# MODERNIZING THE SYSTEM: CALIFORNIA WATERFIX FINANCE AND COST ALLOCATION

The third in a series of policy papers prepared for the consideration of Metropolitan's Board of Directors in advance of planned summer meetings and decisions in fall 2017.

Modernizing and improving California's water system is essential for the reliable delivery of water supplies to much of the state. About 30 percent of the water that flows out of taps in Southern California homes and businesses comes from Northern California watersheds and flows through the Sacramento-San Joaquin Delta. But the Delta's declining ecosystem and 1,100 miles of levees are increasingly vulnerable to earthquakes, flooding, saltwater intrusion, climate change and further environmental degradation. California WaterFix is the product of more than a decade of review, planning, rigorous scientific and environmental analysis and unprecedented public comment.

This white paper provides information about the costs of the project, including adjustments of capital, mitigation and O&M costs to 2017 dollars. The financing plan is presented with financial assumptions and a range of financing scenarios. The cost allocation information covers Metropolitan's anticipated financial commitment, an estimate of member agency wholesale rate impacts, and metrics to assess retail level impacts. Using this information and when compared to costs for other local supply alternatives, California WaterFix would provide a cost-effective supply for Southern California's water portfolio.



## A Cost-Effective Approach to Reliability



- California WaterFix is a sound investment to maintain a reliable source of water for Southern California.
- The proposed project would provide measureable and quantifiable water supply and water quality benefits.
- Costs will be fairly allocated among participating agencies using the 'beneficiary pays' principle.
- Metropolitan will coordinate with the California Department of Water Resources (DWR) and the other state and federal water contractors to evaluate options to optimize financing and reduce costs while minimizing risks.



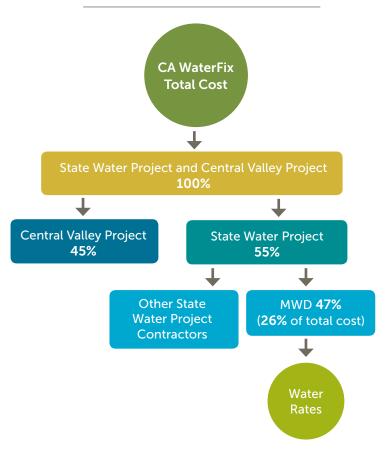




CAPITAL COSTS		
	2014 Dollars	2017 Dollars
Environmental Mitigation*	\$ 367 M	\$ 401 M
Conveyance System Cost	\$ 14.9 B	\$16.33 B
Overall Cost	\$ 15.3 B	\$16.7 B

- \*The mitigation costs for capital and O&M for 25 years equals \$796M in 2014 dollars or \$870M in 2017 dollars.
- Cost estimates were determined through a rigorous analysis by industry professionals and will be updated as additional information becomes available.
- Estimated costs for mitigation and associated environmental commitments are preliminary and will be revised as costs are refined.

## CA WaterFix Cost Allocation



# Costs and Financing Approach

#### Costs and financing considerations include the following:

- Planning, design, construction and other capital costs will be financed with revenue bonds beginning in mid-2019.
- A validation action has been filed by DWR to, among other things, provide the requisite assurance to the financial community for the sale of revenue bonds.
- Anticipated cost increases for California WaterFix have already been incorporated into Metropolitan's ten-year Financial Forecast and are included as part of the long-term projected average 4.5% rate increases.



Approximate average household cost of California WaterFix within the **MWD Service Area** 

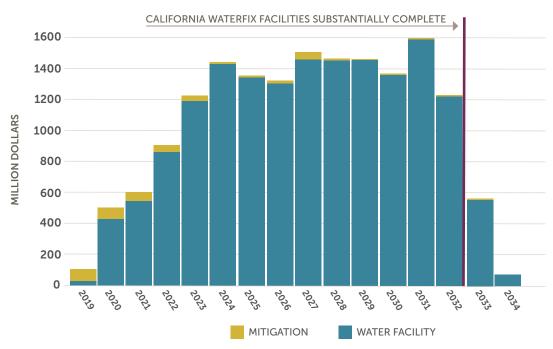








ESTIMATED CASH FLOW FOR CAPITAL EXPENDITURES



Construction of the facilities is expected to be substantially complete in 2032 and fully operational in 2033.

## Key Uncertainties And Mitigation Measures

#### **FINANCING OPTIONS**

In addition to revenue bonds, a range of other financing options will be evaluated to optimize financing and reduce costs, such as short-term borrowing and pursuing WIFIA (federal loan program) supplemental funding.

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#### SWP CONTRACTOR DEFAULTS ON PAYMENTS

Mitigation is included in SWP delivery contracts, obligating contractors to make payments and if necessary compel contractor to levy taxes or assessments in the event of non-payment.

#### REIMBURSEMENT OF DIRECT CONTRACTOR FUNDING CONTRIBUTIONS

The first issuance of revenue bonds will include funds to reimburse contractor-provided gap funding and prior funding contributions for planning costs.



# JUDICIAL DETERMINATION ON DWR AUTHORITY TO ISSUE BONDS

- Pending completion of the validation action, private placement bond sales with the Finance Joint Powers Authority (JPA) would allow funding for project implementation to proceed.
- If DWR does not have the authority, a process would be established leading to the potential conveyance of interest in the project to the Finance JPA or designee to proceed.

#### CVP CONTRACTOR PARTICIPATION

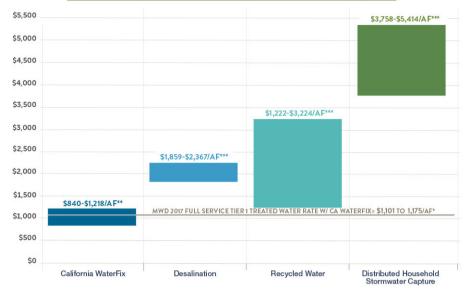
- DWR will not move forward with project implementation without the commitment of a sufficient number of SWP and CVP contractors.
  - Discussions are ongoing concerning the risk of a participating CVP contractor defaulting during project implementation.





# Ensuring Affordable, Reliable Water Supplies

## California WaterFix vs. Alternative Supplies



\* Based on Metropolitan's 2017 Full Service Tier 1 Treated Rate of \$979 plus WaterFix costs ranging from \$122/AF to \$196/AF.

\*\* Illustrative marginal cost shown for California WaterFix when treated and conveyed to Metropolitan's service area so as to be directly comparable to the cost of alternatives. Based on 4%-8% interest rate scenarios in 2017 dollars, projected average supply improvement of 1.3 MAF/YR, and 2017/18 budgeted State Water Contract power costs of \$197/AF and variable treatment costs of \$30/AF.

\*\*\* Range is based on the 25-75% percentiles of projected project costs as reported in the 2015 IRP (in 2015 dollars).

## California WaterFix is the most cost-effective alternative

If we keep our existing imported water supply, made more reliable with California WaterFix, it would cost approximately \$2-3/mo. per average household in the Metropolitan service area.

If we tried to develop new local supplies to replace the imported water supply we would lose without California WaterFix, it would cost two or more times as much per average household in the Metropolitan service area.

### **OUR MISSION**

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

### **ABOUT METROPOLITAN**

The Metropolitan Water District of Southern California is a state-established cooperative of 26 member agencies – cities and public water agencies – that serve nearly 19 million people in six counties. Metropolitan imports water from the Colorado River and Northern California to supplement local supplies and helps its members develop increased water conservation, recycling, storage and other resource management programs.



## JOBS AND ECONOMIC BENEFITS



SECURING CLEAN WATER SUPPLIES

## 4.7-5.3 MILLION

ACRE-FEET ON AVERAGE ANNUALLY (Combined SWP and CVP) Enough to supply 9-11 million households with water for one year



#### **CREATING & PROTECTING JOBS**

1.1 MILLION FULL-TIME EQUIVALENT JOBS CREATED AND SAVED FOR CALIFORNIA Based on a year-by-year estimate



SUPPORTING THE ECONOMY

\$1 TRILLION SOUTHERN CALIFORNIA ECONOMY DEPENDS ON DELTA-CONVEYED WATER

For a full version of the Finance and Cost Allocation Paper, visit mwdh2o.com/waterfix

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