Water Management
Technical Feedback Meeting

October 15, 2010
Fresno, CA

Agenda Overview

• Comments on Meeting Notes
• Water Supply Briefing / Interim Flows
• Restoration Flow Guidelines
• Recapture/Recirculation
• MC/FKC Capacity Restoration / Reverse Flow Feasibility Studies
• Next Meeting Date
Comments on Meeting Notes

Water Supply Briefing / Interim Flows
Water Supply Briefing

- Water Supply update: WY 2,029TAF, 116%
- WY 2010 Account To Date
  - RWA Credits = 82,445 af
  - $10 Water Deliveries = 72,741 af
  - Recaptured Interim Flows = 42,551 af
  - Additional Class 2 deliveries made available through Recirculation = 42,174 af
  - Fall 2009 Mendota Pool Operations

Interim Flow Update

[Graph showing SJRRP Flows 2010: Final Quality Assurance, Quality Control]
2011 Water Right Order

- Explicit authorization for transfers/exchanges in San Luis
- Real time flow monitoring requirement
- Seepage Monitoring Plan
- SJRRP website will be used to issue notifications
- Coordination requirement for flood control
- O&M agreement with CCID, SLCC & Levee District
- Explicit inclusion of flexible flow periods
- Updated Water Quality Monitoring Plan
- Temperature monitoring in Millerton

Restoration Flow Guidelines
**Restoration Flow Guidelines (RFG): Recent and Planned Coordination**

- Oct 29th  Circulate DRAFT 3 RFG among Settling Parties for continued review
- Nov (TBD) Meeting to review RFG

- Significant changes to RFG:
  - Document restructured to follow Paragraph 13(j)
  - Language revisions for clarity, consistency
  - Revised explanation for annual reporting and planning processes
  - Reclamation Proposal for Recovered Water Account
  - Working on development of compliance rules

**Reclamation Proposal for Recovered Water Account (RWA)**

- Common understanding of model inputs and outputs
- Single get-away curve:
  - 1.35 MAF by July 31st
  - Inflow after July 31st
- RWA calculations are:
  - RWA = Pre minus Post water supply
  - Supply = Inflow minus spill
  - Real-time adjustments for winter spill
Recapture / Recirculation

**Preliminary 2011 Recapture Plan**

- Recapture = San Mateo - 5% - Sack Dam
- Additional adjustment for estimated vs. actual Sack Dam flows
- Working with FWA, SLDMWA, SJRECWA
Preliminary 2011 Recirculation Plan

- Currently recapturing at Sack Dam
  - Fall 2010 Interim Flows = over 5,000 af to date
  - Fall 2009 Interim Flows = 850 af
- Working with SCCAO to extend existing scenarios
- Soliciting scenarios for 2011

Friant-Kern & Madera Canals Capacity Restoration Project
Project Update

• “Full-Fix” Appraisal Estimate ~ $67 million

• Reclamation performed screening analysis

• Screening conducted to inform selection of proponent preferred alternative

Screening Analysis

• Purpose
  – Determine if regionally feasible fixes exist
  – Determine general priority of fixes
Screening Approach

- 6 FKC reaches; 4 MC reaches
- FKC and MC screened independently
- 3 levels of repair per reach
- Based on Pre-Appraisal Quantities
- Operations model for water supply benefit
- Costs per linear foot

*Total of ~ 9,000 combinations

Preliminary Results

Relative Feasibility vs. Relative Cost
Preliminary Results

- Appear to be regionally feasible fixes.
- Lining raises cheaper than bank raises, similar benefit.
- Need Authorities expertise for sequencing fixes.

FKC:
  - 1st Priority – Restore Kings River to Kaweah River Check

MC:
  - 1st Priority – Restore milepost 6 to 19
Next Steps

- Identify “Proponent Preferred Alternative”
- Feasibility Report (Designs, Costs, Benefits)
- Environmental Assessment

Friant-Kern Canal Reverse Flow Pump-Back Facilities Project
Project Update

- Evaluated weekly time-step
- Reformulating Project

Weekly Time-Step Results

Monthly Computation

- Arvin Edison: 0.1% (0.1)
- Shafter-Wasco: 0.1% (0.1)
- Increased Delivery - AEID: 6.1% (16%)
- Increased Delivery - SWID: 9.1% (16%)
- Reservoir Check: 4.4% (8%)
- Increased Delivery - Poso: 6.6% (11%)
- Increased Delivery - Reservoir: 6.4% (11%)
- Surplus: 25.1% (43%)

Weekly Computation

- Arvin Edison: 0.1% (0.1)
- Shafter-Wasco: 0.1% (0.1)
- Increased Delivery - AEID: 6.1% (11%)
- Increased Delivery - SWID: 0.3% (1%)
- Reservoir Check: 0.6% (1%)
- Increased Delivery - Poso: 7.6% (13%)
- Increased Delivery - Reservoir: 6.9% (12%)
- Surplus: 18.1% (31%)

Legend:
- Arvin Edison
- Shafter-Wasco
- Increased Delivery - AEID
- Increased Delivery - SWID
- Reservoir Check
- Increased Delivery - Poso
- Increased Delivery - Reservoir
- Surplus
**Weekly Time-Step Results**

**Arvin Edison**

**Shafter - Wasco Pump-Back**

**Poso Creek Pump-Back**

**Reservoir Check Pump-Back**

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**Conclusions**

<table>
<thead>
<tr>
<th>95% Exceedance</th>
<th>Monthly Time-Step (cfs)</th>
<th>Weekly Time-Step (cfs)</th>
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<tr>
<td>Shafter</td>
<td>180</td>
<td>162</td>
</tr>
<tr>
<td>Poso</td>
<td>100</td>
<td>138</td>
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<tr>
<td>Woollomes</td>
<td>50</td>
<td>64</td>
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Conclusions

- Reduces pump-back deliveries to Arvin-Edison
- Increases amount pump-backed through Wasco and Woollomes
- No significant change in pump size.

Project Reformulation Approach

- Work with TSC and Authorities to reformulate project.
- Constraints/Guiding Principles
  - $17 million ceiling
  - Sizing based on projected use
  - Preference to Shafter and Poso
  - Poso and Shafter should be similar size
  - Consider economies of scale
  - Design should allow for future expansion
  - Regionally feasible cost/benefit
Next Steps

• Identify “Proponent Preferred Alternative”

• Feasibility Report (Designs, Costs, Benefits)

• Environmental Assessment

Public Comment / Next Meeting
Next Meeting

• Date & Time:
  – January 2011
  – Resume monthly meetings in January
  – Agenda Topics