



● **Board of Directors**

10/10/2017 Board Meeting

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**8-4**

**Subject**

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Adopt CEQA determination and express Metropolitan's support for California WaterFix; authorize participation in the construction of California WaterFix including payment of costs consistent with Metropolitan's 25.9 percent share of overall costs; authorize the General Manager to execute the following agreements having terms as described in this board letter: (1) Agreement for Implementation of an Adaptive Management Program for Project Operations, (2) Joint Powers Agreement Forming the Delta Conveyance Design and Construction Joint Powers Authority, and (3) Joint Powers Agreement Forming the Delta Conveyance Financing Joint Powers Authority; and adopt a Resolution authorizing the General Manager to participate in the Financing Joint Powers Authority, authorizing the purchase of private placement bonds from the California Department of Water Resources and issue public bonds by the Financing Joint Powers Authority, consistent with Metropolitan's share of 25.9 percent of the California WaterFix project costs, including an agreement to secure payment of Metropolitan's share

**Executive Summary**

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The complex approval process for California WaterFix has progressed to the point where formal Board action is needed to guide planning to completion. In December 2016, the final environmental impact report and environmental impact statement were released, identifying the preferred alternative of three new intakes on the Sacramento River and the twin tunnel pipeline system to convey the supplies. In June of 2017, biological opinions by the National Marine Fisheries Service and U.S. Fish and Wildlife Service were released for compliance with the federal Endangered Species Act. And in July of 2017, the Department of Water Resources certified the final environmental impact report, approved the project, and outlined a new governance structure to enhance Metropolitan's participation in construction oversight via a proposed joint powers authority, while the California Department of Fish and Wildlife issued a permit for compliance with the state Endangered Species Act. While future actions are necessary by the State Water Resources Control Board and the Delta Stewardship Council in particular, the majority of the permitting processes have been successfully completed.

Board action is sought to quantify Metropolitan's level of investment and benefits in California WaterFix; to finalize the governance structures; to participate in adaptive management; to join separate joint power authorities to oversee construction and finance; and to take specific actions pertaining to Metropolitan's role as a responsible agency for California WaterFix under the California Environmental Quality Act.

**Details**

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**Introduction**

After more than a decade of planning, preliminary design, environmental analysis, regulatory review, and public input, California WaterFix has now reached a point where the Board must decide whether to move forward with its implementation. Metropolitan staff believes that California WaterFix represents a viable, comprehensive approach to solving the long-standing problems that have plagued the Sacramento-San Joaquin Delta (Delta), problems that are placing both the state's water supply and the Delta's ecosystem at increasing risk with each passing year.

Accordingly, as detailed more fully below, staff is recommending that the Board: (1) express Metropolitan's support for California WaterFix; (2) authorize participating in construction of California WaterFix, up to a 25.9 percent share of the overall project costs; and (3) subject to this 25.9 percent limitation, authorize the

General Manager to execute various agreements related to: (a) participation in two joint powers authorities for design, construction and financing of California WaterFix, (b) development and implementation of an adaptive management plan for future operations of California WaterFix, and (c) additional documents, in connection with Metropolitan's participation in the financing joint powers authority.

The physical, operational, and financial details of California WaterFix have been discussed extensively in prior Board letters, reports, memoranda, presentations and workshops, including, most recently, in three white papers presented to the Board in July and August. (*See Modernizing the System: California WaterFix Infrastructure* [White Paper #1]; *Modernizing the System: California WaterFix Operations* [White Paper #2]; *Modernizing the System: California WaterFix Finance & Cost Allocation* [White Paper #3].) This Board letter does not attempt to reiterate all of this information. Rather, it presents some of the key details and points for consideration as a preface to the Board actions being recommended by staff.

### **Project Overview**

Major features of California WaterFix include three new intakes on the east bank of the Sacramento River in the northern Delta, three 13.5-mile long tunnels connecting these intakes to a new, 30-acre intermediate forebay, and two 30-mile long tunnels carrying water from this forebay to a new pumping plant connected to an expanded and modified Clifton Court Forebay. From there water would move into the existing SWP and CVP pumping plants located in the south Delta. The total maximum north Delta diversion intake capacity would be 9,000 cubic feet per second (cfs).

The proposed design maximizes the use of public lands, reducing the disruption, time and cost of acquiring private property, easements and rights of way. In addition, a number of changes were made to the original concept in response to input received from various stakeholders during the planning, preliminary design and environmental review processes. These changes were aimed at lessening the impacts to the Delta's environment, ecosystem and existing land uses. They included: (1) downsizing the north Delta intakes from a 15,000 cfs pump-driven system to a 9,000 cfs gravity fed system; (2) using tunnels instead of open canals and pipelines to convey water from the northern intakes to Clifton Court; (3) revising tunnel alignments to minimize the number of water crossings, reduce impacts to sensitive areas, and avoid unnecessary surface disruptions; (4) reducing the size of the intermediate forebay's footprint from 750 acres to approximately 100 acres; (5) reducing the pumping requirements for the overall system, allowing the system to be fully gravity-fed under certain hydrologic conditions and delivery scenarios; (6) reducing the construction impacts along the Sacramento River; and (7) optimizing the location of key construction sites to reduce traffic and other impacts to local residents and agricultural interests.

Construction of California WaterFix is anticipated to take up to 18 years to complete following approval, and would be managed under contract with DWR through a proposed Delta Conveyance Design and Construction Joint Powers Authority (Construction JPA). This approach was successfully used in the mid-1990s when DWR contracted with the Central Coast Water Authority to design and construct a portion of the California Aqueduct's Coastal Branch. In coordination with DWR, the Construction JPA would design and construct the project facilities with the goal of ensuring that they are delivered on time, on budget and in accordance with approved specifications. The Construction JPA would sunset upon the completion and commissioning of California WaterFix, which would be turned over to DWR.

### **Project Need and Benefits**

Modernizing and improving California's water system are essential to ensure reliable delivery of the state's water supplies. Approximately 30 percent of the water used in Southern California homes and businesses comes from Northern California watersheds and flows through the Delta. But the Delta's ecosystem and 1,100 miles of levees are increasingly vulnerable to earthquakes, flooding, saltwater intrusion, climate change and environmental degradation.

Furthermore, SWP and CVP operations have been, and continue to be, severely affected by regulatory restrictions that have decreased operational flexibility and reduced exports to the 25 million Californians and millions of acres of irrigated farmland that depend on this water supply. Over the last three decades, these restrictions are estimated to have reduced exports from the SWP and CVP by over 3 million acre-feet (MAF) per year. This trend will continue if nothing is done. Without California WaterFix, staff estimates that exports from the SWP and CVP would decline to between 3.5 and 3.9 MAF per year on a long-term average basis, representing an additional loss of approximately 800 thousand acre-feet (TAF) to 1.2 MAF per year, when compared to existing conditions.

California WaterFix is intended to address these problems and improve both the reliability and quality of exports from the Delta. Among other things California WaterFix would: (1) allow for isolated deliveries of SWP and CVP water supplies; (2) provide greater flexibility and efficiency in operating the projects; (3) upgrade a decades old system with new, state-of-the-art facilities, fish screens, equipment, and technologies; (4) safely and reliably capture water during periods of heavy rain and high Delta flows; and (5) ensure that more water is available for drought and for emergency needs, such as during a natural disaster.

Beyond this, California WaterFix is an environmentally responsible project that advances the co-equal goals of protecting the Delta ecosystem. As noted above, California WaterFix has been designed and refined to minimize its impacts during construction and operation. Moreover, it would be subject to a host of environmental mitigation measures, including many that involve the creation and restoration of habitat for various fish species and other wildlife within the Delta.

Once online, California WaterFix would allow the SWP and CVP to be operated in a manner that provides a more natural flow in the Delta during critical periods limiting the potential effects of water exports on listed species. In addition, it would improve water quality both for exports from the Delta and for uses within and around the Delta. Likewise, it would reduce the risks associated with climate change, natural disasters, salinity intrusion, and other environmental stressors, which is important not only for water supply reliability, but for protection of the Delta, as well.

Lastly, California WaterFix has a number of elements to ensure the Delta's ecosystem is adequately protected once the facilities are in service. These include flexible, real-time operations that allow adjustments to be made on a day-to-day basis, and a robust, collaborative science and adaptive management program to address uncertainties and make revisions to the operational criteria, as needed, over time.

California WaterFix would not restore SWP and CVP exports to the levels that existed before the first regulatory restrictions were imposed. But it would help to preserve, and potentially increase, the levels of such exports as they exist today. Based on extensive modeling and analysis, it is estimated that with California WaterFix in place, the projects would be able to deliver, on average, between 4.7 and 5.3 MAF per year, and improve the quality and reliability of these deliveries, both of which have been in steady decline for many years.

### **Project Cost and Financing**

The cost to construct California WaterFix is estimated to be \$16.7 billion, and annual operations and maintenance costs are estimated at \$64.4 million. These estimates are in 2017 dollars and were determined through a rigorous analysis by industry professionals. It should be noted that included in these costs are nearly \$900 million for environmental mitigation. These mitigation costs would be in addition to any future state or federal expenditure made pursuant to California EcoRestore, the state's effort to accelerate habitat restoration in the Delta, which is being developed in parallel with California WaterFix.

Consistent with the "beneficiary pays" principle, 55 percent of the costs associated with California WaterFix would be allocated to SWP Contractors, with the remainder allocated to CVP Contractors (55/45 split). For the SWP share, this project would be treated like any other major improvement to the SWP system. Under the California Water Code, DWR is responsible for construction, maintenance, and operation of the SWP, and for securing funding for SWP-related costs. As such, the SWP share of California WaterFix costs would be paid by SWP Contractors in accordance with their long-term water delivery contracts with DWR. With the exception of five north of Delta contractors that would not receive any direct benefit from California WaterFix, all SWP

Contractors would contribute toward the SWP share of project costs in proportion to their baseline Table A contract amount. Thus, Metropolitan's anticipated share of California WaterFix costs would be 25.9 percent (SWP's 55 percent share of total project costs multiplied by Metropolitan's 47.1 percent share of SWP costs).

DWR plans to issue a series of new bonds, California WaterFix Revenue Bonds, to finance the SWP share of capital costs which, based on the 55/45 split, would be approximately \$9.2 billion in 2017 dollars. Proceeds from the sale of these bonds would be used to fund construction, planning, and other preconstruction costs (including reimbursement of funds and services previously provided by various SWP and CVP Contractors), and to pay for various costs associated with bond issuance. However, since the marketability of California WaterFix Revenue Bonds may be affected by judicial challenges to the project, DWR proposes to sell these revenue bonds to a proposed Delta Conveyance Financing Joint Powers Authority (Finance JPA) comprised of certain SWP and CVP Contractors. DWR's direct sale of these revenue bonds is targeted for the middle of calendar year 2018.

With respect to Metropolitan, the anticipated cost impact varies principally based on the interest rate assumed for project financing. The peak annual increase in Metropolitan's costs is estimated to be between \$122 and \$196 per acre-foot of water sold by Metropolitan, based on fixed-interest finance rates ranging from four to eight percent. On an estimated per household basis across Metropolitan's service area, this represents an average monthly cost of \$1.90 to \$3.10. Metropolitan's annual cost increase due to California WaterFix over a 15-year ramp-up to the maximum yearly expenditure is expected to be between 0.9 and 1.4 percent, depending on the interest rate sensitivity analysis. Metropolitan previously estimated California WaterFix costs into its ten-year rate forecast and those projections remain appropriate. The ten-year forecast estimates annual overall rate increases for all anticipated Metropolitan expenditures, including California WaterFix, at 4.5 percent for 2019 through 2026.

Without a doubt, the investment in California WaterFix is a significant one. But it is in line with other projects of this size and scope. Indeed, on a per capita basis, the estimated cost of California WaterFix is significantly less than those of other more recent projects, such as the Coastal Branch of the California Aqueduct, Los Vaqueros Reservoir Expansion Project and the Hetch Hetchy Aqueduct Improvement Project. Moreover, California WaterFix is highly competitive with other alternatives, including recycled water and desalination, the average costs of which are three to four times higher on a dollar per acre-foot basis. And, of course, the cost of doing nothing is likely to be much greater.

### **Project Development and Outreach**

California WaterFix is the product of decades of planning and analysis. A delta conveyance facility of one form or another has been planned since the 1960s, and efforts to address the problems in the Delta began in earnest with the release of the CALFED Bay-Delta Programmatic Record of Decision and Final Environmental Impact Report/Environmental Impact Statement in August 2000. This document outlined a 30-year joint effort by federal and state agencies to improve the Delta's ecosystem, water supply reliability, water quality, and levee stability. Referred to as the CALFED Bay-Delta Program or simply CALFED, the initial concept for conveyance was solely on a through-delta facility, with the understanding that this concept would be reassessed as studies and scientific information evolved.

In April 2006, a 10-Year Action Plan was issued for CALFED which, among other things, called for the program to be restructured and refocused. In particular, the 10-Year Action Plan noted that the question of whether to pursue alternatives to a through-delta conveyance facility needed to be answered in light of new concerns about the seismic stability of such a facility and its potential impacts on the Delta's ecosystem. The result was the creation of the Bay-Delta Conservation Plan (BDCP), a far-reaching plan aimed at addressing both Delta conveyance and ecosystem restoration in one fell swoop. In contrast to the through-Delta facility first proposed as part of CALFED, BDCP called for a dual conveyance system, with delivery facilities located both north and south of the Delta. In April 2015, the conveyance and ecosystem components of BDCP were separated into what we now know as California WaterFix and California EcoRestore.

So while the California WaterFix moniker may be relatively new, the dual conveyance concept embodied by it is not. Indeed, the conveyance facilities proposed under California WaterFix and its predecessor, BDCP, have been subjected to an unprecedented level of analyses, review and scrutiny for more than a decade. The environmental impact report/environmental impact statement (EIR/EIS) for this project was developed in collaboration with DWR, the United States Bureau of Reclamation (Bureau), state and federal fish and wildlife agencies, SWP and CVP Contractors, nongovernmental organizations, agricultural stakeholders, and the general public. More than 100 alternatives were initially considered, and 19 of these were analyzed in detail in the EIR/EIS, which is now over 50,000 pages in length.

Since 2008, over 600 briefings, public meetings, and workgroups have been held throughout California to provide critical information and solicit input on the project. In December 2013, DWR and Reclamation issued a Draft EIR/EIS for BDCP and provided a 228-day period for public comment. Approximately 18,500 comments were received on the draft. Based on public and agency comments and concerns, the project was revised to include the current California WaterFix proposal, and in July 2015 a Recirculated Draft EIR/Supplemental Draft EIS was released for a new 113-day public review period. Roughly 12,500 comments were received on these recirculated documents. In December 2016, DWR and Reclamation issued the Final EIR/EIS, and pursuant to NEPA, Reclamation provided a 30-day notice period. During this period, approximately 49,000 total pages of comment letters and attachments were received from stakeholders and members of the public.

Metropolitan staff has been intimately involved with and an integral part of this process, devoting numerous hours to ensuring that the proposed project would serve Metropolitan's interests and needs. Likewise, staff has endeavored to keep the Board apprised of the project's status and progress. Since 2006, staff has provided monthly updates at the CALFED/Bay-Delta Oversight Special Committee, Special Committee on Bay-Delta, and the Water Planning and Stewardship Committee. California WaterFix and its predecessors have been the subject of several Board retreats and in-depth workshops. In particular, on April 27, 2016, staff held a full-day workshop to review key aspects of California WaterFix and to solicit input and direction from Board members. More recently, staff presented three detailed white papers to the Board at joint meetings of the Special Committee on Bay-Delta and Water Planning and Stewardship Committee held in July and August, each of which focused on a different aspect of the project. And on September 26, staff plans to hold another comprehensive workshop on the project. Staff has also regularly updated the Member Agencies at the Member Agency Managers meetings.

Of course, it is up to each Board member to decide whether he or she has sufficient information regarding the potential costs and benefits of California WaterFix to justify moving forward with the project at this time. But, in staff's view, it does and it should. While there are still some uncertainties regarding how California WaterFix would be operated, those uncertainties would be addressed during implementation of the project and its associated adaptive management plan. Likewise, while certain assumptions have been made regarding which agencies would participate in California WaterFix and how its costs would be allocated among such participants, those assumptions provide both the framework for and the boundaries of the actions being recommended by staff. To that end, the Board's approval of the actions recommended below would not commit Metropolitan to going it alone on California WaterFix or represent an open-ended commitment to this project. Rather, it demonstrates Metropolitan's support for California WaterFix and its willingness to pay a fair share.

### **Project Consistency with Mission and Policies**

Metropolitan's mission is to provide "adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way." For the reasons discussed above, staff believes that California WaterFix furthers this mission, as well as the various policies, principles, programs and plans the Board has adopted in support of it.

Over two decades ago, the Board adopted a set of policy principles for CALFED that formed the basis of the ones that guide us today. These principles included supporting a "comprehensive, long-term Bay-Delta management plan," establishing a balance between "Bay-Delta restoration and local resource and infrastructure development," and promoting "solutions that place costs with beneficiaries." Since then, the Board has taken a myriad of related actions, all with the intent of advancing an effective solution to the seemingly intractable problems facing the Delta.

In April 2006, the Board adopted a new, but similar, set of policy principles related to the long-term sustainability of the Delta. Those principles began with a Delta Mission Statement that read, “Metropolitan supports actions that promote an environmentally and economically sustainable Delta in a manner that: (1) ensures an adequate and reliable supply of high-quality water consistent with statewide integrated resource management practices, and (2) results in a fair and reasonable allocation of costs among all Bay-Delta watershed beneficiaries.” Consistent with this stated mission, these principles described four central themes and 13 strategic goals intended “to ensure a solid foundation for development of future Metropolitan positions and to provide guidance to Metropolitan staff” for actions related to the Delta.

A little over a year later, the Board adopted its Delta Action Plan, which provided a detailed framework for short-, mid- and long-term action plans aimed at stabilizing and maintaining the Delta until an ultimate solution could be selected and implemented. Though the focus was now on BDCP, the overarching goals and objectives remained the same. In particular, the Delta Action Plan noted that the long-term plan “must take a global, comprehensive approach to the fundamental issues and conflicts in the Delta to result in a truly sustainable Delta.” Accordingly, “if water supply is to be maintained, that water must be separated from Delta water through construction of an isolated facility either in or around the Delta” Likewise, “a complete Delta ecosystem restoration plan must address land use, growth, agriculture, water usage and conveyance, and the aquatic and land habitat of the Delta.”

Finally, in September 2007, the Board adopted the following criteria “to further clarify Metropolitan’s position on the water supply conveyance element of the long-term solution” for the Delta: (1) provide water supply reliability; (2) improve export water quality; (3) allow flexible pumping operations in a dynamic fishery environment; (4) enhance Delta ecosystem; (5) reduce seismic risks; and (6) reduce climate change risks. California WaterFix comports with these criteria and all of the policies discussed above.

Southern California’s plan for a reliable water supply future depends on a reliable SWP supply and conveyance system with the capability to move water into storage in wet periods and more flexibly to manage around fishery needs. Metropolitan’s 1996 Integrated Water Resources Plan (IRP) identified the risk and variability associated with future SWP supplies, accurately projecting declines in water supplies because of projected future regulatory restrictions on SWP operations. As a result, Metropolitan embarked on a diversified strategy of local supply development, conservation, storage, and transfers to reduce future reliance on imported supplies, particularly reduced SWP deliveries in dry years. Today, Metropolitan has more than 5.5 MAF of total storage capacity to help manage highly variable imported supplies.

However, much of the investment in local supply development, conservation, storage, and transfers identified in the 1996 IRP has already been made, and still more must be done to ensure that Metropolitan is able to meet the future supply demands of its Member Agencies and their constituents. Thus, ensuring reliable SWP supplies and flexible project operations remain key elements in the 2015 IRP Update. In this regard, the 2015 IRP Update found that under the “Do Nothing” case, Metropolitan’s service area would experience water shortages 33 percent of the time in 2035 and 58 percent of the time in 2040. In addition, the region’s dry-year storage reserves would be drawn down to critical levels (less than 1 MAF dry year supplies) 55 percent of the time in 2035 and 80 percent of the time in 2040.

In contrast, the 2015 IRP Update found that California WaterFix would have a significant positive impact on the total supply reliability for Metropolitan’s service area. Specifically, it estimates that the flexible operations enabled by these facility improvements would provide total average SWP and CVP deliveries of 4.9 MAF, with average SWP deliveries available to Metropolitan of 1.2 MAF starting in 2030. As a result, the likelihood of water shortages would be reduced to 4 percent in 2035 and 10 percent in 2040, and storage reserves also would improve, with reserves being drawn down to critical levels just 9 percent of the time in 2035 and 8 percent of the time in 2040. In short, California WaterFix advances the overall 2015 IRP Update strategy and leverages the investments Metropolitan has made over the past two decades to provide a reliable water supply for the future.

## Board Actions Requested

The extensive planning process for California WaterFix has advanced to the point where it is time for Metropolitan and other water agency contractors to decide whether or not to move forward. Admittedly, there are still some issues that must be resolved. Chief among these are a final allocation of costs, benefits, and responsibilities among the SWP and CVP Contractors. However, these cannot be determined without first knowing who is “in.”

Since it is unknown at this juncture exactly which SWP and CVP Contractors will take action and participate in California Fix, the Board is only being asked to consider action consistent with Metropolitan assuming responsibility for 25.9 percent of the overall project costs. In other words, the Board’s decision will not result in Metropolitan being required to fund any more than its 25.9 percent share of California WaterFix or to subsidize other water contractors as part of this project. This sets clear parameters for Metropolitan participation that would not change absent further Board action.

For a typical SWP improvement project, no formal action would be required by Metropolitan or any other SWP contractor for DWR to proceed. But California WaterFix is not a typical SWP improvement project in several respects. It is of historic importance, and unlike a typical SWP improvement project, Metropolitan and certain other SWP and CVP Contractors will be taking an active role in the adaptive management, final design, construction, and financing of the project. And California WaterFix is proposed to benefit and be paid for not just by SWP Contractors, but also CVP Contractors. Because of these differences, action by the Metropolitan Board is sought. Specifically, staff requests that, in addition to adopting the CEQA determination, the Board take the following actions.

- First, staff is requesting that the Board express Metropolitan’s support for California WaterFix. Because of the unique nature of the California WaterFix, the State of California needs assurance of sufficient support among the SWP and CVP Contractors prior to proceeding to construction.
- Second, to facilitate Metropolitan’s involvement in the adaptive management, design and construction, and financing of the California WaterFix, staff is requesting that the Board authorize execution of certain Joint Powers Authority and other agreements having terms as described in this board letter. (See **Attachment 1** – Summary of Agreements, and **Attachment 2** – Term Sheets containing Proposed Agreement Summaries.) Specifically, staff is asking the Board to authorize the General Manager to execute two agreements related to the formation of joint powers authorities – one for design and construction and the other for financing of California WaterFix – and one agreement related to the implementation of an adaptive management plan for operations.
- Third, staff is requesting that the Board authorize the General Manager to, as a member of the Financing Joint Powers Authority, authorize the purchase of private placement bonds from the California Department of Water Resources and issue public bonds by the Financing Joint Powers Authority, consistent with Metropolitan’s share of 25.9 percent of the California WaterFix project costs, including an agreement to secure payment of Metropolitan’s share. To this end, staff is asking the Board to adopt the attached Resolution (**Attachment 3**), which sets forth in more detail the requested authorizations for Metropolitan’s participation in the financing and funding of the California WaterFix Project, including that Metropolitan’s financial participation in any financing of the Project shall not exceed 25.9 percent of the estimated total capital costs of the project.

If the Board and other public water agencies take actions that result in the project moving forward, there will be future actions that will have to come to the Board for authorization, including appropriating funds to continue design and other preconstruction activities until bonds are issued to reimburse Metropolitan and continue pre-construction, and ultimately construction work. In addition, any opportunities for Metropolitan to enter long-term Table A transfer or banking agreements with other SWP contractors would require subsequent Board action and independent CEQA review.

To summarize, if the Board approves participation in the project, and other water agency contractors participate at the levels assumed, only certain ancillary actions will come to the Board to implement Metropolitan's participation at 25.9 percent and keep the project moving forward on schedule. But if other water contractors decide not to participate in the project, staff will come back to the Board with options for supplementing any decisions based on the 25.9 percent participation level. Or recommend not participating in any project.

## **Policy**

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By Minute Item 50358, dated January 12, 2016, board adoption of the 2015 Integrated Resources Plan Update

By Minute Item 46637, dated April 11, 2006, the board adopted policy principles regarding long-term actions for the Sacramento-San Joaquin River Delta

By Minute Item 47135, dated June 12, 2007, board adopted the proposed Delta Action Plan

By Minute Item 47232, dated September 11, 2007, board adopted criteria for support of conveyance options in Implementation of a Long-term Delta Improvement Plan

Metropolitan Water District Administrative Code Section 8121 (a): General Authority of the General Manager to Enter Contracts

## **California Environmental Quality Act (CEQA)**

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### **CEQA determination for Option #1:**

Pursuant to the provisions of CEQA and the State CEQA Guidelines, DWR, acting as Lead Agency, prepared and processed a Final Environmental Impact Report (Final EIR) for the California WaterFix Project. The Final EIR was certified and the project was approved by the Lead Agency on July 21, 2017. DWR also adopted the Findings of Fact (Findings), the Statement of Overriding Considerations (SOC) and the Mitigation Monitoring and Reporting Program (MMRP), and filed a Notice of Determination (NOD). The Final EIR identifies Metropolitan as a responsible agency for actions related to the project.

The California WaterFix planning process started in 2006 and was initially proposed as the Bay-Delta Conservation Plan (BDCP), a Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) that included 22 conservation measures, with new Delta conveyance infrastructure identified as Conservation Measure 1. In December 2013, DWR, as the CEQA lead agency, and U.S. Bureau of Reclamation (Reclamation), U.S. Fish and Wildlife Service, and National Marine Fisheries Service, as the co-lead agencies under the National Environmental Policy Act (NEPA), released for public review a draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) to analyze the BDCP and 14 project alternatives as well as the no action alternative.

In 2015, in response to comments from the public and various natural resource agencies, DWR and USBR added three sub-alternatives to the project that would update the SWP Delta conveyance infrastructure without the large-scale conservation efforts that were included in the BDCP, and, in July 2015 released the BDCP/California WaterFix Partially Recirculated Draft EIR/Supplemental Draft EIS (RDEIR/SDEIS) for public comment.

The Proposed Final EIR/Final EIS was made available to the public on December 22, 2016, and includes DWR's responses to comments on the Draft EIR and RDEIR. Prior to certifying that the Final EIR complies with CEQA, DWR prepared a document titled Developments after Publication of the Proposed Final Environmental Impact Report (Developments), containing corrections to the December 2016 Proposed Final EIR, an assessment of public comments received after posting the Proposed Final EIR and other information received, a summary of the SWB Change Petition Hearing process along with additional evidence submitted in that proceeding that DWR considered, and a summary of the Federal Endangered Species Act section 7 consultation process and the California Endangered Species Act section 2081 incidental take permit process.

The December 2016 Proposed Final EIR, along with the Developments document, constitutes the Final EIR for purposes of CEQA, certified on July 21, 2017. The NOD, Final EIR, Findings, SOC, and MMRP can be found on the official DWR website at: <http://baydeltaconservationplan.com/NoticeofDetermination.aspx>.



Prior to adopting Option 1, it is recommended that Metropolitan, as a responsible agency under CEQA: Consider the Lead Agency's certified Final EIR and the impacts of the project as disclosed and analyzed in the Final EIR;

- Make certain Findings with respect to each potentially significant impact of the project;
- Adopt a SOC in view of potentially significant and unavoidable impacts; and
- Adopt the MMRP in view of Metropolitan funding its share of project costs, including the mitigation to be carried out by DWR or others.

Note that DWR, as the Lead Agency, is ultimately responsible for ensuring that feasible mitigation measures are implemented.

The CEQA determination is: Review and consider information provided in the Lead Agency's certified Final EIR, and adopt the Lead Agency's Findings, SOC, and MMRP for the California WaterFix Project.

#### **CEQA determination for Option #2:**

None required

### **Board Options**

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#### **Option #1**

Adopt the CEQA determination that the Board has reviewed and considered BDCP/California WaterFix environmental documentation; adopt the lead agency's findings, SOC, and MMRP; and

- a. Express Metropolitan's support for California WaterFix and authorize participation in the construction of California WaterFix including payment of costs consistent with Metropolitan's 25.9 percent share of overall project costs;
- b. Authorize the General Manager to Execute the following agreements having terms as described in this board letter:
  - (i) Agreement for Implementation of an Adaptive Management Program for Project Operations (AMP Agreement);
  - (ii) Joint Powers Agreement Forming the Delta Conveyance Design and Construction Joint Powers Authority (Construction JPA Formation Agreement);
  - (iii) Joint Powers Agreement Forming the Delta Conveyance Financing Joint Powers Authority (Financing JPA Formation Agreement); and
- c. Adopt Resolution \_\_ authorizing the General Manager to, as a member of the Financing Joint Powers Authority, authorize the purchase of private placement bonds from the California Department of Water Resources and issue public bonds by the Financing Joint Powers Authority, consistent with Metropolitan's share of 25.9 percent of the California WaterFix project costs, including an agreement to secure payment of Metropolitan's share.

**Fiscal Impact:** Present value costs (in 2017 dollars) would be Metropolitan's 25.9 percent share (\$4.3 billion) of the overall project costs (\$16.7 billion). 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 percent rate increases.

**Business Analysis:** This option would achieve the goal in Metropolitan's IRP Update to ensure reliability of SWP supplies, to pursue a successful outcome with California WaterFix, and to establish dependable and stable long-term average water supplies of about 1.2 million or more acre-feet annually. This option also meets all of the Delta Conveyance Criteria adopted by the Board in 2007.

**Option #2**

Do not consider the lead agency’s environmental documentation and do not authorize additional activities related to BDCP/California WaterFix at this time.

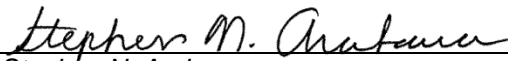
**Fiscal Impact:** Developing additional local resources as an alternative to California WaterFix would be significantly more expensive and result in much higher average cost for households in the Metropolitan service area, i.e., by two or more times as much depending on whether the alternatives are recycled water or seawater desalination.

**Business Analysis:** This option would forego an opportunity to implement the Board’s direction to stabilize SWP water supplies and to ensure completion of California WaterFix.

**Staff Recommendation**

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Option #1

  
\_\_\_\_\_  
Stephen N. Arakawa  
Manager, Bay-Delta Initiatives

9/21/2017  
Date

  
\_\_\_\_\_  
Jeffrey Kightlinger  
General Manager

9/21/2017  
Date

- Attachment 1 – Summary of Agreements**
- Attachment 2 – Term Sheets of Main Agreements**
- Attachment 3 – CDF Resolution**

Ref# eo12651166

**SUMMARY OF PROPOSED METROPOLITAN AGREEMENTS RELATED TO CALIFORNIA WATERFIX**

<b>Proposed Agreement</b>	<b>Signatories</b>	<b>Summary of Basic Provisions</b>
1. Agreement for Implementation of an Adaptive Management Program for Project Operations	<ul style="list-style-type: none"> <li>• DWR</li> <li>• CDFW</li> <li>• Various SWP and CVP water agencies,</li> <li>• Reclamation</li> <li>• USFWS</li> <li>• NMFS</li> </ul>	Confirms the Parties' commitment to implementation of an Adaptive Management Program for the California Water Fix, clarifies the provisions related to Adaptive Management expressed in related documents and the processes the Parties intend to follow, and delineates responsibilities among the Parties in implementing the Adaptive Management Program
2. Joint Powers Agreement Forming the Delta Conveyance Design and Construction Joint Powers Authority (Construction JPA Formation Agreement)	<ul style="list-style-type: none"> <li>• Various SWP and CVP water agencies</li> </ul>	Creates a new public entity separate from its members with the single purpose of designing and constructing the California WaterFix.
3. Joint Powers Agreement Forming the Delta Conveyance Financing Joint Powers Authority (Financing JPA Formation Agreement)	<ul style="list-style-type: none"> <li>• Various SWP and CVP water agencies</li> </ul>	Creates a new public entity separate from its members with the single purpose of financing the design and construction of the California WaterFix.

**1.**  
**Major Terms of**  
**Agreement for Implementation of an Adaptive Management Program for Project Operations**  
**(AMP Agreement)**

1. Basic Provisions:
  - a. Confirms the Parties' commitment to implementation of an Adaptive Management Program for the California Water Fix, clarifies the provisions related to Adaptive Management expressed in related documents and the processes the Parties intend to follow, and delineates responsibilities among the Parties in implementing the Adaptive Management Program
  - b. Establishes an "Interagency Implementation Coordination Group" (IICG) with primary responsibility for coordination and implementation of the Adaptive Management Program.
  
2. Parties:
  - a. DWR
  - b. CDFW
  - c. Various SWP and CVP water agencies,
  - d. Reclamation
  - e. USFWS
  - f. NMFS
  
3. Scope: Components that are subject to the Adaptive Management Program:
  - a. Operation of CVP/SWP facilities within the Delta under
    - i. Biological Opinions and Permits existing prior to the Conveyance Facilities becoming operational
    - ii. new Biological Opinions and Permits for California WaterFix
  - b. Design and operations of fish facilities (including existing fish facilities and intake screens)
  - c. Habitat restoration and non-operational mitigation relative to in-Delta CVP/SWP operations under:
    - i. Biological Opinions and Permits existing prior to the Conveyance Facilities becoming operational
    - ii. new Biological Opinions and Permit for California WaterFix
  - d. Other CVP/SWP-related actions as agreed by the "Interagency Implementation Coordination Group"
  - e. Monitoring associated with all of the foregoing within the bounds of the Biological Opinions and Permits.

4. Time-scale of adaptive management changes
  - a. Applies to changes generally implemented on an annual or longer basis, not intended to apply to real-time operations.
  
5. Interagency Implementation Coordination Group (IICG)
  - a. The Interagency Implementation Coordination Group will have primary responsibility for coordination and implementation of the Adaptive Management Program.
  - b. Members will include a designee from each of USFWS, NMFS, CDFW, DWR, Reclamation, a CVP Contractor and a SWP Contractor.
  - c. DWR or Reclamation will retain an IICG Manager to assist with implementation of the Adaptive Management Program.
  
6. Decision-making:
  - a. Recommendations by the IICG shall be by consensus
  - b. In the event of a dispute, any member of the IICG may initiate a non-binding process for review within the IICG.
  - c. In the event that resolution of the dispute cannot be reached within the IICG, panel review of as part of the Long-term operations biological opinions annual review or a separate independent science review convened by the Delta Science Program.
  - d. The entity with final decision-making authority over the matter shall consider the panel opinions and provide a written response prior to final decision.
  
7. Reinitiation of Consultation or Permit Amendment
  - a. Agreement that any decision on the operational criteria will be based on the best scientific and commercial data available at that time, including data collected and analysis conducted through the Adaptive Management Program.
  - b. If data and analyses indicate that one or more of the water operations flow criteria should be changed, Reclamation will, if required, reinitiate consultation pursuant to Section 7 of the ESA and/or DWR will, if required, commence a permit amendment process under California law to modify the operating criteria, as appropriate.

**2.****Major Terms of Joint Powers Agreement Forming the Delta Conveyance Design and Construction  
Joint Powers Authority  
(Construction JPA Formation Agreement)**

1. Basic Provisions:
  - a. Creates Design-Construction Authority (DCA), a new public entity separate from its members with the single purpose of designing and constructing the conveyance project.
2. Parties/Membership:
  - a. Individual participating CVP and SWP contractors that elect to become member agencies.
  - b. Termination of Membership: Upon a finding that the Member is:
    - i. No longer possesses powers common to the other Members
    - ii. No longer willing to meet its obligations for the Conveyance Project.
3. Term:
  - a. Effective when member agencies execute the agreement and provide their respective shares of “stand-up” costs.
  - b. DCA will dissolve after DWR’s final acceptance of conveyance project.
4. Powers:
  - a. To exercise common and independent and supplementary powers necessary or to design and construct the conveyance project.
  - b. Government Code section 6509 agency for manner and methods of exercising powers to be [To Be Determined]
5. Governance:
  - a. 7-member Board of Directors consisting of:
    - i. MWD
    - ii. KCWA
    - iii. SCVWD
    - iv. SWP Contractor at Large, selected by otherwise non-represented SWP contractor members
    - v. [CVP Participant 1 TBD]
    - vi. [CVP Participant 2 TBD]
    - vii. [CVP Participant 3 TBD]

- b. Board members and officers:
  - i. A board member may be either an employee or a director of the member agency.
  - ii. Chair/Vice-chair of the board and committees of the board serve 2-year terms and rotate between SWP chair/CVP vice-chair and vice versa with each rotation. SCVWD can be considered both a CVP Contractor or a SWP Contractor for purposes of this provision, but cannot serve consecutive terms.
- c. Voting:
  - i. One member, one vote.
  - ii. All decisions must be by majority vote (4 out of 7), except that 70 percent (5 out of 7) needed:
    - 1. To endorse or otherwise support any legislation,
    - 2. For termination of membership
    - 3. For the issuance of notes or other forms of indebtedness, including entering into leases for real property or equipment.
- d. Board Committees:
  - i. There will be an Environmental Compliance and Mitigation Committee
  - ii. Other Committees or as needed
- e. Staff:
  - i. There shall be an Executive Director, Auditor, and Treasurer. Additional staff as determined by DCA.
  - ii. Executive Director shall be the chief administrative officer of the DCA and set the overall direction of the Conveyance Project's design and construction.
- f. Stand-Up Costs:
  - i. Stand-up costs are budgeted at [\$1,000,000] and shall be allocated proportionate to each member's participation in the project

**3.**  
**Major Terms of**  
**Joint Powers Agreement Forming the Delta Conveyance Financing**  
**Joint Powers Authority**  
**(Financing JPA Formation Agreement)**

1. Basic Provisions:
  - a. Creates Delta Conveyance Finance Authority (DCFA), a new public entity separate from its members with the single purpose of financing the design and construction of the conveyance project.
  
2. Parties/Membership:
  - a. Individual participating CVP and SWP contractors that elect to become member agencies.
  
3. Term:
  - a. Effective when member agencies execute the agreement.
  - b. Remains effective for 50 years or until such later date that all bonds and notes of the DCFA and interest have been paid in full, or provision for such payment has been made.
  
4. Powers:
  - a. To exercise common and independent and supplementary powers necessary to finance or assist in the financing of the design and construct the conveyance project.
  - b. To issue, sell, and deliver, bonds, refunding bonds, or notes.
  - c. Government Code section 6509 agency for manner and methods of exercising powers to be [To Be Determined].
  
5. Governance:
  - a. Board of Directors consisting of 1 director for each member.
  - b. A board member may be either an employee or a director of the member agency.
  - c. Officers: President, Vice-President, Treasurer/Auditor
  - d. JPA staff limited to ED, CFO, general counsel, outside auditor
  - e. Board will approve rolling three year schedule of when proceeds are needed from each operating committee and committees could modify from time to time.
  - f. Operating committees will be created for specific bond issuances of CVP/not including SCVWD side, State Water Contractor side bonds, and CVP/SCVWD respectively. Those operating committees will make all decisions with respect to bonds, refunding bonds, notes and other obligations, including but not limited to structuring of debt, terms of debt, security for debt, hiring of consultants, municipal advisors, underwriters, banks and bond counsel, disclosure counsel and other professionals.



- g. Members of the SWC Operating Committee will be selected from among the state water contractors and shall include MWD. Members of CVP Operating Committee will not include SCVWD.
  - h. The CVP/SCVWD Operating Committee shall consist of one member, representing SCVWD.
  - i. Voting:
    - i. For all decisions except those to be made by the Operating Committees, votes shall be by weighted vote based on amount of step-up guarantee pledged by each member.
  - j. Any decision by the DCFA with respect to accepting a transfer of CWF from DWR, designating an entity to operate the CWF if transferred to the DCFA by DWR or any decision by the DCFA or the designated entity in connection with the CWF, which could in the reasonable opinion of any member of the DCFA adversely affect water delivery capability, reduce project life, or significantly increase operations and maintenance costs shall require a supermajority vote.
6. Staff:
- a. The Board shall appoint an Executive Director
  - b. The Board may appoint other staff as it deems necessary.
7. Expenses of JPA
- a. Administrative Costs to be allocated by the JPA board among JPA members first based on the allocation between SWC and CVP (55/45) and then within those families, based upon capacity or Table A amounts, as applicable.
  - b. All other costs will be allocated by the SWP Operating Committee or CVP Operating Committee, as applicable, in accordance with policies, procedures and agreements applicable thereto.
8. Accounts and Reports:
- a. Treasurer/Auditor to require annual independent audit
9. If all SWP bond, refunding bonds, notes and other obligations incurred by SWP have been refunded by DWR or otherwise no longer outstanding, SWP members of JPA may terminate their membership in JPA.
10. If all CVP bond, refunding bonds, notes and other obligations incurred by CVP have been refunded or otherwise no longer outstanding, CVP members of JPA may terminate their membership in JPA.

**THE METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA**

**RESOLUTION \_\_\_\_\_**

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**RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA  
AUTHORIZING DISTRICT'S FINANCIAL PARTICIPATION IN THE CALIFORNIA  
WATERFIX  
AND AUTHORIZING THE GENERAL MANAGER TO NEGOTIATE,  
EXECUTE AND DELIVER VARIOUS FINANCING IMPLEMENTATION  
AGREEMENTS AND RELATED DOCUMENTS**

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The Board of Directors of The Metropolitan Water District of Southern California (the "Board") hereby finds that:

1. The California Department of Water Resources ("DWR") has proposed the construction of the California WaterFix, which consists of the construction of three new intakes on the east bank of the Sacramento River in the northern California Delta, tunnels connecting these intakes to a new, 30-acre intermediate forebay, and two 30-mile long tunnels carrying water from this forebay to a new pumping plant connected to an expanded and modified Clifton Court Forebay; and

2. Various participants in the California State Water Project and in the Central Valley Project (the "Project Participating Members") have proposed assisting DWR in the financing and construction of California WaterFix, among others, in the following ways (collectively, the "CWF Project Arrangements"):

- (a) The Project Participating Members have proposed forming a joint powers authority (the "Construction JPA") that would undertake the construction of the California WaterFix through a contract with DWR;
- (b) The Project Participating Members have proposed forming a joint powers authority (the "Financing JPA") that would facilitate the issuance of revenue bonds by DWR (the "DWR Bonds") through different actions, including (without limitation) through the issuance of bonds of its own (the "Financing JPA Bonds") directly or indirectly supported by the DWR Bonds; and
- (c) The Project Participating Members have proposed supporting the Financing JPA Bonds by protecting the purchasers of such bonds from the risk of nonpayment or invalidity of DWR Bonds through various agreements (any such agreement, a

“support agreement”), including, without limitation, in the form of debt service support agreements, or through the purchase by the Project Participating Members of DWR Bonds or other property through installment purchase agreements; and

3. The District’s participation allocation in the State Water Project under the State Water Contracts (determined by reference to Table A of such State Water Contracts) equals 47% of the state water contractor share of the project or 25.9% of the total project costs; and

4. The Board of Directors of the District desires to authorize the General Manager of the District to negotiate, execute, and deliver financing agreements and documents, in addition to the formation of the Financing JPA, to effect the District’s financial participation in the CWF Project Arrangements, consistent with the District’s Table A allocation; provided, however, the District’s direct financial participation in the CWF Project Arrangement shall not exceed 25.9% of the estimated overall \$16.7 billion total capital cost, in 2017 dollars, of the California WaterFix, said 25.9% amounting to \$4.3 billion in 2017 dollars (provided, however, that for all purposes of this Resolution and all of the limitations contained in this Resolution, any payments that the District would otherwise pay under its State Water Contract are not included in that participation);

NOW, THEREFORE, the Board of Directors (the “Board”) of The Metropolitan Water District of Southern California, DOES HEREBY RESOLVE, DETERMINE AND ORDER as follows:

**1. Approval of the District’s Financial Participation in California WaterFix.** Each of the above recitals is true and correct and is adopted by the Board. The Board hereby authorizes and approves the District’s participation in the financing of the California WaterFix, as set forth in more detail in this Resolution; provided that the District’s participation in any financing of the California WaterFix shall not exceed 25.9% of the \$16.7 billion estimated total capital costs of the project (\$4.3 billion in 2017 dollars).

**2. Authorization of General Manager.** The Board hereby authorizes the General Manager of the District, and any of the designees of the General Manager of the District, to do any and all things necessary or convenient in the best interests of the District to effect any financing of the California WaterFix through the Financing JPA (referred to herein as a “District Participation Action”) consistent with the CWF Project Arrangements, and to enter into any and all agreements and documents that the General Manager or his designee determines, in his or her sole discretion, to be necessary or convenient in the best interests of the District to carry out any District Participation Action, and to execute all papers, documents, certificates, agreements or other instruments that may be required in order to carry out any District Participation Action or to evidence said authority and its exercise; provided, however, that the District shall not make financial commitments to the California WaterFix in excess of \$4.3 billion in 2017 dollars, which amounts to 25.9% of the estimated \$16.7 billion in total capital costs of the California WaterFix. The term of bonds issued for the project shall not exceed 40 years and the total interest cost on debt issued will not exceed 8%. In implementing these actions, the General Manager of the District shall be authorized to use such reasonable assumptions, methods, approaches and calculations that it believes, in good faith, to be consistent with the authorizations herein and necessary to the implementation of the matters provided for in this Resolution.

**3. Severability.** If any provision of this Resolution is held invalid, that invalidity shall not affect other provisions of this Resolution which can be given effect without the invalid portion or application, and to that end the provisions of this Resolution are severable.

**I HEREBY CERTIFY** that the foregoing is a full, true and correct copy of a Resolution adopted by the affirmative votes of members representing more than 50 percent of the total number of votes of all members of the Board of Directors of The Metropolitan Water District of Southern California at its meeting held on October 10, 2017.

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Secretary of the Board of Directors  
of The Metropolitan Water District  
of Southern California