Recap of October 2017 Board Action and Recent Developments

Allocation of Project Cost/Benefits

Alternative Financing for Full Project Implementation

Implementation Agreements

Upcoming Board Action
Recap
October 2017 Board Action

- Adopt CEQA determination for 9,000 cfs project
- Support participation in 9,000 cfs project
  - 25.9 percent share of overall project costs
- Authorize
  - Design and Construction JPA participation
  - Finance JPA participation
  - Adaptive Management Program participation

Recent Developments

- DWR approved CA WaterFix
  - Jul 2017
  - 9,000 cfs, two tunnels, and three intakes
- Public Water Agencies (PWAs) consider CA WaterFix
  - Sep-Oct 2017
- PWAs developing financing options
- DWR announced option of staged construction
  - Feb 2018
- Metropolitan Board directs staff to explore opportunities for full project financing
  - Feb 2018
**Benefits of Full Project Implementation**

- Expedites environmental and water supply benefits
- Reverse flow reduction
- Flexible operations
- Enhanced coordination between SWP/CVP
- Seismic resiliency
- Climate change adaptation
- Water quality
- Cost savings versus staged approach

**Summary of Implementation Issues**

- Central Valley Project PWA Participation
  - USBR Water Contract Administration
  - CVP Contractor financing
  - Allocation of Project Costs/Benefits
  - State Water Project (SWP) PWA Water Transfers
**Allocation of Project Cost/Benefits**

**California WaterFix**

**October 2017**
- **Cost of CA WaterFix**: 100%
  - **Central Valley Project**: 45% of total
  - **State Water Project**: 55% of total
  - **Other SWCs**: 53% of SWP, 29.1% of total
  - **Metropolitan**: 47% of SWP, 25.9% of total

**March 2018**
- **Cost of CA WaterFix**: 100%
  - **Central Valley Project/Unsubscribed**: 33% of total
  - **State Water Project**: 67% of total
  - **Other SWCs**: 53% of SWP, 35.4% of total
  - **Metropolitan**: 47% of SWP, 31.6% of total
California WaterFix Water Supply Analysis

Average Delivery Capability With & Without CA WaterFix

Existing Conditions

- California WaterFix EIR/EIS No Action Alternative, existing conditions with 2025 climate change impacts
- 2015 Delivery Capability Report Existing Conveyance High Outflow scenario
- 2015 Delivery Capability Report Existing Conveyance Low Outflow scenario
- California WaterFix EIR/EIS Alternative 4A-H4, initial operating criteria lower range
- California WaterFix EIR/EIS Alternative 4A-H3, initial operating criteria upper range

Future without CA WaterFix

- Average Without CA WaterFix = 3.7 MAF
- Average With CA WaterFix = 5.0 MAF
- Midpoint = 1.3 MAF

Future with CA WaterFix

- Average Without CA WaterFix = 3.7 MAF
- Average With CA WaterFix = 5.0 MAF
- Midpoint = 1.3 MAF

California WaterFix

Water Supply Improvement Comparison

Incremental Improvement

<table>
<thead>
<tr>
<th></th>
<th>October 2017</th>
<th>March 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1,300,000 AF</td>
<td>1,300,000 AF</td>
</tr>
<tr>
<td>CVP</td>
<td>585,000 AF</td>
<td>429,000 AF</td>
</tr>
<tr>
<td>SWP</td>
<td>715,000 AF</td>
<td>871,000 AF</td>
</tr>
<tr>
<td>MWD</td>
<td>337,000 AF (25.9% of total)</td>
<td>410,000 AF (31.6% of total)</td>
</tr>
</tbody>
</table>

Based on preliminary Metropolitan analysis

Board Workshop: California WaterFix
Item 2a Slide 9
March 27, 2018

Board Workshop: California WaterFix
Item 2a Slide 10
March 27, 2018
Cost Analysis (2017 Dollars)

<table>
<thead>
<tr>
<th></th>
<th>October 2017</th>
<th>March 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4,950 cfs SWP (55%)</td>
<td>6,000 cfs SWP (67%)</td>
</tr>
<tr>
<td></td>
<td>4,050 cfs CVP (45%)</td>
<td>3,000 cfs CVP (33%)</td>
</tr>
</tbody>
</table>

Metropolitan Share
25.9% 31.6%

Metropolitan Capital Cost
$4.3 billion $5.3 billion

Marginal Cost
- South Delta Pumps $613 /AF $613 /AF
- Delivered/Treated $840 /AF $840 /AF

Overall Metropolitan Budget Impact
- Overall Increase (at end of 15-yrs) 13% 16%
- Annual Increase 0.9% 1.1%
- Average Increase per AF $122 /AF $148 /AF

Household Cost
$1.90 / month $2.40 / month

(1) Based on Metropolitan’s 2017/18 Revenue Requirement of $1,574 M; assume 4% interest rate base case
(2) Approximate based on Metropolitan’s 2017/18 sales budget of 1.70 million acre-feet
(3) Household impact based on 6.2 million occupied residential households in MWD Service area, 70% residential / 30% industrial split.

Alternative Financing for Full Project Implementation
**Board request -- Consider implementing full project now**
- Evaluate financing unsubscribed capacity for sale/lease

**Overarching principles**
- Maintain consistency with approved project
- Promote participation by other SWP/CVP contractors to minimize MWD financial impacts
- Beneficiaries pay
- Minimize financial risks to MWD

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**Cost Allocation and Financing**

<table>
<thead>
<tr>
<th>CA Water Fix</th>
<th>SWP PWAs</th>
<th>Design/Construction JPA</th>
<th>JPA Bonds</th>
<th>CVP Bonds</th>
<th>CVP PWAs</th>
</tr>
</thead>
<tbody>
<tr>
<td>$</td>
<td>$</td>
<td>$</td>
<td>~$9.2 Billion</td>
<td>~$7.5 Billion</td>
<td></td>
</tr>
<tr>
<td>SWP Invoice</td>
<td></td>
<td>Construction $</td>
<td>Principal &amp; Interest</td>
<td>Principal &amp; Interest</td>
<td></td>
</tr>
</tbody>
</table>
Cost Allocation and Financing

Acquire CVP PWA Share and Subsequent Purchase by CVP PWAs

CA Water Fix

$ SWP Invoice

67% Principal & Interest

33% Construction $

SWP PWAs

Design/Construction JPA

JPA Bonds

~$1.2 Billion

PWA Bonds

~$5.5 Billion

Principal & Interest

PWA Buyer’s Group

CVP Participants Subject to Purchase Agreement

California WaterFix

Benefit of 33% Unsubscribed Share

SWP PWA Contractors 6,000 cfs 67%

Unsubscribed 3,000 cfs 33%

Acquisition by SWP “Buyer’s Group”
- Sale/lease to CVP Participants
- Improved water supply reliability
- Wheeling revenue
- Conveyance of transfers/Sites Reservoir water

Based on preliminary Metropolitan analysis
**Metropolitan’s Financial Exposure**

33% Unsubscribed Share
Cost Analysis (2017 Dollars)

<table>
<thead>
<tr>
<th></th>
<th>March 2018</th>
<th>Maximum Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6,000 cfs SWP (67%)</td>
<td>6,000 cfs SWP (67%)</td>
</tr>
<tr>
<td>Metropolitan Share</td>
<td>31.6%</td>
<td>64.6%</td>
</tr>
<tr>
<td>Metropolitan Capital Cost</td>
<td>$5.3 billion</td>
<td>$10.8 billion</td>
</tr>
<tr>
<td>Overall Metropolitan Budget Impact</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Annual Increase</td>
<td>1.1%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Overall Increase (at end of 15-yrs)¹</td>
<td>16%</td>
<td>33%</td>
</tr>
<tr>
<td>Household Cost²</td>
<td>$2.40 / month</td>
<td>$4.80 / month</td>
</tr>
</tbody>
</table>

(1) Based on Metropolitan’s 2017/18 Revenue Requirement of $1,574 M; assume 4% interest rate base case
(2) Household impact based on 6.2 million occupied residential households in MWD Service area, 70% residential / 30% industrial split.

**Annual Cost Impact**

- Based on 4% base interest rate
- Applies over the period of construction

<table>
<thead>
<tr>
<th></th>
<th>October 2017</th>
<th>March 2018</th>
<th>MWD Max. Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>55% SWP 45% CVP</td>
<td>67% SWP 33% CVP</td>
<td>67% SWP 33% MWD</td>
</tr>
<tr>
<td>MWD Share</td>
<td>25.9%</td>
<td>31.6%</td>
<td>64.6%</td>
</tr>
</tbody>
</table>
**Proposed Implementation Agreements**

**Key Terms**

**Objective**

- Provide for financing and purchase of unsubscribed share of CA WaterFix
- DWR to assign interest in CA WaterFix capacity to Buyer’s Group
- DWR operates CA WaterFix to maximize water supply benefits consistent with operating requirements

**Participants**

- Department of Water Resources
- Metropolitan/other SWP “Buyer’s Group” members
Board Workshop: California WaterFix

**Key Terms**

- Buyer’s Group retains rights to capacity for the life of CA WaterFix
- Buyer’s Group shall determine fair compensation for the movement of water through their capacity interest
- Buyer’s Group has rights to convey capacity interest in CA WaterFix
- Obligations for capital payments continue until all debt is paid
- Obligations for O&M payments continue for the life of the CA WaterFix

**Objective**

- To convey up to 33% capacity interest from Buyer’s Group to CVP Participants
- Protect Buyer’s Group from financial risk

**Parties**

- Buyer’s Group (MWD and other SWP PWAs)
- CVP Participants preferably through San Luis & Delta Mendota Water Authority

**Key Terms**

- Buyer’s Group provides financing for project during construction
- Upon completion of construction, CVP Participants fully compensate Buyer’s Group
- Non-refundable upfront payment to Buyer’s Group
- Non-refundable progress payments during construction period to Buyer’s Group
- Sufficient security to minimize default risk
SWP Water Transfer Agreements

**Framework**
- All south of Delta contractors pay their proportional share of CA WaterFix cost
- SWP Contractors selling incremental CA WaterFix water reliability benefits
- Buyer pays 85% of seller’s CA WaterFix cost
- Costs align with benefits
- Individual agreements may vary

**Potential Participants**

**Sellers**
- Kern County
- Dudley Ridge
- Tulare Lake Basin
- County of Kings
- Oak Flat
- Empire West Side

**Buyers**
- Santa Clara
- San Gorgonio Pass
- Metropolitan
- Others
Reliability improvement from CA WaterFix

- Buyer receives Table A (~81% of improvement)
- Seller retains Article 21 (~19% of improvement)
- Table A supplies can be scheduled unlike Article 21
- Buyer receives additional transfer benefits should an emergency occur longer than 12 months

Seller

- Pays all SWP costs including CA WaterFix costs to DWR
- Receives 85% reimbursement from buyer, effectively paying 15% of CA WaterFix costs
- Retains access to Article 21 supplies
- Retains conveyance capacity for non-project transfers
- Retains 12 months emergency conveyance for base supply
**Buyer**
- Receives reliability improvement in Table A supplies from CA WaterFix
- Transfer amount linked to SWP allocation and determined in advance
- In the event of an emergency lasting longer than 12 months, Buyer receives additional transfer supplies
- Pays Seller 85% of Seller’s CA WaterFix cost

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**Example for water transfer of 100,000 AF Base Table A**

<table>
<thead>
<tr>
<th>SWP Allocation</th>
<th>Transfer Water (AF) *</th>
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</thead>
<tbody>
<tr>
<td>0 to 10%</td>
<td>-</td>
</tr>
<tr>
<td>11 to 20%</td>
<td>200</td>
</tr>
<tr>
<td>21 to 30%</td>
<td>3,000</td>
</tr>
<tr>
<td>31 to 40%</td>
<td>6,000</td>
</tr>
<tr>
<td>41 to 50%</td>
<td>7,000</td>
</tr>
<tr>
<td>51 to 60%</td>
<td>7,000</td>
</tr>
<tr>
<td>61 to 70%</td>
<td>13,000</td>
</tr>
<tr>
<td>71 to 80%</td>
<td>22,000</td>
</tr>
<tr>
<td>81 to 90%</td>
<td>25,000</td>
</tr>
<tr>
<td>91 to 100%</td>
<td>26,000</td>
</tr>
</tbody>
</table>

* Initial analysis, amounts modeled every five years at a minimum
**Gap Funding Agreement**

**Terms**

- Provides start-up funding prior to issuance of bonds
- All south of Delta participants pay their fair share
- Gap funding will be reimbursed with interest upon first bond issuance
- Provides funding for permitting, geotechnical and design
Duration: 12 months
Budget: $133 million
Funding: SWP Participating agencies and State Water Resources Development System Funds


The board will be asked to consider two main actions:

- Funding Metropolitan’s share of the SWP’s 67% (31.6% of the total)
- Financing the unsubscribed 33% through the SWP Buyer’s Group with contracts executed obligating CVP Participants to pay up to 33% of the cost