Jason Phillips
Chief Executive Officer

Friant Water Authority
Annual Meeting
March 27, 2018 | Fresno, CA
THE FRIANT DIVISION includes over one million acres of irrigated agriculture among five of the United States' most productive agricultural counties.

- **1M+ ACRES**
- **5 COUNTIES**: Fresno, Kern, Merced, Tulare, Madera
- **34 AGENCIES, DISTRICTS & MUNICIPALITIES**

AGRICULTURAL LAND IN THE SAN JOAQUIN VALLEY

FRIANT DIVISION LANDS
**Friant Water Authority, Board of Directors**

<table>
<thead>
<tr>
<th>1. Arvin Edison WSD</th>
<th>Edwin Camp</th>
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<tbody>
<tr>
<td>2. Chowchilla WD **</td>
<td>Kole Upton</td>
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<td>3. City of Fresno</td>
<td>Tim Orman</td>
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<tr>
<td>4. Fresno ID</td>
<td>George Porter</td>
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<td>5. Hills Valley ID</td>
<td>Loren Booth</td>
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<td>6. Kaweah Delta WCD</td>
<td>Chris Tantau</td>
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<td>7. Kern-Tulare WD</td>
<td>Kent Stephens</td>
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<td>8. Lindmore ID</td>
<td>Michael Brownfield</td>
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<tr>
<td>9. Lindsay-Strathmore ID</td>
<td>Cliff Loeffler</td>
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<td>10. Orange Cove ID</td>
<td>Harvey Bailey</td>
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<td>11. Madera ID **</td>
<td>Jim Erickson</td>
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<td>12. Porterville ID</td>
<td>Eric Borba</td>
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<tr>
<td>13. Saucelito ID</td>
<td>Steven Kisling</td>
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<tr>
<td>14. Terra Bella ID</td>
<td>Edwin Wheaton</td>
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<td>15. Tulare ID</td>
<td>Rick Borges</td>
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** Receives supplies from the Madera Canal. All others receive water from the Friant-Kern Canal. **
Other Friant Contractors

1. Lower Tule River ID
2. Delano-Earlimart ID
3. Southern San Joaquin MUD
4. Shafter-Wasco ID
5. Exeter ID
6. Gravelly Ford ID
7. Stone Corral ID
8. Tea Pot Dome WD
9. Ivanhoe ID
10. Garfield WD
11. City of Lindsay
12. City of Orange Cove
13. International WD
14. Lewis Creek WD
15. Tri Valley WD
16. Madera County
17. Fresno County WWKS #18
Kent Stephens
Chairman
Friant Water Authority
2017 Accomplishments - Highlights

Critical Task: Operation & Maintenance of the Friant-Kern Canal
- 1,420,000 AF delivered from the Friant-Kern Canal
- Completed major rehabilitation of the canal
- Implemented state-of-the-art technology
- Improved data collection for maintenance
- Increased efficiency and productivity

Strategic Plan Goal #1: Water Safety Management
- Water safety improvements to ensure 24/7 operations
- Improved leak detection and repair protocols
- Enhanced emergency response plans

Strategic Plan Goal #2: Good Internal and External Governance
- Updated Strategic Plan on goals and objectives
- Increased transparency and accountability

Strategic Plan Goal #3: Outreach and Engagement
- Engaged with stakeholders to enhance water safety
- Provided educational workshops and seminars

2017 Accomplishments
- Completed several major projects on the Friant-Kern Canal
- Increased water deliveries to meet agricultural needs
- Continued to improve water quality and safety

ACWA - California Association of Water Agencies
Friant Water Authority
2017 Accomplishments

San Joaquin Valley (Average Volumes from 1986 – 2015)

- SJ Valley Outflow From all Tributaries: 3.9 MAF
- Local Supplies from all Valley Rivers: 8.2 MAF
- Net Water Demand: 13.3 MAF
- San Joaquin Valley Delta Imports: 3.3 MAF
South of Delta Agricultural Allocations, by Era

- Pre-ESA/CVPIA '52 - '92: 93%
- Early ESA/CVPIA Implementation '93 - '06: 75%
- Current ESA Implementation '07 - '15: 32%
Existing San Joaquin Valley Water Need
13.3 Million Acre-Feet (MAF) per Year

Local Supplies | 8.2 MAF/YR
Delta Supplies | 2.8 MAF/YR
PROJECTED GROUNDWATER OVERDRAFT | 2.3 MAF/YR
Conveyance is diminished from milepost 100 to 152.
How Can We Achieve a Water Balance?

1. Increase surface water deliveries
   - Not otherwise needed for instream flow requirements
2. Limit Pumping to approx. **6-12 inches** per acre (varies by GSA)
3. Land falling or retirement
4. Water recycling
5. Improve irrigation efficiency

Some options will **NOT** prevent retirement in the San Joaquin Valley.

These options are not solutions, here.
Temperance Flat Reservoir Project

- 665 feet tall
  (120’ below water)
- 1.26 MAF of New Storage
Temperance Flat Reservoir, on Profile of San Joaquin River
Existing San Joaquin Valley Water Need
13.3 Million Acre-Feet (MAF) per Year

Temperance Flat Reservoir | 0.2 MAF/YR
Delta Supplies | 2.8 MAF/YR
Local Supplies | 8.2 MAF/YR
Where Conveyance Improvements are Needed

1. Repairs to Existing Conveyances (e.g. Losses due to Subsidence)

3. Connections to Other Water Systems

2. New or Improved Connections

Millerton Lake

Friant-Kern and Madera canals

CVP or SWP Facilities

Connections to Other Water Systems

CVP or SWP Facilities
California Water Bond – November 2018

86127. The sum of seven hundred fifty million dollars ($750,000,000) is appropriated from the Fund to the department for a grant to the Friant Water Authority for water conveyance capital improvements, including restored and increased conveyance capacity to and in the Madera and Friant-Kern canals, resulting in greater groundwater recharge, improved conveyance and utilization of floodwaters, and for water conservation.
Existing San Joaquin Valley Water Need
13.3 Million Acre-Feet (MAF) per Year

SHORTFALL | 1.8 MAF/YR

Over 700,000 Acres of Land Retirement

New Conveyance | 0.2 MAF/YR
Temperance Flat Reservoir | 0.2 MAF/YR
Delta Supplies | 2.8 MAF/YR
Local Supplies | 8.2 MAF/YR
Approx. +1 MAF/YR

South of Delta Agricultural Allocations, by Era

Pre-ESA/CVPIA '52 - '92: 93%
Early ESA/CVPIA Implementation '93 - '06: 75%
Current ESA Implementation '07 - '15: 32%
Existing San Joaquin Valley Water Need
13.3 Million Acre-Feet (MAF) per Year

Shortfall | 0.7 MAF/yr

270,000 Acres of Land Retirement

Improved Delta Reliability, including:
+ New Conveyance
+ Temperance Flat Reservoir | 1.6 MAF/yr

Delta Supplies | 2.8 MAF/yr

Local Supplies | 8.2 MAF/yr
The Path Forward

**The Goals**
1. Restore the reliability of Delta imports to pre-1997 levels
2. Restore and improve SJ Valley conveyance
3. Additional surface storage
4. Minimize land retirement

**The Tools**
1. Federal legislation and/or improved Delta conveyance
2. 2018 Water Bond
3. Temperance Flat and/or other storage projects
Friant Water Authority

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