



• **Board of Directors**  
***Engineering, Operations, and Technology Committee***

4/11/2023 Board Meeting

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**7-4**

**Subject**

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Authorize an increase of \$475,000 to an agreement with Brown & Caldwell, for a new not-to-exceed amount of \$715,000, to investigate potential modifications to Metropolitan's existing East-West conveyance and distribution system; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

**Executive Summary**

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A multi-year drought has resulted in consecutive years of low allocation on the State Water Project (SWP). The limited SWP supplies have significantly impacted member agencies that rely heavily on these supplies to meet service area demands. In August 2022, Metropolitan's Board approved a resolution affirming a call to action and committing to regional reliability for all member agencies. Shortly thereafter, staff began studying alternatives to increase the flexibility of Metropolitan's existing conveyance and distribution system to permit deliveries of alternative water supplies to the SWP-dependent member agencies within Metropolitan's system. Staff initiated a professional services agreement under the General Manager's authority to accelerate the commencement of work on this study. Significant progress has been made and detailed investigations are now required. This action authorizes an amendment to an existing professional services agreement to continue the investigation of potential modifications to Metropolitan's conveyance and distribution system to provide an equivalent level of reliability for all member agencies.

**Details**

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**Background**

Metropolitan's distribution system was originally constructed in the 1940s to deliver treated Colorado River Aqueduct (CRA) supplies throughout the service area. The system was expanded in the 1970s to connect to the SWP. The distribution system was designed to take advantage of the region's topography and primarily utilizes gravity to move water through the system. Much of the service area benefits from access to both CRA and SWP sources of supply; however, certain portions of the system have limited or no access to CRA water and other stored supplies due to certain limitations inherent within the current system configuration.

Water years 2020 and 2021 were the driest consecutive years in California for statewide precipitation, resulting in a 20 percent and five percent allocation from the SWP, respectively. Water year 2022 saw the driest January and February on record, resulting in an unprecedented second consecutive five percent allocation. Accordingly, years 2020 to 2022 saw the lowest water deliveries in the history of the SWP. The low SWP allocations have resulted in a disproportionate impact on a select number of member agencies that are highly dependent on supplies from the SWP.

In November 2021, Metropolitan adopted a resolution declaring a regional drought emergency. In April 2022, the Board declared a water shortage emergency condition and adopted a framework for an emergency water conservation program to reduce non-essential water use and preserve available supply for the greatest public benefit in the SWP-dependent areas. In August 2022, the Board adopted a resolution confirming Metropolitan's call to action and commitment to regional reliability for all member agencies. With respect to the latter, the resolution noted that Metropolitan cannot provide member agencies in the SWP-dependent areas with full access to water supply and storage assets during severe droughts.

In response to the regional drought emergency, Metropolitan and member agencies began a series of workshops aimed at increasing the reliability of deliveries to member agencies within the SWP-dependent areas. Through the workshop process, an initial series of potential portfolios of actionable items was developed and presented to the Board in September 2022. The collaborative process resulted in a supply reliability portfolio which is divided into three categories: system flexibility projects for immediate implementation (near-term projects), system flexibility projects for further development, and supply and storage improvement projects for comprehensive study that require in-depth studies to verify feasibility, sustainability, and cost-effectiveness (long-term projects). One of the projects identified as critical to improving system flexibility is an east-west conveyance solution that will provide additional connectivity of the westside SWP-dependent area to CRA supplies and existing storage such as Diamond Valley Lake.

Based on the urgency expressed by the Board's actions, staff initiated an agreement with Brown & Caldwell under the General Manager's authority to immediately start investigations into potential east-west conveyance alternatives. The preliminary investigations, in collaboration with the member agencies, have identified potential modifications to the existing conveyance and distribution system. However, a more in-depth study is now needed to further develop the identified alternatives, verify their feasibility, develop an integrated solution, and recommend alternatives for further action. Staff recommends an amendment to the existing agreement with Brown & Caldwell to continue these efforts.

In accordance with provisions of the Governmental Accounting Standards Board, Metropolitan's work on feasibility studies not associated with a specific asset must be conducted with O&M funds instead of a capital appropriation. Funds for these planning activities for regional reliability are included in the O&M budget for fiscal years 2022/23 and 2023/24.

#### **East-West Conveyance Facilities – Detailed Investigations**

The east-west conveyance studies will develop and evaluate multiple options to improve the western SWP-dependent areas' ability to access water supplies from the CRA, Diamond Valley Lake, the Pure Water Southern California Program, and other regional sources. The east-west conveyance studies will build upon the near-term actions that are currently underway. Options for improved east-west conveyance may include expansion of the planned Sepulveda and Venice Pump Stations, expansion of the Greg Avenue Pump Station, construction of new east-west conveyance pipelines, improvements to existing pipelines, or a combination of these actions.

The detailed investigations will include in-depth studies to evaluate the feasibility and effectiveness of options identified in the preliminary investigation. Near-term activities will be conducted with a hybrid effort of consultant and Metropolitan staff as described below. Metropolitan staff will conduct hydraulic analyses, participate in analysis of project options, review consultant work, facilitate meetings between member agencies and the consultant, and perform overall project management. Over the course of the study's duration, staff will coordinate with member agencies through a series of workshops to ensure that study objectives remain aligned with overall expectations. Staff will present the Board with updates on the progress of the work and provide a recommended course of action at the end of the study.

A total of \$800,000 is required for these activities. This work will be completed with O&M funds in accordance with Metropolitan's current business practices as described previously. Planned O&M expenditures include \$475,000 for planning, analysis, concept development, and technical assessments by Brown & Caldwell under an existing agreement, as described below, and \$325,000 for Metropolitan staff activities including hydraulic analyses, technical oversight and review of consultant's work, coordination with member agencies to establish project criteria, project management, and project controls.

#### **Technical Investigations (Brown & Caldwell) –Agreement Amendment**

Brown & Caldwell is currently performing the initial investigations into potential east-west conveyance facilities under an existing agreement that has been executed under the General Manager's authority. Brown & Caldwell was prequalified under Request for Qualifications (RFQ) No. 1305 and was selected to perform this work because of their expertise and familiarity with Metropolitan's system. The planned activities include conceptual level alternative development and evaluations; development of evaluation criteria; mitigation strategies for pressure and flow impacts to existing Metropolitan pipelines; facility siting investigations including right-of-way requirements;

coordination with local power providers; development of conceptual cost estimates; and preparation of workshops with member agencies to collaborate on project development. The estimated cost for these services is \$475,000. For this agreement, no Small Business Enterprise participation level was established due to the urgent nature of the work.

This action authorizes an amendment of \$475,000 to an existing agreement with Brown & Caldwell for a new not-to-exceed amount of \$715,000 to provide detailed investigations into a potential east-west conveyance facility.

### **Alternatives Considered**

Alternatives considered for addressing the detailed drought mitigation investigations included assessing the availability and capability of in-house Metropolitan staff to conduct this work. Metropolitan's staffing strategy for utilizing consultants and in house Metropolitan staff has been: (1) to assess current work assignments for in house staff to determine the potential availability of staff to conduct this work; and (2) to utilize consultants when resource needs exceed available in-house staffing or require specialized technical expertise.

This strategy relies on the assumption that in-house engineering staff will handle the baseload of work on capital projects, while professional services agreements are selectively utilized to handle projects above this baseload or where specialized needs are required. Execution of the detailed investigation requires the support of external consultants given the sense of urgency stated in the Board's August 2022 call to action regarding regional reliability and Metropolitan staff's current workload. The recommended approach allows for the timely completion of the detailed drought mitigation investigations as well as the other projects in the Capital Investment Plan.

### **Summary**

This action authorizes an amendment to an existing agreement for technical analysis of a potential east-west conveyance facility to increase regional reliability for all member agencies.

### ***Project Milestone***

December 2023 – Completion of detailed investigations

### **Policy**

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

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 52581, dated November 9, 2021, the Board adopted a resolution which declared specified emergency conditions within the Metropolitan service area.

By Minute Item 52802, dated April 12, 2022, the Board declared a Water Shortage Emergency Condition, adopted an Emergency Water Conservation Program, and expressed support for the Governor's Executive Order N-7-22.

By Minute Item 52790, dated April 12, 2022, the Board approved the Biennial Budget for Fiscal Years 2022/23 and 2023/24.

By Minute Item 52946, dated August 16, 2022, the Board adopted a resolution affirming a call to action and committing to regional reliability for all member agencies.

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

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

The proposed action is statutorily exempt under the provisions of CEQA and the State CEQA Guidelines because it involves only feasibility and planning studies for possible future actions that the agency has not approved (Public Resources Code 21102; Section 15262 of the State CEQA Guidelines). The proposed action is also categorically exempt because it involves basic data collection and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource. This may be strictly for information

gathering purposes, or as part of a study leading to an action which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies under a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

**CEQA determination for Option #2:**

None required

**Board Options**

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**Option #1**

Authorize an amendment to an existing agreement with Brown & Caldwell, for a \$475,000 increase to a new not-to-exceed amount of \$715,000, to investigate potential modifications to Metropolitan's existing East-West conveyance and distribution system.

**Fiscal Impact:** Expenditure of \$800,000 in O&M funds that have been previously authorized.

**Business Analysis:** This project will enhance regional reliability for all member agencies.

**Option #2**

Do not proceed with the project at this time.

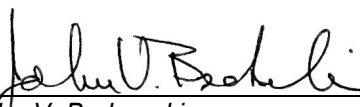

**Fiscal Impact:** None

**Business Analysis:** This option would forgo an opportunity to improve regional reliability for all member agencies.

**Staff Recommendation**

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**Option #1**

 _____ John V. Bednarski Manager/Chief Engineer Engineering Services	3/23/2023 _____ Date
 _____ Adel Hagekhalil General Manager	3/24/2023 _____ Date