SAN JOAQUIN RIVER RESTORATION PROGRAM

# Water Management Technical Feedback Meeting

July 18, 2014
Sacramento, CA

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# Agenda Overview

- Comments on Recent Meeting Notes
- Water Supply Briefing
- Restoration Flows Releases
- Restoration Flow Guidelines
- Recapture / Recirculation
- Investment Strategy
- Part III
- Lecture Series: Unreleased Restoration Flows – Lessons Learned
- Public Comment / Next Meeting Dates and Locations

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# Comments on Meeting Notes

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# Water Supply Briefing

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# Restoration Flow Releases

# Unreleased Restoration Flows (URFs)

- February 2014, Settling Parties suspended Restoration Flows in response to drought
- 12,694 af of URFs banked with FID
- 11,000 af to Class 1 contractors in 2014
  - 23 Agreements executed
  - 4,800 af delivered to date

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# Restoration Flow Guidelines

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# Restoration Flow Guidelines 2.0

- Forecasting Restoration Flows, including tools for mitigating uncertainty.
- Gravelly Ford, minimum compliance point or flow target.
- Managing flood management releases to best meet riparian recruitment needs.

# Recapture / Recirculation

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# Recaptured Water (2010-2013)

| Contract Year | 2010 | 2011 | 2012 | 2013 |
|---|---|---|---|---|
| Recaptured (acre-feet) | 52,000 | 35,740 | 103,000 | 90,000 |

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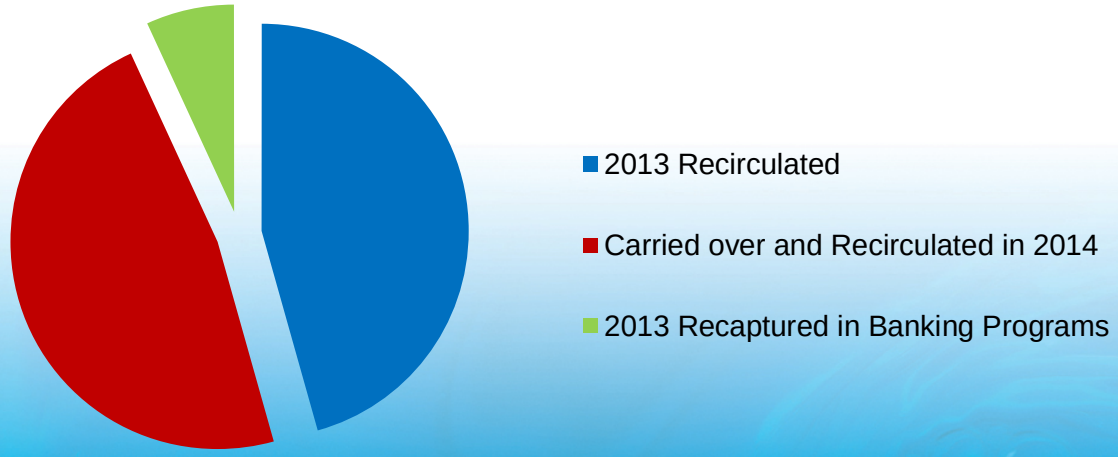
# 2013 Recirculation

- Total Recaptured = 90 TAF
  - Banked Recapture = 6 TAF
  - Recirculated in 2013 = 41 TAF
  - Recirculated in 2014 = 43 TAF




Data: April 17, 2014

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# Long-Term R&R Plan

- Recirculation Chapter drafted with Friant Contractor input
- Critical Path: Recapture Chapter and associated operations agreements
- Plan progress on hold due to resource needs for drought and current FWA lawsuit
- Resume work on recapture after litigation resolved

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# Investment Strategy

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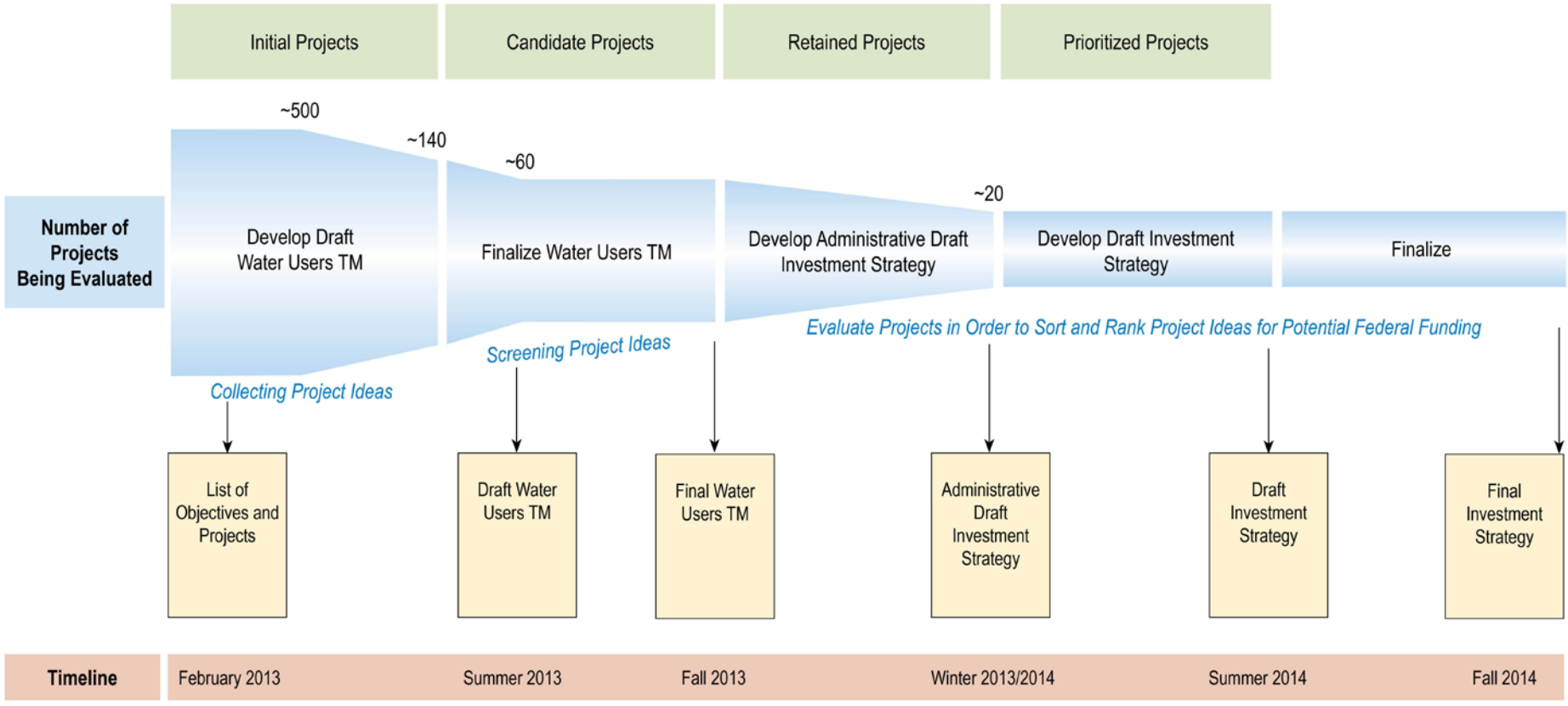
# Investment Strategy Approach



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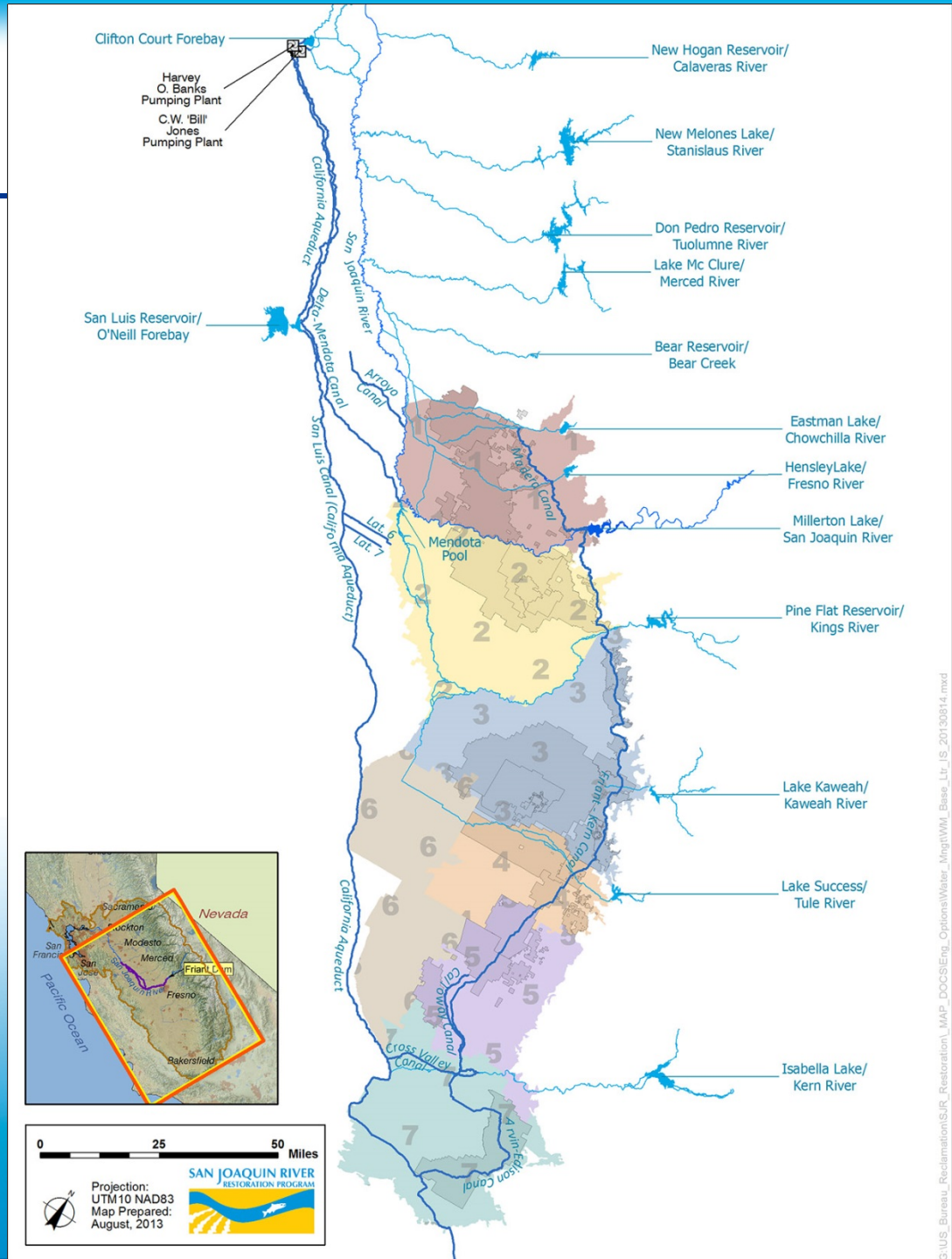
# Investment Strategy Study Area



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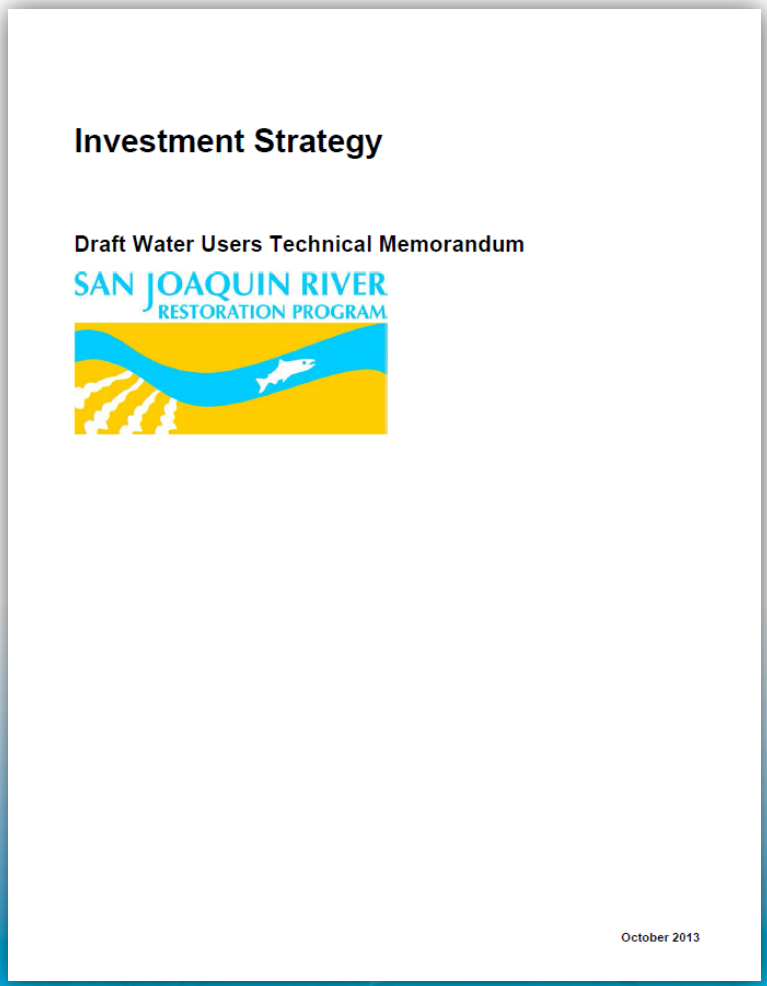
# Water Users TM

October 2013



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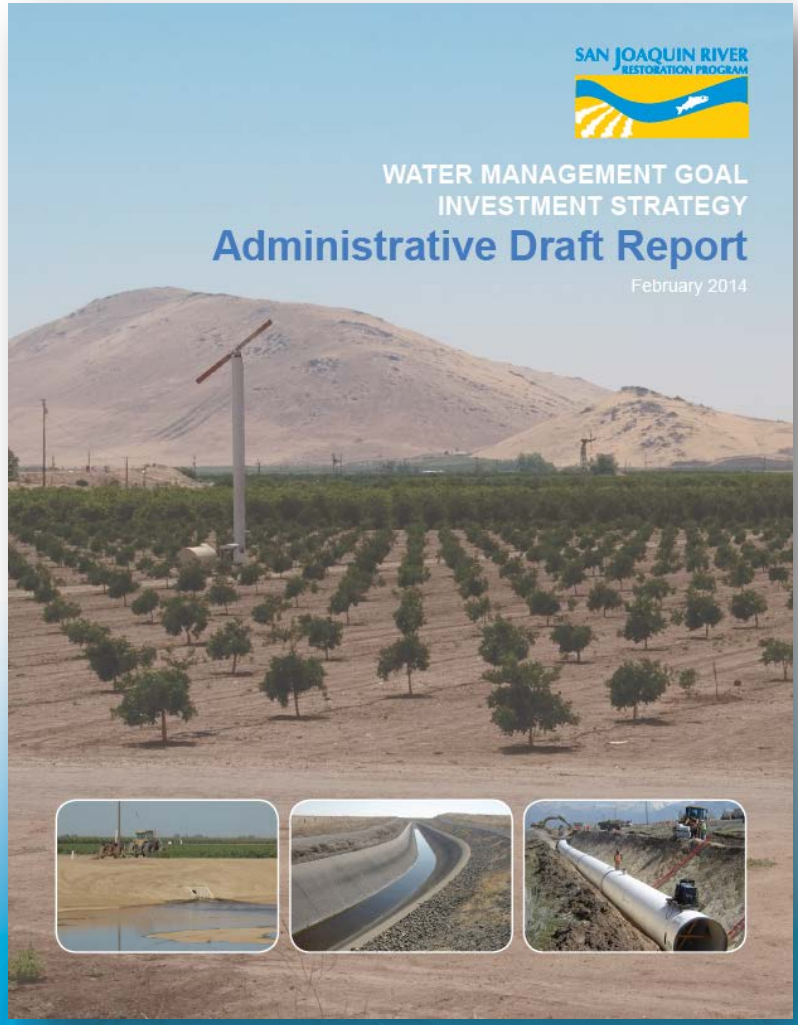
# Administrative Draft Investment Strategy Report

April 2014



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# Draft Investment Strategy Report

Fall 2014

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# Evaluate 20 Priority Projects

- Appraisal-level designs and cost estimates
- Project implementation schedule and budget requirements for major project phases
  - Planning / NEPA / CEQA
  - Design, Permitting
  - Acquisitions, Agreements
  - Construction
- Rank Priority Projects for Future Funding

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# Project Site Visits & Meetings

- Madera ID
- City of Fresno
- Fresno ID
- Orange Cove ID
- Ivanhoe ID
- Tulare ID
- Kaweah Delta WCD
- Porterville ID, Saucelito ID, Terra Bella ID
- Lower Tule River ID
- Delano-Earlimart ID
- Shafter Wasco ID
- Arvin-Edison WSD
- Patterson ID, Banta Carbona ID, West Stanislaus ID
- Friant Water Authority

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# Draft Investment Strategy Dates

- July 2014 – Draft appraisal studies for review by each project proponent
- Sep 2014 – Draft Investment Strategy Report for review by Friant Districts
- Dec 2014 – Revised Draft Investment Strategy Report

# Part III

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# Friant-Kern Canal Capacity Restoration

- Restore Design Maximum Flow Capacity and current design standards from MP 29.14 to MP 71.3
- Design-level 60%
  - Refining cost estimate earthwork assumptions and identifying non-essential pay items
  - starting modification designs for affected bridges and drains

# Madera Canal Capacity Restoration

- Originally combined with Friant-Kern Canal Restoration
- Identify, design and construct select demonstration projects
- Feasibility Study initiated, and first stakeholder meeting scheduled for July 28

# Friant-Kern Canal Reverse Flow Pump-Back Project

- Red Bluff pumps and motors purchased and transported to FWA storage facility
- Feasibility study on hold

# Groundwater Financial Assistance

## Pixley ID- Joint Groundwater Bank

- Site visit in April 2014, kickoff late July.
- Construction complete December 2017.

## Porterville ID- In-Lieu Project

- Site visit/ kickoff July 2014.
- Construction complete December 2016.

# Groundwater Financial Assistance

Shafter-Wasco ID- Madera Aveune Intertie

- Engineering analysis in progress to update project description.

Tulare ID- Cordeniz Basin Construction & Exchange Program

- Kickoff/ site visit July 2014
- Environmental Compliance January 2015, construction December 2015

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# Lecture Series:
# Unreleased Restoration Flows
# Lessons Learned

# Unreleased Restoration Flows (URFs)

- Paragraph 13(i) of Settlement
  - Restoration Flows commence no later than January 1, 2014
  - Restoration Flows that cannot be released from Friant Dam become URFs
  - Use URFs to best achieve the Restoration Goal, as determined by Reclamation
  - Established priority for banking, storing, exchanging, selling, and supplemental releases

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# Projected Availability

| Restoration Year | Reach 2B Channel Capacity (cfs) | Weighted Average Availability (TAF) |
|---|---|---|
| 2015 | 810 | 63 – 117 |
| 2016 | 810 | 63 – 117 |
| 2017 | 810 | 63 – 117 |
| 2018 | 810 | 63 – 117 |
| 2019 | 810 | 63 – 117 |
| 2020 | 2,000 | 63 – 117 |
| 2021 | 2,000 | 15 – 31 |
| 2022 | 2,000 | 15 – 31 |
| 2023 | 3,000 | 0 – 10 |
| 2024 | 3,000 | 0 – 10 |
| 2025 | 3,000 | 0 – 10 |
| 2026 | 3,000 | 0 – 10 |
| 2027 | 4,000 | - |

# Draft URFs Guidance Document

- Recommendations
  - Prioritize Banking, Storing, and Exchanging
  - Execute agreements by March 1 of each Contract Year
  - Prioritize Friant Contractors
  - Practical and mutually acceptable
  - Cover projected volumes + 25%

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# February 2014 URFs

- February 2014, Settling Parties suspended Restoration Flows in response to drought
- 12,694 af of URFs banked with FID
- 70 days from concept to operational temporary pump facility to exchange the URFs
- 11,000 af to Class 1 contractors in 2014
  - 24 of 31 Agreements executed

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# Lessons Learned This Year

- Not possible to limit Agreements to just "a few" Friant Contractors
- Annual agreements are extremely time consuming to develop and track
- Exchange option not popular
- URFs pricing was a contentious issue
- Revenues generated not available without appropriation until 2020

# Proposed 13(i) Concept

- URFs distributed to Friant Contractors on pro-rata basis
- Water rate pre-determined
  - Class 1 Contract rate base
  - Apply year type multiplier to base rate
- Revenues distributed directly to SJRRP without further appropriation

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# Example URFs rates

| | Contract Rate Multiplier | Per AF price |
|---|---|---|
| **Wet** | X 2 | $ 66.34 |
| **Normal-Wet** | X 3 | $ 99.51 |
| **Normal-Dry** | X 5 | $165.85 |
| **Dry** | X 8 | $265.36 |
| **Critical High** | X 12 | $398.04 |
| **Critical Low** | X 16 | $530.72 |

Based on Class 1 Contract Rate = $33.17

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# Example URFs Revenues

| | Max Projected URFs, TAF | Revenue | Min Projected URFs, TAF | Revenue |
|---|---|---|---|---|
| **Wet** | 99 | $6,567,660 | 86 | $5,705,240 |
| **Normal-Wet** | 115 | $11,443,650 | 40 | $3,980,400 |
| **Normal-Dry** | 46 | $7,629,100 | - | - |
| **Dry** | 13 | $3,449,680 | - | - |
| **Critical High** | 12 | $4,776,480 | - | - |
| **Critical Low** | - | - | - | - |

Based on Restoration Flow capacity constraint = 1,100 cfs

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# Uses for URFs Revenues

- Purchase water
  - to supplement future Restoration Flows
  - for unexpected seepage losses
  - for buffer flows
- Accelerate completion of Phase I projects

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# Public Comment / Next Meetings

# Next SJRRP Water Management Technical Feedback Meetings

| Day | Date | Location |
|---|---|---|
| Friday | September 19, 2014 | Visalia |
| Friday | November 21, 2014 | Visalia |
| TBD | January 2015 | Reno |