



# California WaterFix Board Workshop

March 27, 2018

## Presentation Outline

- 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

## California WaterFix

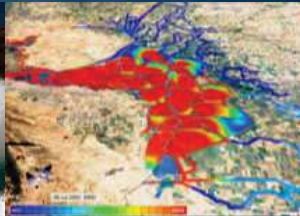
### Recent Developments

- 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

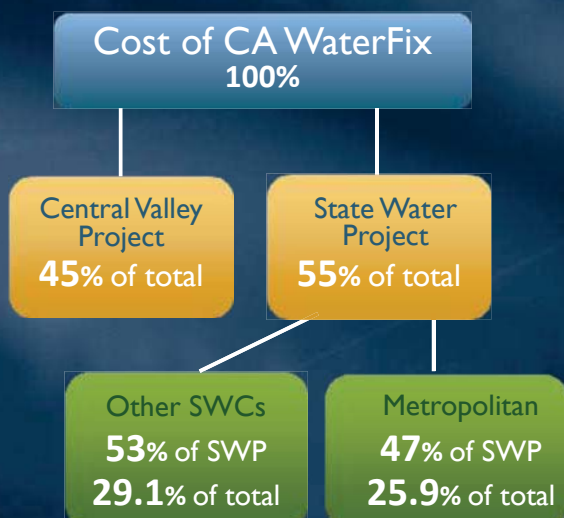
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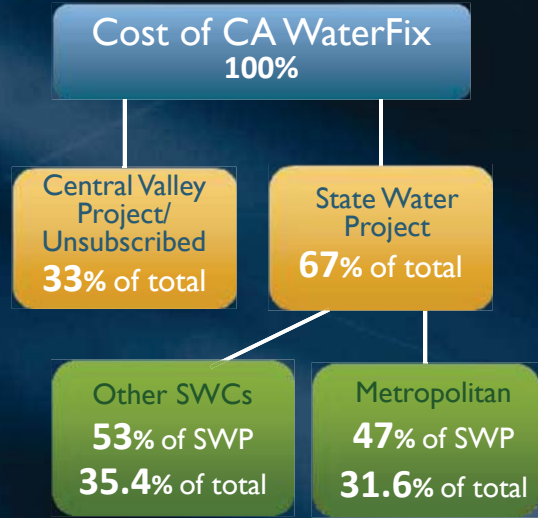
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## California WaterFix

October 2017



March 2018



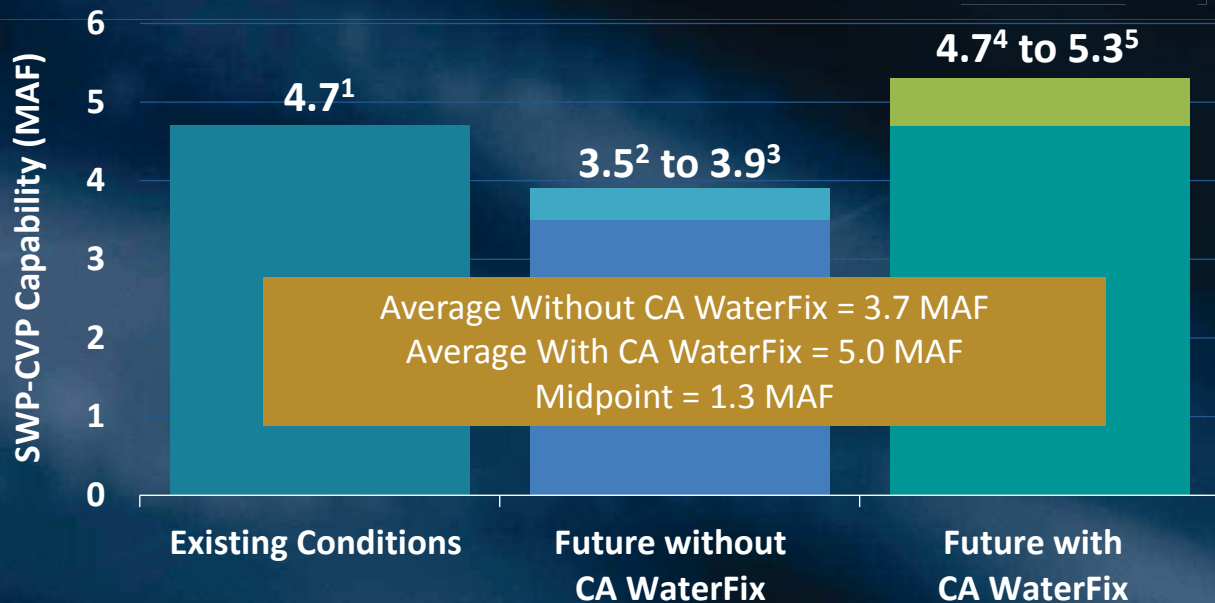
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# California WaterFix Water Supply Analysis

## Average Delivery Capability With & Without CA WaterFix



1 California WaterFix EIR/EIS No Action Alternative, existing conditions with 2025 climate change impacts

2 2015 Delivery Capability Report Existing Conveyance High Outflow scenario

3 2015 Delivery Capability Report Existing Conveyance Low Outflow scenario

4 California WaterFix EIR/EIS Alternative 4A-H4, initial operating criteria lower range

5 California WaterFix EIR/EIS Alternative 4A-H3, initial operating criteria upper range

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## California WaterFix Water Supply Improvement Comparison

Incremental Improvement	October 2017 4,950 cfs SWP (55%) 4,050 cfs CVP (45%)	March 2018 6,000 cfs SWP (67%) 3,000 cfs CVP (33%)
Total	1,300,000 AF	1,300,000 AF
CVP	585,000 AF	429,000 AF
SWP	715,000 AF	871,000 AF
MWD	337,000 AF (25.9% of total)	410,000 AF (31.6% of total)

Based on preliminary Metropolitan analysis

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# California WaterFix

## Cost Analysis (2017 Dollars)

	October 2017 4,950 cfs SWP (55%) 4,050 cfs CVP (45%)	March 2018 6,000 cfs SWP (67%) 3,000 cfs CVP (33%)
<b>Metropolitan Share</b>	25.9 %	31.6 %
<b>Metropolitan Capital Cost</b>	\$4.3 billion	\$5.3 billion
<b>Marginal Cost</b>		
• South Delta Pumps	\$613 /AF	\$613 /AF
• Delivered/Treated	\$840 /AF	\$840 /AF
<b>Overall Metropolitan Budget Impact</b>		
• Overall Increase <sup>1</sup> (at end of 15-yrs)	13 %	16 %
• Annual Increase	0.9 %	1.1 %
• Average Increase per AF <sup>2</sup>	\$122 /AF	\$148/AF
<b>Household Cost<sup>3</sup></b>	\$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.

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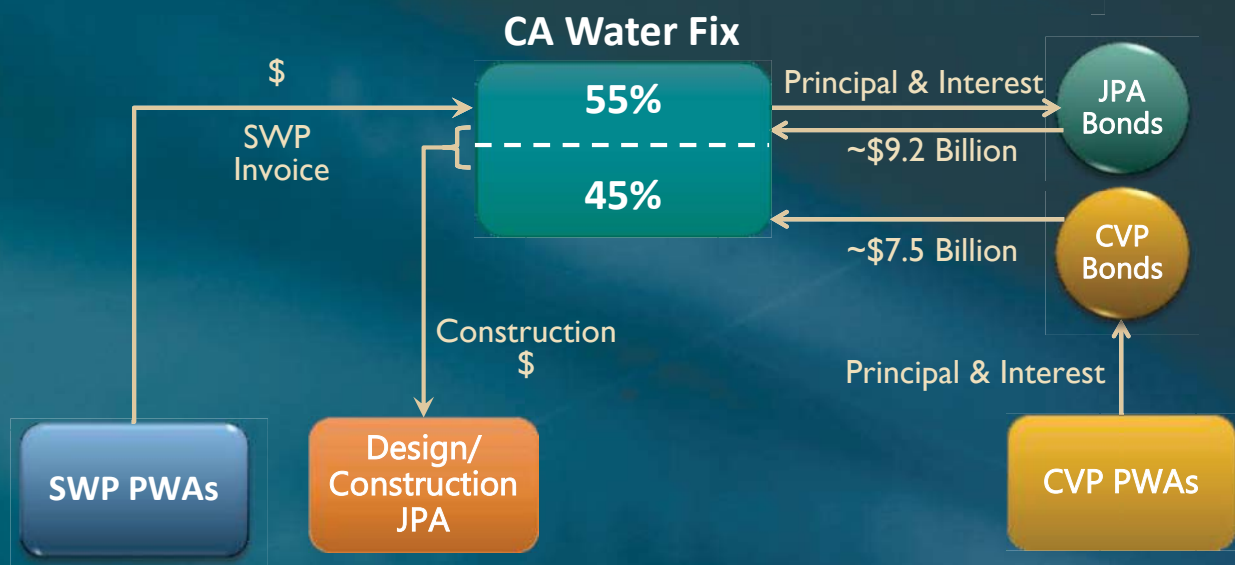
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## Alternative Financing for Full Project Implementation

# Alternative Financing for Full Project Implementation

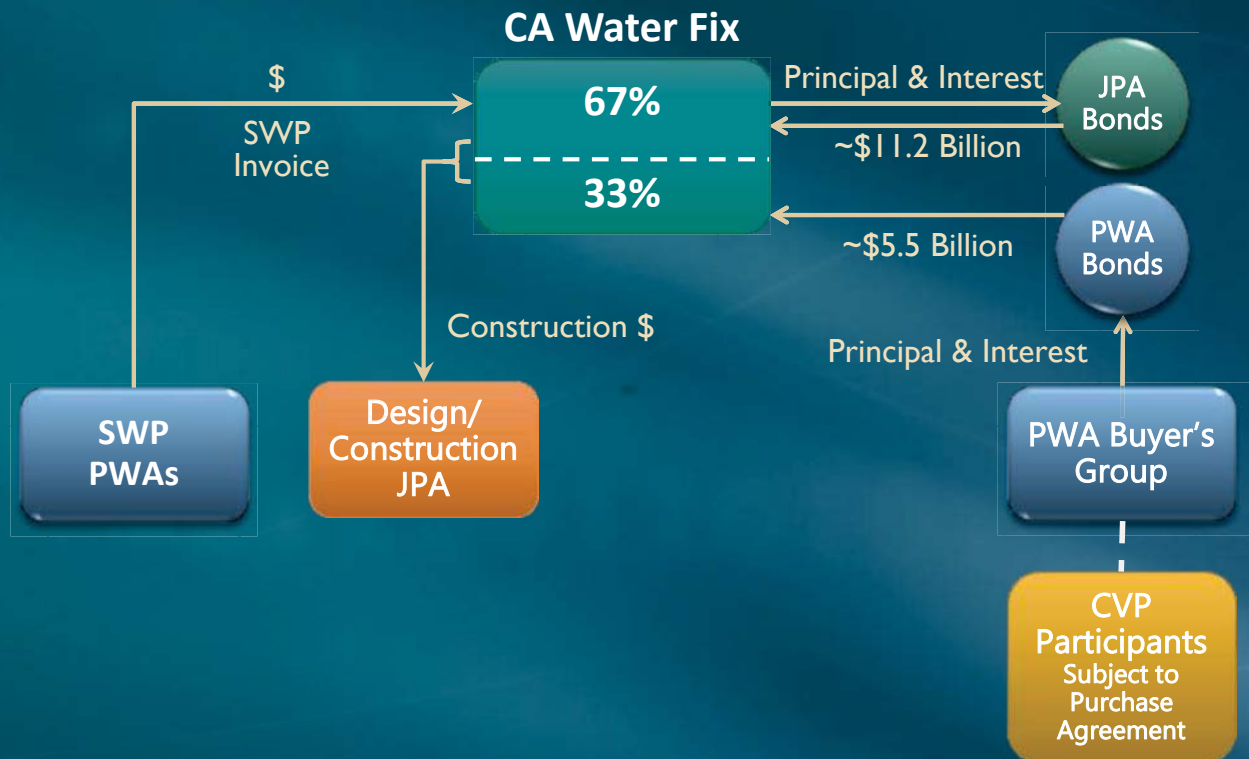
- Board request -- Consider implementing full project now
  - Evaluate financing unsubscribed capacity for sale/lease
- Overarching principles
  - Maintain consistency with approved project
  - Promote participation by other SWP/CVP contractors to minimize MWD financial impacts
  - Beneficiaries pay
  - Minimize financial risks to MWD

## Cost Allocation and Financing



# Cost Allocation and Financing

Acquire CVP PWA Share and Subsequent Purchase by CVP PWAs



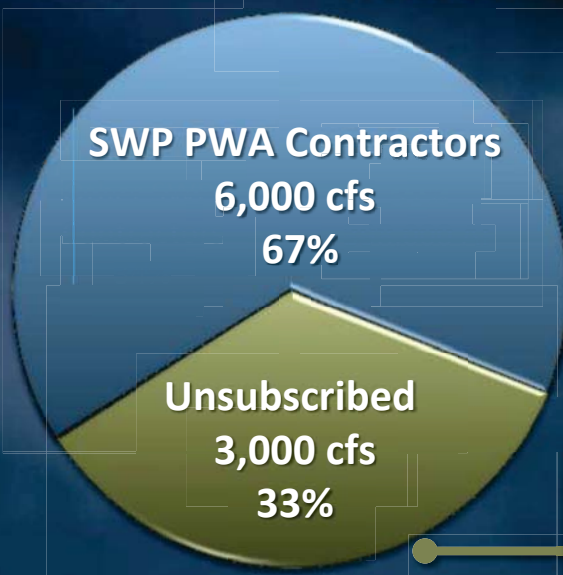
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## California WaterFix

Benefit of 33% Unsubscribed Share



### 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

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# Metropolitan's Financial Exposure

## 33% Unsubscribed Share Cost Analysis (2017 Dollars)

	March 2018 6,000 cfs SWP (67%) 3,000 cfs CVP (33%)	Maximum Exposure 6,000 cfs SWP (67%) 3,000 cfs MWD (33%)
<b>Metropolitan Share</b>	31.6%	64.6%
<b>Metropolitan Capital Cost</b>	\$5.3 billion	\$10.8 billion
<b>Overall Metropolitan Budget Impact</b>		
• Annual Increase	1.1 %	2.2 %
• Overall Increase (at end of 15-yrs) <sup>1</sup>	16 %	33 %
<b>Household Cost<sup>2</sup></b>	\$2.40 / month	\$4.80 / month

(1) Based on Metropolitan's 2017/18 Revenue Requirement of \$1,574 M; assume 4% interest rate base case

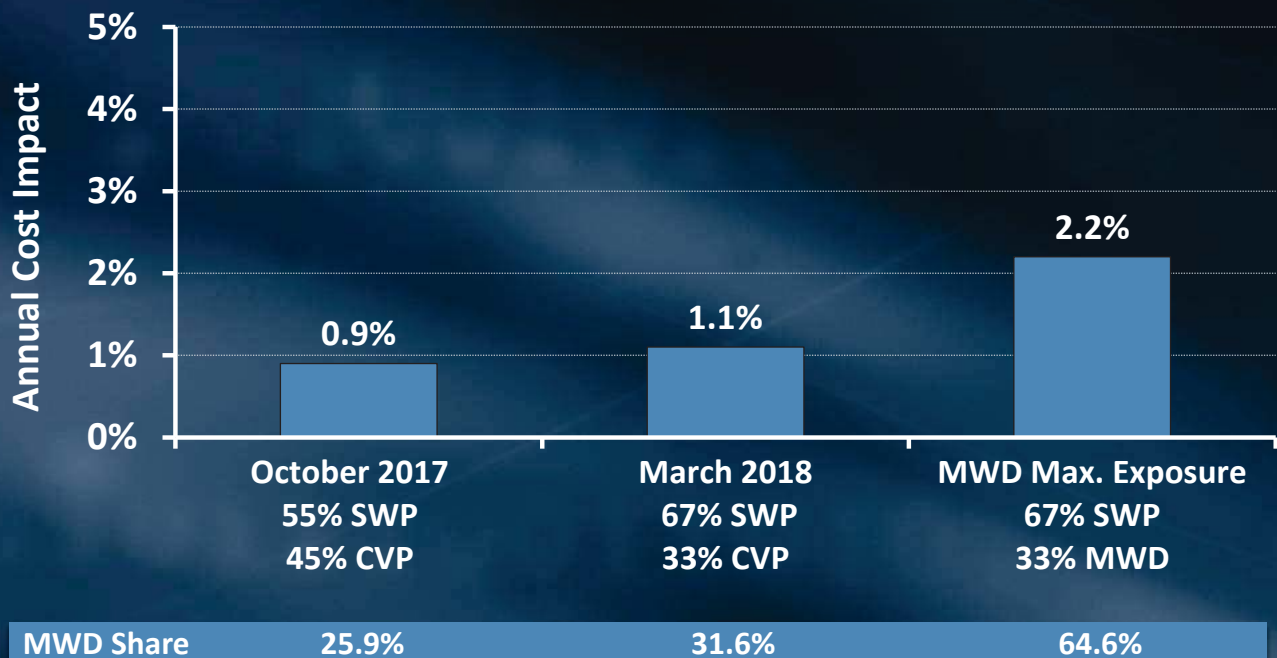
(2) Household impact based on 6.2 million occupied residential households in MWD Service area, 70% residential / 30% industrial split.

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## Annual Cost Impact



Based on 4% base interest rate

Applies over the period of construction

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# Proposed Implementation Agreements Key Terms

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## DWR Master Agreement

### ● 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

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# DWR Master Agreement

## 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

# Capacity Purchase Agreement

## 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

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## 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 Geronio Pass
- Metropolitan
- Others

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# SWP Water Transfer Agreements

## Agreement Template/Key Terms

- 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

# SWP Water Transfer Agreements

## Agreement Template/Key Terms

- 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

# SWP Water Transfer Agreements

## Agreement Template/Key Terms

### 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

# SWP Water Transfer Agreements

## Agreement Template/Key Terms

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

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

\* Initial analysis, amounts modeled every five years at a minimum





# Gap Funding Agreement

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## 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

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# Gap Funding Agreement

- Duration 12 months
- Budget \$133 million
- Funding
  - SWP Participating agencies and State Water Resources Development System Funds

*Preliminary list of agencies that may seek authorization: Antelope Valley-East Kern Water Agency, Coachella Valley Water District, Desert Water Agency, Metropolitan Water District, Mojave Water Agency, San Bernardino Valley Municipal Water District, San Geronio Pass Water Agency, Santa Clara Valley Water District, and Zone 7 Water Agency*

## Upcoming Board Action

- 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