



● **Board of Directors**
Engineering and Operations Committee

2/8/2022 Board Meeting

7-4

Subject

Amend the Capital Investment Plan for fiscal years 2020/2021 and 2021/2022 to include planning and implementation of infrastructure projects to improve water supply reliability for the west service area and authorize an agreement with Carollo Engineers, Inc. in an amount not to exceed \$300,000 for professional services; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The current statewide drought and historically low allocation of State Water Project (SWP) supplies by the California Department of Water Resources directly impact Metropolitan's ability to deliver water to certain SWP dependent areas within its system. This action amends the Capital Investment Plan (CIP) to include planning and potential infrastructure improvements or agreements that would enhance operational flexibility and water delivery capabilities to member agencies within the west service area (West Area Water Reliability Improvements). Alternatives will be developed to convey up to 150 cubic feet per second (cfs) of flow from sources not currently available to the SWP dependent areas. Staff will provide regular progress updates to the Board on this work. As this project was not included in the CIP budget for fiscal years 2020/21 and 2021/22, this action amends the current CIP to include this effort. This action also authorizes a professional services agreement to provide hydraulic modeling and other technical support related to these infrastructure improvements.

Details

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 can only receive limited CRA water due to inherent hydraulic limitations. These SWP dependent areas rely on stored SWP supplies, transfers, and exchange deliveries during multi-year droughts as California is currently experiencing.

In December 2021, the Board approved amending the current CIP to include three projects to improve supply reliability and flexibility on the eastern side of Metropolitan's system. These projects will enhance the ability to move alternative water supplies into SWP dependent areas fed from the Rialto Pipeline. As alternative supplies (e.g., stored water from Diamond Valley Lake or groundwater from San Bernardino Valley MWD) become available to the eastern side, preserved SWP supplies then become available to the western side.

The westernmost portions of the system, such as Ventura County and portions of the San Fernando Valley, are also service areas with limited access to CRA supplies. This western service area currently depends on raw water deliveries from the West Branch of the SWP and limited (up to 60 cfs) CRA deliveries from the Greg Avenue Pump Station. During the last drought in 2014, Metropolitan began refurbishing this pump station to ensure its reliability for the next drought. The rehabilitated pump station was placed into service in June 2021 and enables approximately 43,000 acre-feet per year of CRA supplies to be delivered to the west area to supplement the

extremely limited SWP supply. While the Greg Avenue Pump Station supplements deliveries to the western area, it only partially meets the need for SWP supplies in this area during extreme drought or outages.

In December 2021, the Board approved amending the current CIP to include three projects to improve supply reliability and flexibility on the eastern side of Metropolitan's system. These projects will enhance the ability to move alternative water supplies into SWP dependent areas fed from the Rialto Pipeline. One benefit of these projects to the western area is that as alternative supplies (e.g., stored water from Diamond Valley Lake or groundwater from San Bernardino Valley MWD) become available to the eastern side, preserved SWP supplies then become available to the western area.

Staff recommends evaluating additional alternatives to increase delivery reliability in the west area. Proposed work includes both a comprehensive assessment of wide-ranging alternatives and the advancement of two projects already identified by staff as potential options. Components of the planned work include:

- ***Alternative Supply and Delivery to West Area*** – A broad and comprehensive consideration of alternative approaches to ensuring supply reliability to west area SWP dependent areas is warranted. For example, a combination of local supply development, groundwater or surface storage, and interconnecting infrastructure between agencies could provide long-term reliability equal to or greater than simply accessing and moving CRA supplies.
- ***Greg Avenue Pumping*** – This potential project involves increasing the capacity of the existing Greg Avenue facility by expanding the current facility or adding a second pump station at a new site that can be connected to the discharge side of the existing Greg Avenue Pump Station.
- ***Sepulveda Feeder Pumping*** – This potential project involves new pumping facilities along the Sepulveda Feeder to push Colorado River water north from the central pool into the western area. Likely locations for the new west area pump station would be at the existing Venice and Sepulveda Canyon Pressure Control Structures.

In April 2020, the Board appropriated funds and authorized the General Manager to initiate or proceed with work on all capital projects identified in the CIP, subject to any limits on the General Manager's authority and CEQA requirements. This action amends the CIP to include the West Area Water Reliability Improvements. It is not anticipated that the addition of this project to the CIP will increase CIP expenditures in the current biennium beyond those which have been previously approved by the Board. Funds required for work to be performed pursuant to the subject project after fiscal year 2021/22 will be budgeted within the Capital Investment Plan Appropriation for Fiscal Years 2022/23 and 2023/24. This project has been reviewed in accordance with Metropolitan's CIP prioritization criteria and was approved by Metropolitan's CIP Evaluation Team to be included in the System Reliability Program.

West Area Water Supply Reliability Improvements – Preliminary Investigations

The preliminary investigation work to be performed in the current biennium includes conducting a feasibility study and developing a concept-level suite of options, which will include additional pumping facilities, local supply sources, and other options to improve supply reliability to the SWP dependent zones in the west service area. Near-term activities will be conducted with a hybrid effort of consultant and Metropolitan staff as described below. Metropolitan staff will perform planning and analysis of project options, overall project management, and consultant oversight. Staff will regularly return to the Board to provide updates on the progress of the work, present recommended courses of action, and award construction contracts.

A total of \$700,000 is required for these activities. Allocated funds include \$300,000 for planning, analysis, concept development, and technical assessments by Carollo Engineers, Inc. under a new agreement, as described below. Allocated funds for Metropolitan staff activities include \$161,000 for technical oversight and review of consultant's work; \$140,000 for coordination with member agencies to establish project parameters, project management, and project controls; and \$99,000 for remaining budget.

Technical Investigations (Carollo Engineers, Inc.) – New Agreement

Carollo Engineers, Inc. is recommended to perform preliminary investigations for the West Area Water Supply Reliability Improvements. Carollo Engineers, Inc. was prequalified under Request for Qualifications No. 1215. Carollo Engineers, Inc. was selected to perform this work because of their expertise in the designs of pumping plants, hydraulic analysis, and familiarity with Metropolitan's system. The planned activities include conceptual

level alternative evaluations; development of project needs criteria; hydraulic analyses including pressure and flow impacts to existing Metropolitan pipelines and mitigation strategies; facility siting investigations including right-of-way requirements; coordination with local power providers; and development of conceptual cost estimates. The estimated cost for these services is \$300,000.

This action authorizes a new agreement with Carollo Engineers, Inc. for a not-to-exceed amount of \$300,000 to provide conceptual alternative analysis for the West Area Water Supply Reliability Improvements. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Carollo Engineers, Inc. has agreed to meet this level of participation.

Alternatives Considered

Metropolitan staff is also progressing with study-level evaluations of several other potential infrastructure improvement options to enhance water reliability for SWP dependent service areas in Metropolitan's Western and Eastern areas. This includes investigating the need and feasibility of additional storage reservoirs. Staff will return to the Board for authorization to include additional selected infrastructure improvements in the CIP.

Summary

This action amends the current CIP to include investigation of enhanced deliveries to the western area of Metropolitan's distribution system that is dependent on raw water deliveries from the SWP. This action also authorizes a new agreement for technical analysis of several alternatives. See **Attachment 1** for the Allocation of Funds and **Attachment 2** for the Location Map.

Project Milestone

July 2022 – Report to Board on preliminary investigations of Westside Water Supply Reliability Improvements

Policy

Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 51963, dated April 14, 2020 the Board appropriated a total of \$500 million for projects identified in the Capital Investment Plan for Fiscal Years 2020/21 and 2021/22.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

Amending the Capital Investment Plan (CIP) and authorizing work to proceed under the CIP, subject to the limits described above, is not defined as a project and is not subject to CEQA because it involves the creation of a general funding mechanism and general policy and procedure making with no commitment to proceed with any specific project at this time (Sections 15378(b)(4) of the State CEQA Guidelines). Furthermore, the proposed action involves feasibility or planning studies for possible future actions which the agency, commission or board has not yet approved, adopted or funded. Accordingly, the proposed action qualifies as a Statutory Exemption (Section 15262 of the State CEQA Guidelines). In addition, the proposed actions also involve basic data collection and resource evaluation activities that 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 as a Class 6 Categorical Exemption (Section 15306 of the State CEQA Guidelines).

CEQA determination for Option #2:

None required

Board Options

Option #1

- a. Amend the current CIP to include planning and implementation of infrastructure projects to improve water supply reliability for the western service area; and
- b. Authorize a new agreement with Carollo Engineers, Inc. in an amount not to exceed \$300,000 for technical investigations.

Fiscal Impact: Expenditure of \$700,000 in capital funds. Approximately \$700,000 will be incurred in the current biennium and has been previously authorized. It is not anticipated that the addition of the project listed above to the CIP will increase CIP expenditures in the current biennium beyond those which have been previously approved by the Board. The remaining funds for this project, including future construction costs, will be accounted for and appropriated under the next biennial budget.

Business Analysis: This project will enhance the reliability of water deliveries to member agencies within the westernmost portion of Metropolitan’s service area.

Option #2



Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forgo improving the reliability of service to those member agencies in the westernmost portions of Metropolitan’s service area.

Staff Recommendation

Option #1

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|--|-----------|
|  | 1/19/2022 |
| _____ John V. Bednarski Manager/Chief Engineer Engineering Services | Date |
|  | 1/20/2022 |
| _____ Adel Hagekhalil General Manager | Date |

Attachment 1 – Allocation of Budgeted Funds

Attachment 2 – Location Map

Ref# es12684762

Allocation of Funds for Western Region Water Supply Reliability Improvements

| | <u>Current Board Action (Feb. 2022)</u> |
|---|---|
| Labor | |
| Studies & Investigations | 161,000 |
| Final Design | - |
| Owner Costs (Program mgmt., envir. monitoring) | 140,000 |
| Submittals Review & Record Drwgs. | - |
| Construction Inspection & Support | - |
| Metropolitan Force Construction | - |
| Materials & Supplies | - |
| Incidental Expenses | - |
| Professional/Technical Services | |
| Carollo Engineers, Inc | 300,000 |
| Right-of-Way | - |
| Equipment Use | - |
| Contracts | - |
| Remaining Budget | 99,000 |
| Total | <u>\$ 700,000</u> |

This is the first action for Western Region Water Supply Reliability Improvements.

Distribution System

