td>
</tr>
<tr>
<td>9. Senior Accountant</td>
<td>1</td>
</tr>
<tr>
<td>10. Accounting Technician</td>
<td>1</td>
</tr>
<tr>
<td>11. Payroll Specialist &amp; Analyst</td>
<td>1</td>
</tr>
<tr>
<td>12. Director of Technology</td>
<td>1</td>
</tr>
<tr>
<td>13. Human Resources/Risk Analyst</td>
<td>1</td>
</tr>
<tr>
<td>14. Executive Secretary</td>
<td>1</td>
</tr>
<tr>
<td>15. Executive Assistant</td>
<td>1</td>
</tr>
<tr>
<td>16. Administrative Assistant*</td>
<td>1</td>
</tr>
<tr>
<td>17. Office Technician</td>
<td>2</td>
</tr>
<tr>
<td>18. General Superintendent</td>
<td>1</td>
</tr>
<tr>
<td>19. Operations Supervisor</td>
<td>1</td>
</tr>
<tr>
<td>20. Resources Manager*</td>
<td>1</td>
</tr>
<tr>
<td>21. Water Resources Technician</td>
<td>1</td>
</tr>
<tr>
<td>22. Senior Engineer</td>
<td>1</td>
</tr>
<tr>
<td>23. Engineering Technician</td>
<td>1</td>
</tr>
<tr>
<td>24. Maintenance Foreman</td>
<td>3</td>
</tr>
<tr>
<td>25. Maintenance Supervisor*</td>
<td>1</td>
</tr>
<tr>
<td>26. Canal Maintenance Worker*</td>
<td>21</td>
</tr>
<tr>
<td>27. Canal System Operator</td>
<td>6</td>
</tr>
<tr>
<td>28. Electrician</td>
<td>1</td>
</tr>
<tr>
<td>29. Electronic Technician</td>
<td>2</td>
</tr>
<tr>
<td>30. Equipment Mechanic</td>
<td>2</td>
</tr>
<tr>
<td>31. Equipment Operator</td>
<td>4</td>
</tr>
<tr>
<td>32. Instrumentation Technician</td>
<td>1</td>
</tr>
<tr>
<td>33. Intern(s) (Ops./Engineering &amp; Technical Services)*</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total Full Time Positions</strong></td>
<td><strong>68</strong></td>
</tr>
</tbody>
</table>

* The following positions will remain vacant and no dollar amount will be budgeted for FY 2021, Director of Water Policy, one Administrative Assistant, one Maintenance Supervisor, one Resources Manager and three Canal Maintenance Worker positions.
An inflation factor of 3.00% per year was used in the projected wage rates to cover both the "merit increases" and "cost of living adjustment (COLA)" that will occur in FY 2021 (FY 2020 wages were used as the base).

B. Overtime hours associated with routine and extra ordinary projects equaling a total of 2.9% of total man-hours.

2. Materials

A. An inflation factor of 2.5% per year and 8.75% sales tax was used in the calculation of the majority of the required materials for FY 2021. The inflation factor and sales tax is computed on the budget worksheets. **Supporting documentation reflects current dollars and current sales tax.**

B. Routine maintenance materials were budgeted with the assumption that the planned FY 2021 purchases occur in full.

C. It is the policy of the Authority to capitalize all property, plant and equipment, except equipment costing less than $1,000 and equipment installed directly onto the Friant-Kern Canal, which is a federally owned facility. The budgeted costs for capitalize property are in the accounts of 6299, 6399 and 6799.
### 2021 & 2022 Budget

<table>
<thead>
<tr>
<th>Classification</th>
<th>2021 Budget</th>
<th>2022 Budget</th>
<th>Extrapolated</th>
<th>Actual</th>
<th>Actual</th>
<th>Extrapolated</th>
<th>Actual</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor</td>
<td>7,950,945</td>
<td>9,750,445</td>
<td>11,021,787</td>
<td>99,901</td>
<td>97,846</td>
<td>11,021,787</td>
<td>99,901</td>
<td>97,846</td>
</tr>
<tr>
<td>O&amp;M Maintenance</td>
<td>352,505</td>
<td>352,505</td>
<td>352,505</td>
<td>78,775</td>
<td>78,775</td>
<td>352,505</td>
<td>78,775</td>
<td>78,775</td>
</tr>
<tr>
<td>Repair</td>
<td>5,000,000</td>
<td>5,000,000</td>
<td>5,000,000</td>
<td>122,512</td>
<td>122,512</td>
<td>5,000,000</td>
<td>122,512</td>
<td>122,512</td>
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</tbody>
</table>

### Other Costs

<table>
<thead>
<tr>
<th>Classification</th>
<th>2021 Budget</th>
<th>2022 Budget</th>
<th>Extrapolated</th>
<th>Actual</th>
<th>Actual</th>
<th>Extrapolated</th>
<th>Actual</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Rental</td>
<td>622,618</td>
<td>622,618</td>
<td>622,618</td>
<td>146,595</td>
<td>146,595</td>
<td>622,618</td>
<td>146,595</td>
<td>146,595</td>
</tr>
<tr>
<td>Outside Services</td>
<td>215,342</td>
<td>215,342</td>
<td>215,342</td>
<td>52,247</td>
<td>52,247</td>
<td>215,342</td>
<td>52,247</td>
<td>52,247</td>
</tr>
<tr>
<td>Total Other Costs</td>
<td>838,118</td>
<td>838,118</td>
<td>838,118</td>
<td>198,842</td>
<td>198,842</td>
<td>838,118</td>
<td>198,842</td>
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</tr>
</tbody>
</table>

### Total Budget

<table>
<thead>
<tr>
<th>Classification</th>
<th>2021 Budget</th>
<th>2022 Budget</th>
<th>Extrapolated</th>
<th>Actual</th>
<th>Actual</th>
<th>Extrapolated</th>
<th>Actual</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>14,193,608</td>
<td>15,832,108</td>
<td>17,212,152</td>
<td>339,214</td>
<td>339,214</td>
<td>14,193,608</td>
<td>339,214</td>
<td>339,214</td>
</tr>
</tbody>
</table>

### General Overview

The budget for the current fiscal year is $15,440,990. This includes significant investments in maintenance and operation, with a focus on labor and O&M expenses. The budget also includes funding for repairs, equipment rental, and outside services. The overall goal is to maintain and improve the facilities and infrastructure necessary for water management and distribution. 

### Justification for FY2021 & FY2022 Spending

The increase in budget is justified by the need to address maintenance backlogs, improve infrastructure, and ensure the safety and reliability of the water system. The budget reflects a comprehensive approach to long-term sustainability and the provision of clean water to all residents.
## Project Code Description

### 2023 Budget vs. 2020 Budget

<table>
<thead>
<tr>
<th>Budget</th>
<th>2020</th>
<th>2021</th>
<th>2021 % of 2020</th>
<th>Historical Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>JSON</td>
<td>$2,762,063</td>
<td>$2,533,812</td>
<td>92.2%</td>
<td>$2,623,331</td>
</tr>
</tbody>
</table>

### Justification for FY2021 & FY2022 Spending

- **Divisional Services**:
  - **Community Services**: $1,540,998 (50.9%)
  - **Operations and Maintenance - FRKCN**: $756,000 (23.8%)

- **Total**:
  - **Divisional Services**: $2,762,063 (100.0%)

---

### Operations and Maintenance - FRKCN

<table>
<thead>
<tr>
<th>Budget</th>
<th>2020</th>
<th>2021</th>
<th>2021 % of 2020</th>
<th>Historical Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>JSON</td>
<td>$2,762,063</td>
<td>$2,533,812</td>
<td>92.2%</td>
<td>$2,623,331</td>
</tr>
</tbody>
</table>

### Justification for FY2021 & FY2022 Spending

- **Divisional Services**:
  - **Community Services**: $1,540,998 (50.9%)
  - **Operations and Maintenance - FRKCN**: $756,000 (23.8%)

- **Total**:
  - **Divisional Services**: $2,762,063 (100.0%)

---

### TOTAL SPENDING BUDGET: FY2021 & FY2022

<table>
<thead>
<tr>
<th>Budget</th>
<th>2020</th>
<th>2021</th>
<th>2021 % of 2020</th>
<th>Historical Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>JSON</td>
<td>$5,524,126</td>
<td>$5,067,624</td>
<td>91.6%</td>
<td>$5,246,662</td>
</tr>
</tbody>
</table>

### Justification for FY2021 & FY2022 Spending

- **Divisional Services**:
  - **Community Services**: $3,081,996 (55.6%)
  - **Operations and Maintenance - FRKCN**: $1,466,000 (26.7%)

- **Total**:
  - **Divisional Services**: $5,524,126 (100.0%)
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Description</th>
<th>2021 Budget</th>
<th>2021 Expenditure</th>
<th>2022 Budget</th>
<th>2022 Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1801</td>
<td>Fixed Assets</td>
<td>0.0%</td>
<td>$200</td>
<td>0.0%</td>
<td>$200</td>
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<tr>
<td>1805</td>
<td>Vehicle &amp; Equipment Service</td>
<td>-10.9%</td>
<td>$189,940</td>
<td>297,692</td>
<td>$217,676</td>
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<tr>
<td>3002</td>
<td>Maintenance &amp; Repair</td>
<td>-9.6%</td>
<td>$40,326</td>
<td>385,514</td>
<td>310,883</td>
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<tr>
<td>3005</td>
<td>Right of Way Management</td>
<td>-18.4%</td>
<td>36,302</td>
<td>59,513</td>
<td>20,012</td>
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<tr>
<td>3007</td>
<td>Work &amp; Post Construction</td>
<td>-3.2%</td>
<td>$208,764</td>
<td>263,773</td>
<td>277,185</td>
</tr>
<tr>
<td>3008</td>
<td>Fracture/Biological opinion EXP</td>
<td>0.0%</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>3009</td>
<td>Road Maintenance</td>
<td>-27.3%</td>
<td>$30,981</td>
<td>84,310</td>
<td>52,807</td>
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<tr>
<td>3050</td>
<td>Yard &amp; Building Maintenance</td>
<td>-52.1%</td>
<td>$62,746</td>
<td>86,235</td>
<td>104,513</td>
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<tr>
<td>3142</td>
<td>Structural Engineering</td>
<td>114.2%</td>
<td>149,423</td>
<td>369,872</td>
<td>681,405</td>
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<tr>
<td>3270</td>
<td>Clearing of Right-of-Way</td>
<td>-7.7%</td>
<td>$4,941</td>
<td>24,758</td>
<td>21,513</td>
</tr>
<tr>
<td>3290</td>
<td>Bridge &amp; Culvert Maintenance</td>
<td>-29.7%</td>
<td>$27,907</td>
<td>37,623</td>
<td>39,834</td>
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<tr>
<td>3292</td>
<td>Embankment Maintenance</td>
<td>76.4%</td>
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<tr>
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<td>19.6%</td>
<td>$3,911</td>
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<td>Modifying</td>
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<td>Rip-Rolling</td>
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<td>0</td>
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<td>Legal Expense Direct</td>
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<td>Payroll (all)</td>
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<td>6,627</td>
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<tr>
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<td>Inventory &amp; Property Mgt.</td>
<td>-74.1%</td>
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<td>Employee Benefit (Holidays)</td>
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<tr>
<td>3510</td>
<td>Lease - office equipment</td>
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<tr>
<td>3512</td>
<td>Lease Office Equipment</td>
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<td>0</td>
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<tr>
<td>3514</td>
<td>Auditing &amp; Auditing</td>
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<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3522</td>
<td>Outside Services / Bids</td>
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<tr>
<td>Totals</td>
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<td>243,880</td>
<td>184,242</td>
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**Note:** The above table represents the LABOR SPENDING BUDGET for FY2021 & FY2022 of FRANT WATER AUTHORITY.
<table>
<thead>
<tr>
<th>Project Code</th>
<th>Description</th>
<th>Description</th>
<th>2021 Budgeted</th>
<th>2021 Actual $</th>
<th>Location: All Locations</th>
<th>Extrapolation CPI COLA Sales Tax</th>
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<tbody>
<tr>
<td>5062</td>
<td>600324.00</td>
<td>256,948</td>
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<td>5062</td>
<td>600324.00</td>
<td>256,948</td>
<td>256,948</td>
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<td>256,948</td>
</tr>
<tr>
<td>5062</td>
<td>600324.00</td>
<td>256,948</td>
<td>256,948</td>
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<td>256,948</td>
</tr>
<tr>
<td>5062</td>
<td>600324.00</td>
<td>256,948</td>
<td>256,948</td>
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<td>256,948</td>
<td>256,948</td>
</tr>
<tr>
<td>5062</td>
<td>600324.00</td>
<td>256,948</td>
<td>256,948</td>
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<td>256,948</td>
</tr>
<tr>
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<td>600324.00</td>
<td>256,948</td>
<td>256,948</td>
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</tr>
<tr>
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<td>600324.00</td>
<td>256,948</td>
<td>256,948</td>
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<tr>
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<td>600324.00</td>
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<td>256,948</td>
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FRANT WATER AUTHORITY  
OPERATIONS AND MAINTENANCE - FRIANT CENAL  
MATERIALS SPENDING BUDGET: FY2021 & FY2022 & 2023  
Extrapolation CPI COLA Sales Tax
<table>
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<tr>
<th>Job Code</th>
<th>Budget Category</th>
<th>Total Spending</th>
<th>Material Dollars</th>
<th>Labor Dollars</th>
<th>Total Labor Hours</th>
<th>Regular Hours</th>
<th>OT Hours</th>
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<tr>
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<td>% Variance 2021</td>
<td>Variance 2020</td>
<td>Totals 2021</td>
<td>Variance 2020</td>
<td>Variance 2020</td>
<td>Variance 2020</td>
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<tr>
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<td></td>
<td></td>
<td></td>
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<tr>
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<td>($115,746)</td>
<td>$10,879,612</td>
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<tr>
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<td></td>
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<td>(119,201)</td>
<td>2,155,874</td>
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<td>(208,282)</td>
<td>-</td>
<td>(212,356)</td>
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<td>(186,444)</td>
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<td>Less: Interest and misc revenue</td>
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<td>120,000</td>
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<tr>
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<td>2020</td>
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**Total Costs**: $8,575,477

**Variance**: $2,034,834

**Reg. Hours**: $5,622

**Var. Hours**: $5,038

**Var. %**: $1,242
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<td>32,766</td>
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<td>(32,766)</td>
<td>(32,766)</td>
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<td>26,933</td>
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**TOTAL WATER OPERATIONS** | -5.9% | ($119,201)| 2,151,874| 2,155,677| ($16,846) | 2,170,210| 1,101,954| 49,055| 885,663| 934,718| 893| 20,163| 29,606| 2,102| 25,434| 27,536| ($209)| 3,729| 2,520
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<th>Material Dollars</th>
<th>Labor Dollars</th>
<th>Total Labor Hours</th>
<th>Regular Hours</th>
<th>OT Hours</th>
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<td>Variance</td>
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<tr>
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<td>-0.0%</td>
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<tr>
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<td>-0.0%</td>
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TOTAL ADMINISTRATION: 4.7% 114,965 2,346,207 2,461,171 247,039 1,406,812 1,655,851 132,074 939,394 807,320 1,096 25,399 24,303 1,080 25,208 24,128 16 191 175
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<tr>
<th>Job Code</th>
<th>Project Title</th>
<th>Project Location</th>
<th>Dept.</th>
<th>Total Cost</th>
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<tr>
<td>6030</td>
<td>Aquatic Weed Control</td>
<td>MP 46.04 to MP 61.03 / Orange Cove</td>
<td>Maintenance</td>
<td>$245,172</td>
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<tr>
<td>6040</td>
<td>Roadway Chip Seal</td>
<td>MP 15.0 to MP 28.54 / Orange Cove</td>
<td>Maintenance</td>
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<td>6060</td>
<td>Gate Actuator Upgrade</td>
<td>Multiple Sites</td>
<td>Maintenance</td>
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<td>Sand Blast &amp; Paint Metal Work - Canal Structures</td>
<td>MP 69.42 &amp; MP 71.29</td>
<td>Maintenance</td>
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<td>Maintenance &amp; Repair on Metal Components at Turnouts</td>
<td>MP 107.34 to MP 151.81</td>
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<td>6120</td>
<td>Concrete Liner Replacement</td>
<td>8 Sites, 40 Panels</td>
<td>Maintenance</td>
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Totals: $1,255,672
Project Title: Aquatic Weed Control

Job Code: 6030

Project Location and Maintenance Department: MP 46.04 to MP 61.03 / Orange Cove Maintenance

Project Description: Apply pre-emergent herbicide in selected unlined sections approximately 164 acres to control invasive aquatic weed.

Estimated Total Project Cost $245,172.00

General Justification: Reducing the aquatic weed biomass in the canal will have many advantages including reduction of capacity limitations, reduction of restrictions at turnouts, reduction of restrictions at end user irrigation systems, and reductions in silt accumulation within the prism.

Operating Impact: If aquatic weed is not controlled it will continue to decrease canal capacity, cause restrictions in turnouts, and cause restrictions in end user irrigation systems.

Photo of Existing Conditions MP 48.60
Friant Water Authority  
Major Maintenance Projects  
Cost Summary  
Proposed for FY 2021

**Project Title:** Aquatic Weed Control

**Project Location and Maintenance Department:** MP 46.04 to MP 61.03 / Orange Cove Maintenance.

**Estimated Total Project:** $245,172.00

### Breakdown of Estimated Costs

**Materials:**
- Preemergent Herbicides  
  164 acres @ $1,100.00 an acre  
  (includes water testing)  
  **Subtotal:** $180,400.00

**Rental Equipment:**
- Excavator  
  ($10,000 per month x 1 month)  
  **Subtotal:** $10,000

**Fuels:**
- 1- Excavator @ 80 gals a day x 26 days = 2,080 gals.  
  Diesel = 4.50 a gal (Current Price)  
  **Subtotal:** $9,360

**Regular Labor (Hours and Cost):**
- 5 - CMW (22 days @ 8 hr. @ $24.68/hr.)  
  **Subtotal:** $21,718.40

**Overtime Labor (Hours and Cost):**
- 5 – CMW (22 days @ 4 hr. OT/day @ $37.02/hr.)  
  **$16,288.80**
- 5 – CMW (4 Saturdays @ 10 hr. @ $37.02/hr.)  
  **$7,404.00**
  **Subtotal:** $23,692.80

**Total:** $245,172.00
Friant Water Authority
Major Maintenance Project
Summary Sheet
Proposed For FY 2021

Project Title: Operation and Maintenance Roadway Chip Seal.

Job Code: 6040

Project Location and Maintenance Department: Approx. MP 15.0 to MP 28.54 / Orange Cove

Project Description: Chip seal a 15 mile section of canal roadway with 3/8” rock and CRS-2H asphalt emulsion. An in-house hauling operation will stock pile chip material from a local plant staging it along the 15-mile section of roadway. Outside service contractor will provide emulsion trucks to disperse asphaltic emulsion onto the existing road. Authority staff will follow behind operating a chipping machine, placing rock chips over the emulsion. The rock chips will be forced into the emulsion with two rented roller compactors. Once the rock/emulsion mixture sets, the roadway is swept to remove loose chips.

Estimated Total Project Cost (x1000): $134.5

Estimated Total Project Cost (Excluding Regular Labor Costs, x1000): $116.9

General Justification: Chip seal applications are repeated on a 10-year rolling cycle. Chip sealing slows down serious deterioration of the operational canal roadways lessening the need for road removal and reconstruction. An inspection of the 152 miles of operational roadway is conducted each year to determine sections to be chip sealed.

Operating Impact: Failure to maintain good road conditions could directly delay operation and maintenance in the event of road failure, as well as pose a serious threat to the safety of those traveling on the canal roadways.

Photo of Existing Conditions
### Friant Water Authority

**Major Maintenance Projects**

**Cost Summary**

Proposed For FY 2021

---

**Project Title:** Roadway Chip Seal Project

**Project Location and Maintenance Department:** Approx. MP 0.0 to MP 15.00 / Orange Cove

**Estimated Total Project Cost (x1000):** $134.5

**Estimated Total Project Cost (Excluding Regular Labor Costs x1000):** $116.9

---

#### Breakdown of Estimated Costs

**Contract Services: (3 day project)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emulsion Truck Spread Time - ($135/hr. for 24 hours.)</td>
<td>$3,240</td>
</tr>
<tr>
<td>Chip Spreader w/Operator - ($5,000 per 8 hr. day)</td>
<td>$15,000</td>
</tr>
</tbody>
</table>

Subtotal: **$18,240**

**Materials:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emulsion (150 Ton @ $415/Ton)</td>
<td>$62,250</td>
</tr>
<tr>
<td>Screenings (1,700 Ton @ $15/Ton)</td>
<td>$25,500</td>
</tr>
</tbody>
</table>

Subtotal: **$87,750**

**Rental Equipment:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roller - ($1,300 per week x 2 units)</td>
<td>$2,600</td>
</tr>
<tr>
<td>Sweeper – ($1,135 per week)</td>
<td>$1,135</td>
</tr>
</tbody>
</table>

Subtotal: **$3,735**

**Fuel:**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stockpile – 1,932 gal (23 gal/day x 28 days x 3 trucks)</td>
<td>$6,666</td>
</tr>
<tr>
<td>Roller – 90 gal (15 gal/day x 3 days x 2 units)</td>
<td>$311</td>
</tr>
<tr>
<td>Sweeper – 30 gal (10 gal/day x 3 days)</td>
<td>$104</td>
</tr>
</tbody>
</table>

Diesel = $3.45/gallon

Subtotal: **$7,081**

**Regular Labor (Hours and Cost):**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stockpile – 3 CMW (28 days x 8 hr./day @ $21.65/hr.)</td>
<td>$14,550</td>
</tr>
<tr>
<td>Chip-Seal – 6 CMW (3 days x 8 hr./day @ $21.65/hr.)</td>
<td>$3,118</td>
</tr>
</tbody>
</table>

Subtotal: **$17,668**

---

**Total:** **$134,474**
Friant Water Authority
Major Maintenance Projects
Summary Sheet
Proposed For FY 2021

Project Title: Gate Actuator Upgrade

Job Code: 6060

Project Location and Department: Scheduled Gate Actuator upgrade is schedule in various locations along the 152-mile system unless noted otherwise. / Operations.

Project Description: This will be a replacement of both the gate actuator and gate shaft that raise and lower the gates at these various sites. A total of eight actuators and shafts will be replaced. This is part of the standardization plan in the canal system.

Estimated Total Project Cost (x1000): $ 150.0

Estimated Total Material Cost (Including Fuel Costs, x1000): $ 120.2

General Justification: This effort is to bring the sites to a higher level of operational reliability and to standardize the gate actuators along the canal system.

Operating Impact: Replacement of these gate actuators will bring a higher level of operational reliability to the canal system by both having new components in service and having standardization in the event of a failure thereby reducing operational downtime.

View of Similar Conditions
**Friant Water Authority**  
**Major Maintenance Projects**  
**Cost Summary**  
Proposed For FY 2021

**Project Title:** Gate Actuator Upgrade

**Project Location and Department:** Scheduled Gate Actuator upgrade is scheduled in various locations along the 152-mile system unless noted otherwise. / Operations.

**Estimated Total Project Cost (x1000):** $150.0

**Estimated Total Material Cost (Including Fuel Costs, x1000):** $120.2

### Breakdown of Estimated Costs

**Contract Service:** n/a

- Machine Shop Services  
  Subtotal: $19,195

**Materials:**

- 6 - 1 Hp Gate Actuators and Shafts @ $13,700 ea.  
  $82,200
- 2- 4 Hp Gate Actuators and Shafts @ $19,000 ea.  
  $38,000

  *(Motor Prices include starters, breaks, and cabinets.)*  
  Subtotal: $120,200

**Rental Equipment:** n/a  
  Subtotal: n/a

**Fuel:** n/a  
  Subtotal: n/a

**Regular Labor (Hours and Cost):**

<table>
<thead>
<tr>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Electrician (25 days @ 8 hr. @ $30.77/hr.)</td>
<td>$6,154</td>
</tr>
<tr>
<td>1 – CMW (20 days x 8 hr./day @ $27.82/hr.)</td>
<td>$4,451</td>
</tr>
</tbody>
</table>

Subtotal: $10,605

---

Total: $150,000
Friant Water Authority
Major Maintenance Projects
Summary Sheet
Proposed for FY2021
(Dewatering)

**Project Title:** 6060 Sandblast and paint metal work at Friant Kern Canal Structures.

**Project Location and Maintenance Department:** MP.69.42 and MP 71.29

**Project Description:** Sandblast and paint rusted radial gates & components at MP.69.42 St. Johns river Waste way and MP 71.29 Kaweah River Waste way structures on the Friant Kern Canal

**Estimated Total Project Cost (x1000):** 220K

**Estimated Total Project Cost (Excluding Regular Labor Costs, x1000):** 187k

**General Justification:** In 2017 dewatering an inspection was performed at all check structure locations, from that inspection a scheduled list of structures requiring painting was identified.

**Operating Impact:** Failure to sandblast and paint the identified locations may result in failure of gate components.

**Photo of Existing Conditions MP. 69.42 Waste way Structure**
Friant Water Authority
Major Maintenance Projects
Cost Summary
Proposed for FY 2021

Project Title: 6060 Sandblast and paint metalwork at Friant Kern Canal Radial Gates.

Project Location and Maintenance Department: MP.69.42 and MP 71.29

Project Description: Sandblast and paint rusted radial gates & components at MP.69.42 at St. Johns Waste way and MP 71.29 Kaweah River Waste way on the Friant Kern Canal

Estimated Total Project Cost (x1000): 220k

Estimated Total Project Cost (Excluding Regular Labor Costs, x1000): 187K

Breakdown of Estimated Costs

Contract Services: (Temporary Employees)
Three Employees x 440 hrs. Each @ $14.43/hr. = $ 19,048.00
55 days @ 4 hrs. OT/day x Three Employees @ $21.12/hr. = $ 14,289.00
8 Saturdays @ 10 hrs. OT/day x Three Employees @ $21.12/hr. = $ 5,196.00
Subtotal: $38,533.00

Materials:
- Paint/Thinners = $21,850
- Blast Material = $21,263
- Safety & Misc. Supplies = $3,000.00
- J-Seals & Hardware = $37,481.00
Subtotal: $83,594.00

Rental Equipment:
- 2 -Man lifts @ $2,000 per month x 2 = $8,000.00
- 1-Compressor @ $1,800 per month x 2 = $3,600.00
- 1-160 cubic foot Sandblasting pot @ $2,400 Per month x 2 = $4,800.00
Subtotal: $16,400.00

Fuels:
- 2- Man lifts @ 14 gals a day x 63 days = 1,764 gals. = $7,938.00
- Air Compressor @ 25 gals a day x 63 = 1,575 gals. = $7,087.00
- Diesel = 4.50 a gal (Current Price)
Subtotal: $15,025.00

Regular Labor (Hours and Cost):
Three Employees x 440 hrs. Each @ $24.68/hr. = $32,578.00

Overtime Labor (Hours and Cost):
- Eight Saturdays x three employees x 10 hrs. @ $37.02/hr. = $8,885.00
- 55 days @ 4 hrs. OT/day x six employees @ $37.02/hr. = $24,443.00
Subtotal: $65,906
Total: $219,458.00
Friant Water Authority
Major Maintenance Projects
Summary Sheet
Proposed for FY2021
(Dewatering)

Project Title:  6060 Maintenance and repair metal work at Friant Kern Canal turnouts.

Project Location and Maintenance Department:  Delano section

Project Description: Maintenance and repair metal components at turnout locations MP. 107.34 to 151.81 on the Friant Kern Canal

Estimated Total Project Cost (x1000):  202.5K

Estimated Total Project Cost (Excluding Regular Labor Costs, x1000):  137K

General Justification: Last dewatering inspection was preformed in the Delano section from that a list of turnouts requiring repairs and maintenance was identified.

Operating Impact: Failure to maintenance or repair the identified locations may result in failure of gate components.

Photo of Existing Conditions
Friant Water Authority  
Major Maintenance Projects  
Cost Summary  
Proposed for FY 2021

Project Title: 6060 Maintenance and repair metal work at Friant Kern Canal turnouts

Project Location and Maintenance Department: Delano section.

Estimated Total Project Cost (x1000): 202.5K

Estimated Total Project Cost (Excluding Regular Labor Costs, x1000): 137K

Breakdown of Estimated Costs

**Contract Services:** (Temporary Employees)
Three Employees x 440 hrs. Each @ $14.43/hr. = $19,048
55 days @ 4 hrs. OT/day x Three Employees @ $21.65/hr. = $14,289
8 Saturdays @ 10 hrs. OT/day x Three Employees @ $21.65/hr. = $5,196
Subtotal: $38,533

**Materials:**
- Paint/Thinners = $6,720
- Blast Material = $10,000
- Safety. Supplies = $1,000
Subtotal: $17,720

**Rental Equipment:**
- Man lift @ $1,800/mo. x 2 mo. = $3,600
- Compressor @ $1,800/mo. x 2 mo. = $3,600
Subtotal: $7,200

**Fuels:**
- Man lift @ 10 gals a day x 63 days = 630 gals. = $2,835
- Compressor @ 15 gals a day x 63 = 945 gals. = $4,253
- Diesel @ 4.50 a gal
Subtotal: $7,088

**Regular Labor (Hours and Cost):**
Six Employees x 440 hrs. Each @ $24.68/hr. = $65,155
Subtotal: $65,155

**Overtime Labor (Hours and Cost):**
Eight Saturdays x six employees x 10 hrs. @ $37.02/hr. = $17,770
55 days @ 4 hrs. OT/day x six employees @ $37.02/hr. = $48,866
Subtotal: $66,636

Total: $202,332
Friant Water Authority
Major Maintenance Projects
Summary Sheet
Proposed for FY 2021
(Dewatering)

**Project Title:** Concrete Liner Replacement

**Job Code:** 6120

**Project Location and Maintenance Department:** MP 30.50, MP 64.40 &-MP 106.19/Lindsay

**Project Description:** Replace Failed/Cracked Concrete Liner Panels – 8 Sites, 40 Panels

**Estimated Total Project Cost (x 1000):** $303.5

**Estimated Total Material Cost (Including Fuel Costs x 1000):** $118.4

**General Justification:** Concrete panels in the Lindsay section are cracked/failing causing leaks and embankment failures.

**Operating Impact:** By not repairing the concrete panels, further failure/cracking will occur which will cause embankment instability, leaks and possible canal failure.

*Photo of Existing Conditions*
Friant Water Authority
Major Maintenance Projects
Cost Summary
Proposed for FY 2021
(Dewatering)

Project Title: Concrete Liner Replacement

Project Location and Maintenance Department: MP 30.50, MP 64.40 & MP 106.19/Lindsay

Estimated Total Project Cost (x 1000): $303.5

Estimated Total Material Cost (Including Fuel Costs x 1000): $118.4

Breakdown of Estimated Costs

Contract Services: (Work Start 11/28)

3 Employee (43 days x 8 hr./day @ $13.96/hr.) $14,407
3 Employee (43 days x 4 hr./day OT @ $20.94/hr.) $10,806
3 Employee (8 Saturdays x 10 hr./day OT @ $20.94/hr.) $5,026
Concrete Pump Truck $17,500
Subtotal: $47,739

Materials:

Concrete 300 yds x $130/yd. (40 panels at 7.5 yds/panel) $39,000
Subtotal: $39,000

Equipment:

Long Reach Excavator (Price for 2 Month Rental) $18,960
Subtotal: $18,960

Fuel:

Excavator – 2,907 gal (57 gal/day x 51 days) $11,628
Roller Screed - 255 gal (5 gal/day x 51 days) $1,020
Diesel = $4.00/gallon
Subtotal: $12,648

Regular Labor (Hours and Cost):

12 CMW (43 days x 8 hr./day @ $21.36/hr.) $88,175
Subtotal: $88,175

Overtime Labor (Hours and Cost):

12 CMW (43 days x 4 hr./day @ $32.04/hr.) $66,131
12 CMW (8 Saturdays x 10 hr./day @ $32.04/hr.) $30,759
Subtotal: $96,890

Total: $303,412
FY 2021
NON-ROUTINE
O & M
PROJECT
JUSTIFICATIONS
## Non-Routine O&M Projects
### FY 2021

<table>
<thead>
<tr>
<th>Job Code</th>
<th>Project Title</th>
<th>Project Location</th>
<th>Dept.</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>6221</td>
<td>FKC Pump-Back Project</td>
<td>Multiple Sites</td>
<td></td>
<td>$25,000</td>
</tr>
<tr>
<td>6225 &amp; 6226</td>
<td>FKC Capacity Correction Project</td>
<td>Middle Reach - Approx. MP 88.2 to MP 121.5</td>
<td></td>
<td>$5,000,000</td>
</tr>
<tr>
<td>6230</td>
<td>Ground Water Sustainability Agencies Engagement</td>
<td>Friant Kern Canal and Associated Facilities</td>
<td></td>
<td>$536,600</td>
</tr>
<tr>
<td>6370</td>
<td>Friant Kern Canal Water Quality Program</td>
<td>Entire Friant Kern Canal (152 Miles)</td>
<td></td>
<td>$146,000</td>
</tr>
<tr>
<td>6402</td>
<td>Title Transfer</td>
<td>Friant Kern Canal, Madera Canal and Associated Facilities</td>
<td></td>
<td>$-</td>
</tr>
</tbody>
</table>

**Totals:** $5,707,600
Friant Water Authority
Non-Routine O&M Project
Summary Sheet
Proposed for FY 2021

Project Title: Friant Kern Canal Reverse Pump-Back Project

Job Code: 6221

Project Location: Friant-Kern Canal from terminus MP 151.8 to Tule River pool MP 95.67

Project Description: The Secretary of the Interior is authorized in PL-111-11 Section 10201 and directed to conduct feasibility studies in coordination with Friant Water Authority and create improvements or reverse flow pump-back facilities on the Friant-Kern Canal to help manage for water supply lost as part of the San Joaquin River Restoration Program Settlement. In August 2016, Friant Water Authority (FWA) entered into a Financial Assistance Agreement (FAA) with the U. S. Bureau of Reclamation to design and construct Reverse flow Pump-Back facilities in the lower reaches of the FKC. The current project is at 30% design and is looking to build reverse flow pump-back facilities at Shafter Check, Woollomes Check and Deer Creek Check.

Estimated Project Costs (x1000): $56,000 pre- 30% design estimate
Fiscal Year 2021 Budget = $25.0

General Justification: This project originally stemmed from the SJRRP to help facilitate the Long-Term Recapture and Recirculation program. It was authorized as part of the settlement program to help Friant Division Contractors keep access to their water utilized to help restore the SJR fishery. This program helps keep the SJR settlement viable.

Operating Impact: The reverse flow pump-back project provides a significant amount of flexibility in making the San Joaquin River Settlement Water Supply initiatives successful. Facilities also have the potential for use by FKC contractors at other drought times when the return of supplies wouldn’t be possible without this infrastructure.
Friant Water Authority
Non-Routine O&M Project
Cost Summary
Proposed for FY 2021

**Project Title:** Friant Kern Canal Reverse Pump-Back Project

**Project Location and Department:** Friant-Kern Canal from terminus MP 151.8 to Tule River Check MP 95.67 / Maintenance Department.

**Estimated Total Project Cost (x1000):** $56,000 pre- 30% design estimate
Fiscal Year 2021 Budget = $25.0

**Estimated Total Material Cost (Including Fuel Costs, x1000):** $25.0

**Breakdown of Estimated Costs**

**Contract Service:**
To assist in bridging the funding gap between the Federal FAA and the Financial Assistance Agreement with the Department of Water Resources

Subtotal: $25.0

**Materials:** n/a

Subtotal: n/a

**Rental Equipment:** n/a

Subtotal: n/a

**Fuel:** n/a

Subtotal: n/a

**Regular Labor (Hours and Cost):** Labor Costs will be funded through the Financial Executive Team (COO, CEO, etc…))………. Assistance Agreements
Senior Engineer……………………………
Engineering Technician……………………

Subtotal: $0.0

Total: $ 25,000
Friant Water Authority
Non-Routine O&M Project
Summary Sheet
Proposed for FY 2021

Project Title: FKC Capacity Correction Project – Subsidence Correction

Job Code: 6225 & 6226

Project Location: Middle Reach - Approx. MP 88.2 to MP 121.5

Project Description: Friant Water Authority is undertaking evaluations of potential conveyance and operational improvements to the FKC to address original design and subsidence induced capacity reductions. The FKC has been subject to regional subsidence for several years. This subsidence-induced capacity reduction is most prevalent in the FKC Middle Reach (MP 88 and MP 122). Increased groundwater pumping during the drought period from 2012 through 2016 has caused further subsidence of the FKC and reduced canal capacity to levels that have the potential to impair water delivery operations.

Estimated Project Costs (x1000): $350,000 to $535,000
Fiscal Year 2021 Budget = $5 million

General Justification: For the Subsidence Correction Project, at the March 28, 2019 meeting, the Board of Directors authorize up to $5M in pre-construction costs to be considered OM&R and directed Staff to budget accordingly. The allocation of the remaining balance of the Project will be determined once the scope of the Project is defined and the Board takes final action to proceed with the construction of the Project.

Operating Impact: Without correction, the capacity of the FKC to deliver a full run of Class 2 supplies would be impaired below Deer Creek Check. This directly affects the flexibility of several districts to schedule contract supplies for delivery.
**Friant Water Authority**

**Non-Routine O&M Project**

**Cost Summary**

Proposed for FY 2021

**Project Title:** FKC Capacity Correction Project – Subsidence Correction

**Project Location and Department:** Middle Reach - Approx. MP 88.2 to MP 121.5 / Maintenance Department.

**Estimated Total Project Cost (x1000):** $350,000 to $535,000

Fiscal Year 2021 Budget = $5 million

**Estimated Total Material Cost (Including Fuel Costs, x1000):** unknown

**Breakdown of Estimated Costs**

Of the $5 million budgeted for FY 2021, $348,000 is for FWA involvement in the completion of final permits, engineering designs, real estate transactions, finance plans, contract negotiations, construction contract administration, and construction management. $4,650,000 is an estimate for FWA non-federal cost share requirements in FY 2021, if necessary. While the total FY 2021 non-federal cost-share is expected to be much greater than this amount, until a financing plan for the Project is finalized in the fall of 2020, the exact amount and allocation is not certain. Once a final amount is determined and approved by the FWA board of directors, an adjustment to this amount will be made.

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Total: $5,000,000
**Project Title:** Groundwater Sustainability Agencies Engagement

**Job Code:** 6230

**Project Location:** Friant-Kern Canal and associated facilities

**Project Description:** Friant Water Authority has undertaken a review of the various Groundwater Sustainability Plans (GSP) that have the potential to affect the lands adjacent to the Friant-Kern Canal. Through the engagement of Groundwater Sustainability Agencies (GSA), the Authority seeks to protect the facility from adverse impacts like subsidence.

**Estimated Project Costs (\( \times 1000 \)):** \$unknown

Fiscal Year 2021 Budget = $536.6

**General Justification:** during the summer of 2019, the FWA Board of Directors sent notice letters regarding undesirable subsidence impacts on the Friant-Kern Canal. This letter requested that each GSP identify the effects of subsidence emanating from or within the various basins on the Friant-Kern Canal and treat it as an undesirable result that must be avoided. Fast forward to summer of 2020 and various GSA have identified impacts to the FKC through transitional pumping. The proposed budget is for the continuation of the monitoring of management actions and mitigation and to prepare for legal action if necessary.

**Operating Impact:** Potentially has a high operational impact if the Friant-Kern Canal continues to subside without mitigation.
Friant Water Authority
Non-Routine O&M Project
Cost Summary
Proposed for FY 2021

Project Title: Groundwater Sustainability Agencies Engagement

Estimated Total Project Cost (x1000): unknown
Fiscal Year 2021 Budget = $536.6

Breakdown of Estimated Costs

Contract Service:
Special Counsel for preparing legal actions, if necessary.
Subject matter experts for additional review of impacts.

Subtotal: $320,000

Contract Service:
Special Counsel for negotiation assistance

Subtotal: $75,000

Regular Labor (Hours and Cost):
Executive Team (COO, CEO, etc…)…………1024 hrs @138.27

Subtotal: $141,589

Total: $ 536,589
Friant Water Authority
Non-Routine O&M Project
Summary Sheet
Proposed for FY 2021

Project Title: Friant Kern Canal Water Quality Program

Job Code: 6370

Project Location: Friant-Kern Canal (entire 152 miles)

Project Description: Friant Water Authority is embarking on the management of the quality of water delivered through the Friant-Kern Canal. The FKC water quality program will consist of monitoring, measuring and reporting various water quality changes in the FKC associated with the introduction of non-Millerton Lake water. This is the initial costs of standing up a program to be able to satisfy the needs of contractors throughout the system.

Estimated Project Costs (x1000): $unknown (depends on the final constituents list and program requirements)
Fiscal Year 2021 Budget = $146

General Justification: The Board of Directors, at the request of the Water Quality Ad Hoc group has requested that staff pursue management of a Water Quality Plan. This plan originally stemmed from the environmental requirements of both the Long-Term Recapture and Recirculation EIS/R (LTRREIS) and the Friant-Kern Canal Reverse Pump-back Project Environmental Assessment (EA). While the full water quality plan is still being scoped, the Water Quality Ad Hoc group and the Board of Directors requested Staff create a model, start monitoring as appropriate, and create notification when water from the cross-valley system were being introduced to the FKC.

Operating Impact: This estimate assumes implementation of the Friant-Kern Canal Water Quality Policy (Policy) will occur in this fiscal year. Although the costs for finalizing and implementing the Policy will be applied under a separate cost code (and reimbursed through FAA agreements with DWR and Reclamation), the administration and water quality monitoring outlined in the Policy will be applied 6370. A portion of these costs will be reimbursed through a surcharge applied to those Friant contractors that introduce water into the FKC once the Policy is implemented.
Friant Water Authority
Non-Routine O&M Project
Cost Summary
Proposed for FY 2021

Project Title: Friant Kern Canal Water Quality Program

Project Location and Department: Friant-Kern Canal (entire 152 miles) /Operations Department

Estimated Total Project Cost (x1000): $unknown (depends on the final constituents list and program requirements)
Fiscal Year 2021 Budget = $146

Estimated Total Material Cost (Including Fuel Costs, x1000): $71

Breakdown of Estimated Costs

Contract Service: (Stantec)
All contracting services billed under reimbursable tasks of 6221 (Pumpback) for technical support of managing CEQA mitigation requirements

Water Quality Testing Equipment and Laboratory Testing –
- Purchase and install of ten (10) Seametrics CT2X conductivity sensors at remaining FKC check structures - $30,100
- Annual sensor and meter maintenance - $5,150
- Periodic in-prism water quality laboratory testing - $35,750

Subtotal: $71,000

Regular Labor (Hours and Cost):
It is assumed that the implementation of the Policy will occur part-way through the fiscal year and will require the hiring of another full-time staff member. This staff member will be required to:
- Maintain and calibrate conductivity meters on a bi-weekly basis
- Perform water quality sampling during pump-in operations, coordinate laboratory water quality testing
- Oversee FWA staff, coordinate with Friant Division contractors on water quality data
- Manage water quality and operations database
- Perform weekly water quality reporting and forecasting using FKC Water Quality Model
- Perform weekly analysis to determine mitigation and distribution to respective Friant districts using the FKC Water Quality Mitigation Ledger
- Coordinate with U.S. Department of the Interior, Bureau of Reclamation’s South-Central California Area Office on water quality reporting, mitigation, and contractual requirements
- Coordinate and facilitate FWA committee on water quality

Subtotal: $75,000

Total: $146,000
Friant Water Authority
Non-Routine O&M Project
Summary Sheet
Proposed for FY 2021

**Project Title:** Friant Division Title Transfer

**Job Code:** 6402

**Project Location:** Friant-Kern Canal and associated facilities, Madera Canal, federally owned distribution facilities in the Friant Division

**Project Description:** Friant Water Authority is undertaking evaluations of the potential to transfer in fee, the titles of the FKC, the Madera Canal and the federally owned distribution facilities in the Friant division. The title transfer process could take several years and include the need for lands, environmental and other procedural requirements as well as crafting both a memorandum of understanding (MOU) with Reclamation and a Title Transfer agreement.

**Estimated Project Costs (x1000):** $2,547 in 2019 dollars
($1,783 in permitting and Title related costs)
($763.5 in outstanding balances of Friant district capital)

**Fiscal Year 2021 Budget = $0**

**General Justification:** In November of 2017 and continually since, the Board of Directors has requested that staff pursue the transfer of title to the Friant-Kern Canal. The transfer of title would allow greater flexibility in operations, maintenance and replacement, will limit Endangered Species Act (ESA) exposure, provide eligibility for non-reclamation federal funding sources, and has the potential to provide flexibility to use the lands as collateral.

**Operating Impact:** None immediately, the advantages of transfer of title come after the facility is transferred and FWA can more appropriately manage the lands and the repairs needed by the FKC.

---

**Title Transfer · Process Flow Chart**

- **Scope Definition**
  - Title Team
  - Title Packet
  - Checklist
  - Initial Transaction $ Estimate of Valuation $ 8
  - Team: FWA - FWA Legal - FWA - Friant BOD

- **MOU Development**
  - Roles and Responsibilities
  - Project Time Table
  - Team: FWA Legal - FWA - Friant BOD

- **Title Transfer Agreement**
  - Who gets what
  - Mitigation required
  - Payments
  - Post-transfer Governance agreement
  - Team: FWA - FWA Legal - Friant BOD

- **Procedural Requirements**
  - NPRP
  - NTPA
  - LANDs
  - Constitutions?
  - Team: FWA - FWA Legal - Friant BOD

- **Title Transfer Legislation**
  - Developed jointly
  - Jointly presented to Congress
  - Jointly support Passage
  - Post-transfer Governance agreement
  - Team: FWA - FWA Legal - Friant BOD

- **Legislation Implementation**
  - Finalize Deed
  - Finalize Boundary Surveys
  - Facility Work through with new governing body (DWR)?
  - Sign and Record Deeds
  - Team: FWA - FWA Legal - Friant BOD

---

**Project Management**
Friant Water Authority
Non-Routine O&M Project
Cost Summary
Proposed for FY 2021

Project Title: Friant Division Title Transfer

Project Location and Department: Friant-Kern Canal and associated facilities, Madera Canal, federally owned distribution facilities in the Friant Division / Maintenance Department.

Estimated Total Project Cost (x1000): $2,547 in 2019 dollars
($1,783 in permitting and Title related costs)
(763.5 in outstanding balances of Friant district capital)
Fiscal Year 2021 Budget = $0

Estimated Total Material Cost (Including Fuel Costs, x1000): $

Breakdown of Estimated Costs

Contract Service:
Special Counsel for drafting of MOU
and pre-drafting of title transfer agreement tenants
Subtotal: $149,540

Regular Labor (Hours and Cost):
Executive Team (COO, CEO, etc…)……….496 hrs @129.29
Subtotal: $59,167

Total: $ 208,707

Note: there is no new budget proposed in FY2021 – all funds needed will come from the previous year’s budget (FY-2020). Activities for title transfer that are related to: Right-of-way cadastral surveying, lands actions and legal descriptions, title searches and agreements, and USBR rights-of-way management are vital to both the transfer agreement and to the Authorities day to day operations of the canal. Staff recommends the continued pursuit of these actions irrespective of the decision on Title.
FY 2021
VEHICLES
&
EQUIPMENT
<table>
<thead>
<tr>
<th>Job Code</th>
<th>Equipment &amp; Vehicles</th>
<th>Location</th>
<th>Dept.</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>One 1 Ton Flatbed Truck</td>
<td>Orange Cove</td>
<td>10</td>
<td>$31,000</td>
</tr>
<tr>
<td>1991</td>
<td>Portable Compressor</td>
<td>Orange Cove</td>
<td>10</td>
<td>$31,000</td>
</tr>
<tr>
<td>1991</td>
<td>Ford F150 Pickup</td>
<td>Orange Cove</td>
<td>10</td>
<td>$24,100</td>
</tr>
<tr>
<td>1991</td>
<td>One 1/2 Ton Forman Pickup</td>
<td>Orange Cove</td>
<td>10</td>
<td>$30,000</td>
</tr>
<tr>
<td>1991</td>
<td>Ford F150 Pickup</td>
<td>Lindsay</td>
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<tr>
<td>1991</td>
<td>Utility Tractor</td>
<td>Delano</td>
<td>30</td>
<td>$110,000</td>
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<tr>
<td>1991</td>
<td>OBD Engine Light Scanner</td>
<td>Mechanics</td>
<td>40</td>
<td>$5,573</td>
</tr>
<tr>
<td></td>
<td><strong>Totals:</strong></td>
<td></td>
<td></td>
<td><strong>$255,773</strong></td>
</tr>
</tbody>
</table>

**Engineering**

<table>
<thead>
<tr>
<th>Job Code</th>
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<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>Survey Equipment: Schonstedt instrument and laser level</td>
<td>65</td>
<td>$1,672</td>
</tr>
<tr>
<td>1991</td>
<td>Under water drone w/ camera to view siphons</td>
<td>65</td>
<td>$2,229</td>
</tr>
<tr>
<td>1991</td>
<td>Flying Drone- GIS / Survey</td>
<td>65</td>
<td>$2,229</td>
</tr>
<tr>
<td>1991</td>
<td>Monitor/TV. Use as drawing board w/ ipad and view plans</td>
<td>65</td>
<td>$892</td>
</tr>
<tr>
<td></td>
<td><strong>Totals:</strong></td>
<td></td>
<td><strong>$7,022</strong></td>
</tr>
</tbody>
</table>

**IT Technology**

<table>
<thead>
<tr>
<th>Job Code</th>
<th>Equipment &amp; Vehicles</th>
<th>Dept.</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1991</td>
<td>(2) Desktop Computers</td>
<td>70</td>
<td>$6,688</td>
</tr>
<tr>
<td>1991</td>
<td>(5) Laptop Computers</td>
<td>70</td>
<td>$15,606</td>
</tr>
<tr>
<td>1991</td>
<td>(12) Mobile Devices</td>
<td>70</td>
<td>$8,918</td>
</tr>
<tr>
<td></td>
<td><strong>Totals:</strong></td>
<td></td>
<td><strong>$31,212</strong></td>
</tr>
</tbody>
</table>

**Totals:** **$294,007**
Friant Water Authority
Vehicle/Equipment Justification Form

Date: 5/5/2020          FY - 2021

Replacement: ☒  Addition: ☐

ESTIMATED COSTS: $110K

Proposed Delivery Date: 2021

Department: Delano Maintenance Facility

Purpose of Vehicle/Equipment: The utility tractor is one of the most versatile pieces of equipment used in the maintenance of the canal. In normal years, the maintenance department used an average 500 hours of utility tractor operation time per year. Daily maintenance activities for our utility tractor include road work, stock piling, drain ditch clearing, loading trucks, back dragging, digging, filling washes, pulling equipment, trash removal, mowing ROW’S, and lifting. The Delano maintenance section has sandy soil conditions, requiring increased embankment work for which the utility tractor is frequently needed.

Reason(s) for Replacement: The present 570XL Case tractor located in the Delano yard has been in service for 22 years. Environmental regulations require turnover of the equipment. Installing a particulate filter on the equipment is not feasible.

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: The proposed utility tractor would comply with state and federal laws. reduce downtime for repairs and would be a great help on future projects. Upcoming maintenance where the tractor would be valuable are canal lining replacement, major roadwork, drain ditch cleaning, riprap at Lake Woollomes and mowing vegetation along the Friant Kern Canal Right of Ways.
Friant Water Authority
Vehicle/Equipment Replacement Justification
Mechanics Report

Date: 5/5/2021
Vehicle/Equipment: Utility Tractor

RTA: 3304  Year: 1998  Age (yrs.): 22
Make: Case  Model: 570XL
Department: Maintenance  Maintenance Yard: Delano

Current Mileage/Hours:

<table>
<thead>
<tr>
<th>GENERAL CONDITIONS:</th>
<th>POOR</th>
<th>FAIR</th>
<th>GOOD</th>
<th>EXCELLENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body and Interior:</td>
<td></td>
<td>☒</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suspension:</td>
<td></td>
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<td>☒</td>
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<tr>
<td>Drive Train:</td>
<td></td>
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<td>☒</td>
<td></td>
</tr>
<tr>
<td>Engine:</td>
<td></td>
<td></td>
<td>☒</td>
<td></td>
</tr>
</tbody>
</table>

History of Repairs: Normal repair and maintenance items as well as transmission repairs and control valve repairs.

Estimated Future Repair Cost: Normal Radiator replacement $2,000, Hydraulic system overhaul along with pins and bushings $5,000.

Safety Concerns: N/A

Mechanic’s Recommendations: Replace backhoe with a modern and emission compliant machine.

ESTIMATED SALVAGE VALUE: $15,000.00
Date: 04-29-20  
Vehicle/Equipment: 1021  
Replacement: ☒  Addition: ☐  
Estimated Cost: $31,000  
Proposed Delivery Date: FY-2021  
Department: Maintenance  
Maintenance Yard: Orange Cove  

Purpose of Vehicle/Equipment: This vehicle is used by FWA canal maintenance staff primarily for herbicide transport/application.  
Reason(s) for Replacement: Engine failure.  

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: This vehicle is used for weed and pest control.
Date: 04-29-2020

Vehicle/Equipment I.D. 1109

License #: 1215939       Year: 2008       Age (yrs.): 12
Make: Ford             Model: 3500
Department: Maintenance  Maintenance Yard: O.C.

Current Mileage/Hours: 110k miles very high hours.

<table>
<thead>
<tr>
<th>GENERAL CONDITIONS:</th>
<th>POOR</th>
<th>FAIR</th>
<th>GOOD</th>
<th>EXCELLENT</th>
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<tbody>
<tr>
<td>Body and Interior:</td>
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<td>Suspension:</td>
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<tr>
<td>Drive Train:</td>
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<tr>
<td>Engine:</td>
<td>☒</td>
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</tr>
</tbody>
</table>

History of Repairs: Engine & electrical issues.

Estimated Future Repair Cost: Engine, Transmission: $10K

Safety Concerns: Engine failure.

Mechanic’s Recommendations: Replace due to major component failure.

Estimated Salvage Value: $2,500

Prepared By: Josh Taylor
Friant Water Authority
Vehicle/Equipment Replacement
Justification Form
Proposed FY 2021

Date: 04-29-20
FY-2021

Vehicle/Equipment:
Job Code: 6119

Replacement: ☒ Addition: ☐

Estimated Cost: $31,000

Proposed Delivery Date: FY-2021

Department: Maintenance

Maintenance Yard: Orange Cove

Purpose of Vehicle/Equipment: Provide compressed air.

Reason(s) for Replacement: Previous unit was retired under air quality regulations

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: Portable compressor is used for many projects including bridge maintenance, concrete lining maintenance and sand blasting.
Friant Water Authority
Vehicle/Equipment Replacement Justification
Mechanics Report
Proposed For FY 2021

Date: 04-29-2020

Vehicle/Equipment I.D.

License #: Year: Age (yrs.): 

Make: Model: 

Department: Maintenance Maintenance Yard: O.C. 

Current Mileage/Hours: 110k miles very high hours.

<table>
<thead>
<tr>
<th>GENERAL CONDITIONS:</th>
<th>POOR</th>
<th>FAIR</th>
<th>GOOD</th>
<th>EXCELLENT</th>
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</thead>
<tbody>
<tr>
<td>Body and Interior:</td>
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<tr>
<td>Suspension:</td>
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<tr>
<td>Drive Train:</td>
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<tr>
<td>Engine:</td>
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</tr>
</tbody>
</table>

History of Repairs:

Estimated Future Repair Cost:

Safety Concerns:

Mechanic’s Recommendations:

Estimated Salvage Value:

Prepared By: Josh Taylor
Friant Water Authority
Vehicle/Equipment Replacement
Justification Form
Proposed for FY 2021

Date: 5/7/2020

Vehicle/Equipment: Ford F150 Pickup

Replacement: ☒  Addition: ☐

Estimated Cost: $24,100

Proposed Delivery Date: FY-2021

Department: Water Operations

Maintenance Yard: Lindsay

Purpose of Vehicle/Equipment: This vehicle is used by Canal System Operator to patrol and monitor the flow of water through the canal; it is driven on and off road. Presently 30.1K plus miles are put on the vehicle annually traveling to various sites in the canal service areas. This vehicle is available to respond to alarms and emergency call outs as may be required.

Reason(s) for Replacement: This vehicle is projected to be at sufficient mileage to warrant replacement as per FWA mileage guidelines.

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: This vehicle is driven by the Canal System Operator to patrol the Friant-Kern Canal. CSO is subject to being called out at any time and needs a reliable vehicle to cover their service area and possibly work out of their respective service area.

Photo of similar CSO truck
Friant Water Authority
Vehicle/Equipment Replacement Justification
Mechanics Report
Proposed for FY 2021

Date: 5/7/2020

Vehicle/Equipment I.D.: 2032

License #: 1226585 Year: 2011 Age (yrs.): 10

Make: Ford Model: F150

Department: Water Operations Maintenance Yard: Lindsay

Current Mileage/Hours: 203,245 (Estimated at time of replacement)

GENERAL CONDITIONS:  POOR FAIR GOOD EXCELLENT
Body and Interior:     ☐   ☒    ☐    ☐
Suspension:           ☐   ☒    ☐    ☐
Drive Train:          ☐   ☒    ☐    ☐
Engine:               ☐   ☒    ☐    ☐

History of Repairs: Cooling system, brakes, heater, a/c, and normal maintenance items.

Estimated Future Repair Cost: Engine, transmission: $5,000

Safety Concerns: This vehicle is subject to call out to respond to various alarms and public safety response.

Mechanic’s Recommendations: Due to the high mileage and usage, it is recommended to replace this vehicle at the recommended replacement schedule.

Estimated Salvage Value: $2,500

Prepared By: Chris Hickernell
Friant Water Authority
Vehicle/Equipment Replacement
Justification Form
Proposed for FY 2021

Date: 5/7/2020
FY-2021
Vehicle/Equipment: Ford F150 Pickup
Job Code: 6299
Replacement: ☒ Addition: ☐
Estimated Cost: $24,100
Proposed Delivery Date: FY-2021
Department: Water Operations
Maintenance Yard: Orange Cove

Purpose of Vehicle/Equipment: This vehicle is used by Canal System Operator to patrol and monitor the flow of water through the canal; it is driven on and off road. Presently 30.1K plus miles are put on the vehicle annually traveling to various sites in the canal service areas. This vehicle is available to respond to alarms and emergency call outs as may be required.

Reason(s) for Replacement: This vehicle is projected to be at sufficient mileage to warrant replacement as per FWA mileage guidelines.

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: This vehicle is driven by the Canal System Operator to patrol the Friant-Kern Canal. CSO is subject to being called out at any time and needs a reliable vehicle to cover their service area and possibly work out of their respective service area.

Photo of similar CSO truck
Friant Water Authority  
Vehicle/Equipment Replacement Justification  
Mechanics Report  
Proposed for FY 2021

Date: 5/7/2020

Vehicle/Equipment I.D.: 1026

License #: 1226622 Year: 2013 Age (yrs.): 8

Make: Ford Model: F150

Department: Water Operations Maintenance Yard: Orange Cove

Current Mileage/Hours: 221,245 (Estimated at time of replacement)

<table>
<thead>
<tr>
<th>GENERAL CONDITIONS:</th>
<th>POOR</th>
<th>FAIR</th>
<th>GOOD</th>
<th>EXCELLENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body and Interior:</td>
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<td>Suspension:</td>
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<tr>
<td>Drive Train:</td>
<td></td>
<td>☒</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine:</td>
<td></td>
<td>☒</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

History of Repairs: Cooling system, brakes, heater, a/c, and normal maintenance items.

Estimated Future Repair Cost: Engine, transmission: $5,000

Safety Concerns: This vehicle is subject to call out to respond to various alarms and public safety response.

Mechanic’s Recommendations: Due to the high mileage and usage, it is recommended to replace this vehicle at the recommended replacement schedule.

Estimated Salvage Value: $2,500

Prepared By: Chris Hickernell
Friant Water Authority
Vehicle/Equipment Replacement
Justification Form
Proposed For FY 2021

Date: 05-4-2020

Vehicle/Equipment: 1028

Replacement: ☒ Addition: ☐

Estimated Cost: $30,000

Proposed Delivery Date: FY-2021

Department: Maintenance

Maintenance Yard: Orange Cove

Purpose of Vehicle/Equipment: This vehicle is used by the Maintenance Foreman to supervise Maintenance Department activities. Presently 23K plus miles are put on the vehicle annually traveling to various sites in the canal service area. This vehicle is available to respond to alarms and emergency call outs as required.

Reason(s) for Replacement: Oil Consumption-Potential engine failure.

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: This vehicle is driven by the Maintenance Foreman to monitor Maintenance activities on the Friant-Kern Canal. The Maintenance Foreman is subject to being called out at any time and needs a reliable vehicle to cover their service area.
Friant Water Authority
Vehicle/Equipment Replacement Justification
Mechanics Report
Proposed For FY 2021

Date: 05-4-2020

Vehicle/Equipment I.D. 1028

License #: 1215939  Year: 2009  Age (yrs.): 10
Make: Chevy  Model: 1500
Department: Maintenance  Maintenance Yard: O.C.

Current Mileage/Hours: 179854

<table>
<thead>
<tr>
<th>GENERAL CONDITIONS:</th>
<th>POOR</th>
<th>FAIR</th>
<th>GOOD</th>
<th>EXCELLENT</th>
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<tbody>
<tr>
<td>Body and Interior:</td>
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<tr>
<td>Drive Train:</td>
<td></td>
<td>✗</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engine:</td>
<td>✗</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

History of Repairs: Normal wear parts.

Estimated Future Repair Cost: Engine, Suspension: $5,000

Safety Concerns: This vehicle is subject to call out to respond to various alarms and public safety response.

Mechanic’s Recommendations: Replace before major component failure.

Estimated Salvage Value: $2,500

Prepared By: Josh Taylor
FY 2022

ASSUMPTIONS & CONSIDERATIONS
Friant Water Authority
Proposed Fiscal Year 2022 Budget
for
Operation and Maintenance
Friant-Kern Canal and Supporting Facilities

Summary of Assumptions and Considerations

1. Labor

A. Total staffing levels for FY 2022 are proposed as follows:

<table>
<thead>
<tr>
<th>Position</th>
<th>Total Positions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Chief Executive Officer</td>
<td>1</td>
</tr>
<tr>
<td>2. Chief Operating Officer</td>
<td>1</td>
</tr>
<tr>
<td>3. Chief of External Affairs</td>
<td>1</td>
</tr>
<tr>
<td>4. Director of Water Policy*</td>
<td>1</td>
</tr>
<tr>
<td>5. Governmental Affairs &amp; Communications Manager</td>
<td>1</td>
</tr>
<tr>
<td>6. Water Resources Manager</td>
<td>1</td>
</tr>
<tr>
<td>7. Business Administration Manager</td>
<td>1</td>
</tr>
<tr>
<td>8. Accounting Operations Administrator</td>
<td>1</td>
</tr>
<tr>
<td>9. Senior Accountant</td>
<td>1</td>
</tr>
<tr>
<td>10. Accounting Technician</td>
<td>1</td>
</tr>
<tr>
<td>11. Payroll Specialist &amp; Analyst</td>
<td>1</td>
</tr>
<tr>
<td>12. Director of Technology</td>
<td>1</td>
</tr>
<tr>
<td>13. Human Resources/Risk Analyst</td>
<td>1</td>
</tr>
<tr>
<td>14. Executive Secretary</td>
<td>1</td>
</tr>
<tr>
<td>15. Executive Assistant</td>
<td>1</td>
</tr>
<tr>
<td>16. Administrative Assistant*</td>
<td>1</td>
</tr>
<tr>
<td>17. Office Technician</td>
<td>2</td>
</tr>
<tr>
<td>18. General Superintendent</td>
<td>1</td>
</tr>
<tr>
<td>19. Operations Supervisor</td>
<td>1</td>
</tr>
<tr>
<td>20. Resources Manager*</td>
<td>1</td>
</tr>
<tr>
<td>21. Water Resources Technician</td>
<td>1</td>
</tr>
<tr>
<td>22. Senior Engineer</td>
<td>1</td>
</tr>
<tr>
<td>23. Engineering Technician</td>
<td>1</td>
</tr>
<tr>
<td>24. Maintenance Foreman</td>
<td>3</td>
</tr>
<tr>
<td>25. Maintenance Supervisor*</td>
<td>1</td>
</tr>
<tr>
<td>26. Canal Maintenance Worker*</td>
<td>21</td>
</tr>
<tr>
<td>27. Canal System Operator</td>
<td>6</td>
</tr>
<tr>
<td>28. Electrician</td>
<td>1</td>
</tr>
<tr>
<td>29. Electronic Technician</td>
<td>2</td>
</tr>
<tr>
<td>30. Equipment Mechanic</td>
<td>2</td>
</tr>
<tr>
<td>31. Equipment Operator</td>
<td>4</td>
</tr>
<tr>
<td>32. Instrumentation Technician</td>
<td>1</td>
</tr>
<tr>
<td>33. Intern(s) (Ops./Engineering &amp; Technical Services)*</td>
<td>3</td>
</tr>
<tr>
<td>Total Full Time Positions</td>
<td><strong>68</strong></td>
</tr>
</tbody>
</table>

* The following positions will remain vacant and no dollar amount will be budgeted for FY 2022, Director of Water Policy, one Administrative Assistant, one Maintenance Supervisor, one Resources Manager and three Canal Maintenance Worker positions.
An inflation factor of 3.00% per year was used in the projected wage rates to cover both the "merit increases" and "cost of living adjustment (COLA)" that will occur in FY 2022 (FY 2021 wages were used as the base).

B. Overtime hours associated with routine and extra ordinary projects equaling a total of 2.9% of total man-hours.

2. Materials

A. An inflation factor of 2.5% per year and 8.75% sales tax was used in the calculation of the majority of the required materials for FY 2022. The inflation factor and sales tax is computed on the budget worksheets. Supporting documentation reflects current dollars and current sales tax.

B. Routine maintenance materials were budgeted with the assumption that the planned FY 2022 purchases occur in full.

C. It is the policy of the Authority to capitalize all property, plant and equipment, except equipment costing less than $1,000 and equipment installed directly onto the Friant-Kern Canal, which is a federally owned facility. The budgeted costs for capitalize property are in the accounts of 6299, 6399 and 6799.
FY 2022
MAJOR MAINTENANCE PROJECT JUSTIFICATIONS
## Major Maintenance Projects
### FY 2022

<table>
<thead>
<tr>
<th>Job Code</th>
<th>Project Title</th>
<th>Project Location</th>
<th>Dept.</th>
<th>Total Project Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>6040</td>
<td>Roadway Chip Seal</td>
<td>MP 30.0 to MP 45.00 / Orange Cove</td>
<td>Maintenance</td>
<td>$134,500</td>
</tr>
<tr>
<td>6060</td>
<td>Gate Actuator Upgrade</td>
<td>Multiple Sites</td>
<td>Maintenance</td>
<td>$150,000</td>
</tr>
</tbody>
</table>

**Totals:** $284,500
Project Title: Operation and Maintenance Roadway Chip Seal.

Job Code: 6040

Project Location and Maintenance Department: Approx. MP 30.0 to MP 45.00 / Orange Cove

Project Description: Chip seal a 15 mile section of canal roadway with 3/8” rock and CRS-2H asphalt emulsion. An in-house hauling operation will stock pile chip material from a local plant staging it along the 15-mile section of roadway. Outside service contractor will provide emulsion trucks to disperse asphaltic emulsion onto the existing road. Authority staff will follow behind operating a chipping machine, placing rock chips over the emulsion. The rock chips will be forced into the emulsion with two rented roller compactors. Once the rock/emulsion mixture sets, the roadway is swept to remove loose chips.

Estimated Total Project Cost (x1000): $134.5

Estimated Total Project Cost (Excluding Regular Labor Costs, x1000): $116.9

General Justification: Chip seal applications are repeated on a 10-year rolling cycle. Chip sealing slows down serious deterioration of the operational canal roadways lessening the need for road removal and reconstruction. An inspection of the 152 miles of operational roadway is conducted each year to determine sections to be chip sealed.

Operating Impact: Failure to maintain good road conditions could directly delay operation and maintenance in the event of road failure, as well as pose a serious threat to the safety of those traveling on the canal roadways.

Photo of Existing Conditions
Project Title: Roadway Chip Seal Project

Project Location and Maintenance Department: Approx. MP 30.0 to MP 45.00 / Orange Cove

Estimated Total Project Cost (x1000): $134.5

Estimated Total Project Cost (Excluding Regular Labor Costs x1000): $116.9

Breakdown of Estimated Costs

Contract Services: (3 day project)
- Emulsion Truck Spread Time - ($135/hr. for 24 hours.) $3,240
- Chip Spreader w/Operator - ($5,000 per 8 hr. day) $15,000
  **Subtotal: $18,240**

Materials:
- Emulsion (150 Ton @ $415/Ton) $62,250
- Screenings (1,700 Ton @ $15/Ton) $25,500
  **Subtotal: $87,750**

Rental Equipment:
- Roller - ($1,300 per week x 2 units) $2,600
- Sweeper – ($1,135 per week) $1,135
  **Subtotal: $3,735**

Fuel:
- Stockpile – 1,932 gal (23 gal/day x 28 days x 3 trucks) $6,666
- Roller – 90 gal (15 gal/day x 3 days x 2 units) $311
- Sweeper – 30 gal (10 gal/day x 3 days) $104
  Diesel = $3.45/gallon
  **Subtotal: $7,081**

Regular Labor (Hours and Cost):
- Stockpile – 3 CMW (28 days x 8 hr./day @ $21.65/hr.) $14,550
- Chip-Seal – 6 CMW (3 days x 8 hr./day @ $21.65/hr.) $3,118
  **Subtotal: $17,668**

**Total: $134,474**
Project Title: Gate Actuator Upgrade

Job Code: 6060

Project Location and Department: Scheduled Gate Actuator upgrade is schedule in various locations along the 152-mile system unless noted otherwise. / Operations.

Project Description: This will be a replacement of both the gate actuator and gate shaft that raise and lower the gates at these various sites. A total of eight actuators and shafts will be replaced. This is part of the standardization plan in the canal system.

Estimated Total Project Cost (x1000): $150.0

Estimated Total Material Cost (Including Fuel Costs, x1000): $120.2

General Justification: This effort is to bring the sites to a higher level of operational reliability and to standardize the gate actuators along the canal system.

Operating Impact: Replacement of these gate actuators will bring a higher level of operational reliability to the canal system by both having new components in service and having standardization in the event of a failure thereby reducing operational downtime.

View of Similar Conditions
Project Title: Gate Actuator Upgrade

Project Location and Department: Scheduled Gate Actuator upgrade is scheduled in various locations along the 152-mile system unless noted otherwise. / Operations.

Estimated Total Project Cost (x1000): $150.0

Estimated Total Material Cost (Including Fuel Costs, x1000): $120.2

Breakdown of Estimated Costs

Contract Service: n/a
  Machine Shop Services          Subtotal: $19,195

Materials:
  6 - 1 Hp Gate Actuators and Shafts @ $13,700 ea.                          $82,200
  2- 4 Hp Gate Actuators and Shafts @ $19,000 ea.                          $38,000
         (Motor Prices include starters, breaks, and cabinets.)
          Subtotal: $120,200

Rental Equipment: n/a

Subtotal: n/a

Fuel: n/a

Subtotal: n/a

Regular Labor (Hours and Cost):
  1 - Electrician (25 days @ 8 hr. @ $30.77/hr.)                           $ 6,154
  1 – CMW (20 days x 8 hr./day @ $27.82/hr.)                              $ 4,451
          Subtotal: $10,605

Total: $ 150,000
FY 2022
NON-ROUTINE
O & M
PROJECT
JUSTIFICATIONS
### Non-Routine O&M Projects
#### FY 2022

<table>
<thead>
<tr>
<th>Job Code</th>
<th>Project Title</th>
<th>Project Location</th>
<th>Dept.</th>
<th>Total Project Cost</th>
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<tbody>
<tr>
<td>6221</td>
<td>FKC Pump-Back Project</td>
<td>Multiple Sites</td>
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<td>$25,000</td>
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<tr>
<td>6225 &amp; 6226</td>
<td>FKC Capacity Correction Project</td>
<td>Middle Reach - Approx. MP 88.2 to MP 121.5</td>
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<td>$5,000,000</td>
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<tr>
<td>6230</td>
<td>Ground Water Sustainability Agencies</td>
<td>Friant Kern Canal and Associated Facilities</td>
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<td>$536,600</td>
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<tr>
<td>6370</td>
<td>Friant Kern Canal Water Quality Program</td>
<td>Entire Friant Kern Canal (152 Miles)</td>
<td></td>
<td>$100,000</td>
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<td></td>
<td><strong>Totals:</strong></td>
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<td><strong>$5,661,600</strong></td>
</tr>
</tbody>
</table>
Friant Water Authority
Non-Routine O&M Project
Summary Sheet
Proposed for FY 2022

**Project Title:** Friant Kern Canal Reverse Pump-Back Project

**Job Code:** 6221

**Project Location:** Friant-Kern Canal from terminus MP 151.8 to Tule River pool MP 95.67

**Project Description:** The Secretary of the Interior is authorized in PL-111-11 Section 10201 and directed to conduct feasibility studies in coordination with Friant Water Authority and create improvements or reverse flow pump-back facilities on the Friant-Kern Canal to help manage for water supply lost as part of the San Joaquin River Restoration Program Settlement. In August 2016, Friant Water Authority (FWA) entered into a Financial Assistance Agreement (FAA) with the U. S. Bureau of Reclamation to design and construct Reverse flow Pump-Back facilities in the lower reaches of the FKC. The current project is at 30% design and is looking to build reverse flow pump-back facilities at Shafter Check, Woollomes Check and Deer Creek Check.

**Estimated Project Costs (x1000):** $56,000 pre- 30% design estimate

Fiscal Year 2021 Budget = $25.0

**General Justification:** This project originally stemmed from the SJRRP to help facilitate the Long-Term Recapture and Recirculation program. It was authorized as part of the settlement program to help Friant Division Contractors keep access to their water utilized to help restore the SJR fishery. This program helps keep the SJR settlement viable.

**Operating Impact:** The reverse flow pump-back project provides a significant amount of flexibility in making the San Joaquin River Settlement Water Supply initiatives successful. Facilities also have the potential for use by FKC contractors at other drought times when the return of supplies wouldn’t be possible without this infrastructure.
Friant Water Authority
Non-Routine O&M Project
Cost Summary
Proposed for FY 2022

**Project Title:** Friant Kern Canal Reverse Pump-Back Project

**Project Location and Department:** Friant-Kern Canal from terminus MP 151.8 to Tule River Check MP 95.67 / Maintenance Department.

**Estimated Total Project Cost (x1000):** $56,000 pre- 30% design estimate

Fiscal Year 2021 Budget = $25.0

**Estimated Total Material Cost (Including Fuel Costs, x1000):** $25.0

**Breakdown of Estimated Costs**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Subtotal</th>
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<tr>
<td><strong>Contract Service:</strong></td>
<td>To assist in bridging the funding gap between the Federal FAA and the Financial Assistance Agreement with the Department of Water Resources</td>
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<td><strong>Materials:</strong></td>
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<td><strong>Rental Equipment:</strong></td>
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<td><strong>Fuel:</strong></td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td><strong>Regular Labor (Hours and Cost):</strong></td>
<td>Labor Costs will be funded through the Financial Executive Team (COO, CEO, etc...)........... Assistance Agreements</td>
<td>$0.0</td>
</tr>
</tbody>
</table>

Senior Engineer.................................
Engineering Technician..........................

**Total:** $ 25,000
Friant Water Authority
Non-Routine O&M Project
Summary Sheet
Proposed for FY 2022

Project Title: FKC Capacity Correction Project – Subsidence Correction

Job Code: 6225 & 6226

Project Location: Middle Reach - Approx. MP 88.2 to MP 121.5

Project Description: Friant Water Authority is undertaking evaluations of potential conveyance and operational improvements to the FKC to address original design and subsidence induced capacity reductions. The FKC has been subject to regional subsidence for several years. This subsidence-induced capacity reduction is most prevalent in the FKC Middle Reach (MP 88 and MP 122). Increased groundwater pumping during the drought period from 2012 through 2016 has caused further subsidence of the FKC and reduced canal capacity to levels that have the potential to impair water delivery operations.

Estimated Project Costs (x1000): $350,000 to $535,000
Fiscal Year 2021 Budget = $5million

General Justification: For the Subsidence Correction Project, at the March 28, 2019 meeting, the Board of Directors authorize up to $5M in pre-construction costs to be considered OM&R and directed Staff to budget accordingly. The allocation of the remaining balance of the Project will be determined once the scope of the Project is defined and the Board takes final action to proceed with the construction of the Project.

Operating Impact: Without correction, the capacity of the FKC to deliver a full run of Class 2 supplies would be impaired below Deer Creek Check. This directly affects the flexibility of several districts to schedule contract supplies for delivery.
Friant Water Authority
Non-Routine O&M Project
Cost Summary
Proposed for FY 2022

**Project Title:** FKC Capacity Correction Project – Subsidence Correction

**Project Location and Department:** Middle Reach - Approx. MP 88.2 to MP 121.5 / Maintenance Department.

**Estimated Total Project Cost (x1000):** $350,000 to $535,000
Fiscal Year 2021 Budget = $5million

**Estimated Total Material Cost (Including Fuel Costs, x1000):** unknown

**Breakdown of Estimated Costs**

The $5 million budgeted for FY 2022 is an estimate for FWA non-federal cost share requirements in FY 2022. While the total FY 2022 non-federal cost-share could be much greater than this amount, until a financing plan for the Project is finalized in the fall of 2020, the exact amount and allocation is not certain. Once a final amount is determined and approved by the FWA board of directors, an adjustment to this amount will be made.

Total: $5,000,000
Project Title: Groundwater Sustainability Agencies Engagement

Job Code: 6230

Project Location: Friant-Kern Canal and associated facilities

Project Description: Friant Water Authority has undertaking a review of the various Groundwater Sustainability Plans (GSP) that have the potential to affect the lands adjacent to the Friant-Kern Canal. Through the engagement of Groundwater Sustainability Agencies (GSA), the Authority seeks to protect the facility from adverse impacts like subsidence.

Estimated Project Costs (x1000): $unknown

Fiscal Year 2021 Budget = $536.6

General Justification: during the summer of 2019, the FWA Board of Directors sent notice letters regarding undesirable subsidence impacts on the Friant-Kern Canal. This letter requested that each GSP identify the effects of subsidence emanating from or within the various basins on the Friant-Kern Canal and treat it as an undesirable result that must be avoided. Fast forward to summer of 2020 and various GSA have identified impacts to the FKC through transitional pumping. The proposed budget is for the continuation of the monitoring of management actions and mitigation and to prepare for legal action if necessary.

Operating Impact: Potentially has a high operational impact if the Friant-Kern Canal continues to subside without mitigation.
Friant Water Authority
Non-Routine O&M Project
Cost Summary
Proposed for FY 2022

Project Title: Groundwater Sustainability Agencies Engagement

Estimated Total Project Cost (x1000): unknown
Fiscal Year 2021 Budget = $536.6

Breakdown of Estimated Costs

Contract Service:
  Special Counsel for preparing legal actions, if necessary.
  Subject matter experts for additional review of impacts.

  Subtotal: $320,000

Contract Service:
  Special Counsel for negotiation assistance

  Subtotal: $75,000

Regular Labor (Hours and Cost):
  Executive Team (COO, CEO, etc…)...1024 hrs @138.27

  Subtotal: $141,589

Total: $536,589
Project Title: Friant Kern Canal Water Quality Program

Job Code: 6370

Project Location: Friant-Kern Canal (entire 152 miles)

Project Description: Friant Water Authority is embarking on the management of the quality of water delivered through the Friant-Kern Canal. The FKC water quality program will consist of monitoring, measuring and reporting various water quality changes in the FKC associated with the introduction of non-Millerton Lake water. This is the initial costs of standing up a program to be able to satisfy the needs of contractors throughout the system.

Estimated Project Costs (x1000): $unknown (depends on the final constituents list and program requirements)
Fiscal Year 2021 Budget = $100

General Justification: The Board of Directors, at the request of the Water Quality Ad Hoc group has requested that staff pursue management of a Water Quality Plan. This plan originally stemmed from the environmental requirements of both the Long-Term Recapture and Recirculation EIS/R (LTRREIS) and the Friant-Kern Canal Reverse Pump-back Project Environmental Assessment (EA). While the full water quality plan is still being scoped, the Water Quality Ad Hoc group and the Board of Directors requested staff create a model, start monitoring as appropriate, and create notification when water from the cross-valley system were being introduced to the FKC.

Operating Impact: This estimate assumes implementation of the Friant-Kern Canal Water Quality Policy (Policy) will occur in this fiscal year. Although the costs for finalizing and implementing the Policy will be applied under a separate cost code (and reimbursed through FAA agreements with DWR and Reclamation), the administration and water quality monitoring outlined in the Policy will be applied 6370. A portion of these costs will be reimbursed through a surcharge applied to those Friant contractors that introduce water into the FKC once the Policy is implemented.
Friant Water Authority
Non-Routine O&M Project
Cost Summary
Proposed for FY 2022

Project Title: Friant Kern Canal Water Quality Program

Project Location and Department: Friant-Kern Canal (entire 152 miles) /Operations Department

Estimated Total Project Cost (x1000): $unknown (depends on the final constituents list and program requirements)

Fiscal Year 2021 Budget = $100

Breakdown of Estimated Costs

Contract Service: (Stantec)
All contracting services billed under reimbursable tasks of 6221 (Pumpback) for technical support of managing CEQA mitigation requirements

Regular Labor (Hours and Cost):
It is assumed that the implementation of the Policy will occur part-way through the fiscal year and will require the hiring of another full-time staff member. This staff member will be required to:

- Maintain and calibrate conductivity meters on a bi-weekly basis
- Perform water quality sampling during pump-in operations, coordinate laboratory water quality testing
- Oversee FWA staff, coordinate with Friant Division contractors on water quality data
- Manage water quality and operations database
- Perform weekly water quality reporting and forecasting using FKC Water Quality Model
- Perform weekly analysis to determine mitigation and distribution to respective Friant districts using the FKC Water Quality Mitigation Ledger
- Coordinate with U.S. Department of the Interior, Bureau of Reclamation’s South-Central California Area Office on water quality reporting, mitigation, and contractual requirements
- Coordinate and facilitate FWA committee on water quality

Subtotal: $100,000

Total: $100,000
FY 2022
VEHICLES
&
EQUIPMENT
## Equipment & Vehicles Acquisition
### FY 2022

<table>
<thead>
<tr>
<th>Job Code</th>
<th>Equipment &amp; Vehicles</th>
<th>Location</th>
<th>Dept.</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>6119</td>
<td>Forklift</td>
<td>Orange Cove</td>
<td>10</td>
<td>$30,000</td>
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<tr>
<td>6119</td>
<td>1 Ton Flatbed Truck</td>
<td>Orange Cove</td>
<td>10</td>
<td>$31,000</td>
</tr>
<tr>
<td>6299</td>
<td>RTA 2302 John Deere 770B Grader</td>
<td>Lindsay</td>
<td>20</td>
<td>$541,000</td>
</tr>
<tr>
<td>6299</td>
<td>Front-End Loader</td>
<td>Lindsay</td>
<td>20</td>
<td>$315,000</td>
</tr>
</tbody>
</table>

**Totals:** $917,000
Friant Water Authority
Vehicle/Equipment Replacement
Justification Form
Proposed FY 2022

Date: 04-29-20

Vehicle/Equipment: 1401

Replacement: ☒ Addition: ☐

Estimated Cost: $30,000

Proposed Delivery Date: FY-2022

Department: Maintenance

Maintenance Yard: Orange Cove

Purpose of Vehicle/Equipment: Heavy Lifting.

Reason(s) for Replacement: Current forklift engine smokes and needs overhaul. Transmission is slow to engage. Brake system is also in need of repair.

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: Loading and unloading trucks.
Friant Water Authority  
Vehicle/Equipment Replacement Justification  
Mechanics Report  
Proposed For FY 2022

Date: 04-29-2020

Vehicle/Equipment I.D. 1401

License #: Year: 1995 Age (yrs.): 25

Make: Clark Model:

Department: Maintenance Maintenance Yard: O.C.

Current Mileage/Hours: 8600 hours

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</table>

History of Repairs: Fuel and hydraulic systems.

Estimated Future Repair Cost: $4500

Safety Concerns: Engine/transmission failure.

Mechanic’s Recommendations: Replace before major component failure.

Estimated Salvage Value: $2500

Prepared By: Josh Taylor
Friant Water Authority
Vehicle/Equipment Replacement
Justification Form
Proposed FY 2022

Date: 04-29-20

Vehicle/Equipment: 1015

Replacement: ☒ Addition: ☐

Estimated Cost: $31,000

Proposed Delivery Date: FY-2022

Department: Maintenance

Maintenance Yard: Orange Cove

Purpose of Vehicle/Equipment: This vehicle is used by FWA canal maintenance staff primarily for routine maintenance activities.

Reason(s) for Replacement: Reliability

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: This vehicle is used to facilitate various routine and special projects including: Road maintenance, embankment projects, painting projects and copper sulfate applications.
Friant Water Authority
Vehicle/Equipment Replacement Justification
Mechanics Report
Proposed For FY 2022

Date: 04-29-2020

Vehicle/Equipment I.D. 1015

License #: 900544 Year: 2006 Age (yrs.): 14
Make: Ford Model: 350
Department: Maintenance Maintenance Yard: O.C.

Current Mileage/Hours: 110,350

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</table>

History of Repairs: Engine & electrical issues.

Estimated Future Repair Cost: Engine, Transmission: $10K

Safety Concerns: Engine failure.

Mechanic’s Recommendations: Replace before major component failure.

Estimated Salvage Value: $3,500

Prepared By: Josh Taylor
Friant Water Authority
Vehicle/Equipment Replacement
Justification Form
Proposed for FY 2022

Date: 05/20/20
FY-2022

Vehicle/Equipment: RTA 2302 John Deere 770B Grader
Job Code: 6299

Replacement: ☒ Addition: ☐

Estimated Cost: $541,000

Proposed Delivery Date: FY-2022

Department: Maintenance

Maintenance Yard: Lindsay

Purpose of Vehicle/Equipment: The motor grader has been used for many routine and extraordinary projects such as: ROW maintenance, road maintenance, embankment repairs, canal lining replacement, and removal of debris.

Reason(s) for Replacement: Although the machine has been well maintained with over 15k hours, it is nearing its designed life expectancy. We are beginning to experience reliability issues with the machine and CARB requires this machine to be retired from the Friant Water Authority fleet by December 31, 2022. The engine is original and has had no major repairs; it should be expected to need overhauled in the next few years.

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: The motor grader has been a very useful tool as indicated by the number of hours on it. It is an asset to the Authority. Rental for this type of machine runs $9,500-$10,500 per month currently and can be expected to go up as rental companies have to update their fleets. Rental units are subject to availability, sometimes requiring motor graders to be hauled in from other areas, incurring additional expenses.
Friant Water Authority
Vehicle/Equipment Replacement Justification
Mechanics Report
Proposed for FY 2022

Date: 05/20/20

Vehicle/Equipment I.D.: 2302

License #: Year: 1999
Age (yrs.): 21

Make: John Deere
Model: 770B

Department: Maintenance
Maintenance Yard: Lindsay

Current Mileage/Hours: 15,687
Prepared By: Tom Fousek/Chris Hickernell

<table>
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</table>

Estimated Future Repair Cost: Hydraulic pumps $15,500, under carriage $15,000, Tier 4 engine pricing estimated at $130,000. The current engine is Tier 1.

Safety Concerns: N/A

Recommendation: Due to its age and current hours, it is recommended to replace this equipment to keep the Authority in compliance with the CARB requirements.

Estimated Salvage Value: $35,000

View of existing machine
Friant Water Authority
Vehicle/Equipment Replacement
Justification Form
Proposed for FY 2022

Date: 05/20/20

Vehicle/Equipment: RTA 2303 John Deere 624G

Replacement: ☒  Addition: ☐

Estimated Cost: $315,000

Proposed Delivery Date: FY-2022

Department: Maintenance

Maintenance Yard: Lindsay

Purpose of Vehicle/Equipment: The front loader has been used for many routine and extraordinary projects such as: cleaning toe drains, cleaning out under drains, clearing vegetation from river over crossings, embankment repairs, canal lining replacement, canal de-silting, and removal of debris.

Reason(s) for Replacement: Although the machine has been well maintained with over 15k hours, it is nearing its designed life expectancy. We are beginning to experience reliability issues with the machine and CARB requires this machine to be retired from the Friant Water Authority fleet by December 31, 2022. The engine is original and has had no major repairs; it should be expected to need overhauled in the next few years.

Description of How Vehicle/Equipment Augmentation Facilitates O&M Activities: The excavator has been a very useful tool as indicated by the number of hours on it. It is an asset to the Authority. Rental for this type of machine runs $9,500-$10,500 per month currently and can be expected to go up as rental companies have to update their fleets. There is not an abundance of these machines in our area, so rental is subject to availability, sometimes requiring units to be hauled in from other areas, incurring additional expenses.
Date: 05/20/20

Vehicle/Equipment I.D.: 2303

License #: Year: 1992 Age (yrs.): 24

Make: John Deere Model: 624G

Department: Maintenance Maintenance Yard: Lindsay

Current Mileage/Hours: 15,687 Prepared By: Tom Fousek/Chris Hickernell

<table>
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</table>

Estimated Future Repair Cost: Hydraulic pumps $15,500, under carriage $15,000, Tier 4 engine pricing estimated at $130,000.

Safety Concerns: N/A

Recommendation: Due to its age and current hours, it is recommended to replace this equipment to keep the Authority in compliance with the CARB requirements.

Estimated Salvage Value: $35,000

View of existing machine