Unanswered Questions From Last Review

- What portion of the costs will San Diego be expected to pay?
- How much water will San Diego County receive?
- What guarantee do participating agencies have of stated benefits?
- What other agencies will commit to pay for the project?
- How will San Diego County ratepayers be protected from paying an unfair share?
Cost Assumptions Used by MWD – Twin Tunnels

- Capital: $16.7B*
  - O&M: $64M/yr
- Cost split between CVP/SWP: 45/55
- MWD Share: 25.9%, or $4.3B
  - $207M/yr–$334M/yr (@4% – 8%)
- WaterFix supply benefit: 1.3 MAF for both projects/ MWD Share: 337,000 acre-feet
  - $840/af – $1,218/af at MWD service area
- Oct 2017: MWD Board authorized participation of 25.9%, and Finance JPA

* In 2017$
Staged Approach to WaterFix
Announced: February 7, 2018

Full Project – Staged Approach

- Intake 2
- Intake 3
- Intake 5
- West Tunnel
- West Pumping Plant
- East Tunnel
- East Pumping Plant
- SWP Pumps
- CVP Pumps

Stage 1
Stage 2
Stage 1 (Single Tunnel) Summary – Reported by MWD

- Capital: $11.1B*
- O&M: $49.6M/yr
- Largely funded by SWP contractors
  - CVP: up to 1,000 cfs (of 6,000 cfs)
- MWD Share: $4.3B – $5.2B
- Stage 1 supply benefit: 0.9 MAF
  - 400,000 AF less than full WaterFix
- SWP Delivery Capacity
  - ~2.8 MAF ("roughly unchanged between 9,000 cfs and 6,000 cfs")
- CVP contractors negatively impacted

* In 2017$
Because CVP and SWP share same waterway, both projects have historically coordinated operations.

Incorporating WaterFix to existing CVP and SWP facilities will change how projects are currently operated.

Based on “cost follows water” principle, Stage 1 benefits will be accrued by SWP contractors leaving CVP contractors bearing the burden of reduced exports from existing facilities.

- Stage 1 benefit is 400,000 af less than full project, according to MWD (1.3 MAF vs 0.9 MAF).
- Will CVP contractors agree to change in operations that results in reduction of their exports based on regulations that may not occur?

State Board’s Bay Delta Water Quality Plan update may further impact water exports not addressed by WaterFix.
Natural Flow
Natural Flow

Existing Southern Delivery Systems: SWP & CVP
Natural Flow

Existing Southern Delivery Systems: SWP & CVP

Reverse Flow
Natural Flow

Existing Southern Delivery Systems: SWP & CVP

WaterFix-Original Proposal

Dual Facility helps reduce reverse flow
Natural Flow

Existing Southern Delivery Systems: SWP & CVP

WaterFix (Stage 1 6,000 cfs)

Dual Facility helps reduce reverse flow
Natural Flow

Existing Southern Delivery Systems: SWP & CVP

WaterFix (Stage 1 6,000 cfs)

WaterFix (Stage 2 3,000 cfs)

Dual Facility helps reduce reverse flow
Issues (cont.)

- MWD’s participation level?
  - Stage 1: $4.3B – $5.2B* (1.2x more than previously authorized)
    - Water transfer agreement with SWP ag contractors
  - Full project:
    - MWD to fund CVP share: ~$11.8B (2.7x more than previously authorized)
      - “lease capacity” to CVP contractors

- Finance JPA
  - Alternative financing for WaterFix
  - To-date, only MWD and Zone 7 signed on to participate
  - JPA debt would also be secured by the pledge of revenues from contractors who agree to finance

*4% interest
## Benefits–Costs
### Dr. Sunding’s Analyses

<table>
<thead>
<tr>
<th>Scenario</th>
<th>SWP Urban</th>
<th>SWP Ag</th>
<th>CVP</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>California WaterFix (Nov 2015 Draft): assumed life span = 50 years</strong></td>
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<tr>
<td>9,000 cfs (With $3.9B of $13.9B paid for by others)</td>
<td>2.43x</td>
<td>0.71x</td>
<td>0.63x</td>
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<td><strong>California WaterFix Stage 1 (6,000 cfs): assumed life span = 100 years</strong>&lt;br&gt;“No Trading”</td>
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</tr>
<tr>
<td>1,000 cfs SWP/1,000 cfs CVP</td>
<td>1.35x</td>
<td>1.04x</td>
<td>1.08x</td>
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<tr>
<td>6,000 cfs SWP</td>
<td>1.29x</td>
<td>1.03x</td>
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<tr>
<td>6,000 cfs SWP</td>
<td><strong>1.23x</strong></td>
<td>1.17x</td>
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</tbody>
</table>
Next Steps

- MWD plans to present cost benefit analysis to its Board
  - 2/27/18

- MWD Board action on cost adjustments, including transfer agreements
  - 3/13/18

- SWP contractors will have to each decide funding contribution
Questions?