THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

8/20/2024 Board Meeting

7-3

Subject

Authorize an increase of $840,000 in change order authority to an existing contract with Steve P. Rados for the installation of an isolation valve for the Wadsworth Pump Plant Bypass Pipeline; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (This action is part of a series of projects that are being undertaken to improve the supply reliability for State Water Project dependent member agencies)

Executive Summary

The Wadsworth Pump Plant Bypass Pipeline project is one of four projects to allow the delivery of water from Diamond Valley Lake (DVL) to the Rialto Pipeline service area. Construction of the Wadsworth Pumping Plant Bypass Pipeline was planned to be implemented in two stages. Under Stage 1, the contractor would install an approximately 600-foot-long, 96-inch-diameter steel pipeline and an isolation valve structure. Under Stage 2, an 84-inch diameter butterfly valve would be installed to improve operational flexibility. In January 2023, the Board awarded a contract to Steve P. Rados for construction of the Stage 1 work.

Coordination with the other Rialto Pipeline service area contracts has created an opportunity to add the Stage 2 work to the existing contract. Utilizing the existing contract to perform this work eliminates an additional shutdown and reduces both shutdown-related and contract-administration costs. Other related work to be performed includes procurement and installation of electrical components for operation of the valve, modifications to the gate at the Wadsworth facility to allow passage of the valve to the project site, and installation of anodes within the Eastside Pipeline to minimize corrosion that was encountered when the pipeline was taken out of service for the tie-in work. This action authorizes increasing the General Manager's authority to execute a change order to an existing contract. See **Attachment 1** for the Allocation of Funds and **Attachment 2** for the Location Map.

Proposed Action(s)/Recommendation(s) and Options

Staff Recommendation: Option #1

Option #1

Authorize an increase of $840,000 in change order authority for a new maximum change order authority of $1,581,025 to an existing contract with Steve P. Rados for the installation of an isolation valve at the Wadsworth Pumping Plant Bypass Pipeline.

Fiscal Impact: Expenditure of $1,900,000 in capital funds. All costs will be incurred in the current biennium and have been previously authorized.

Business Analysis: This option will reduce overall costs and enhance delivery reliability to member agencies.

Option #2

Do not authorize the increase in change order authority at this time.

Fiscal Impact: None

Business Analysis: Under this option, installation of the isolation valve would be performed under a separate contract. This option would likely result in higher project costs and require an additional facility shutdown.

Alternatives Considered

In May 2024, while the contractor was interconnecting the Wadsworth Pump Plant Bypass to the Eastside Pipeline, staff discovered cracking, disbanding, and blistering lining damage of a 1,100-foot reach of the 12-foot-diameter Eastside Pipeline. The Eastside Pipeline was constructed in 1997, is eight miles long, and is the most southerly reach of the Inland Feeder. An inspection revealed that the 30-year-old epoxy lining, adjacent to the Wadsworth Pump Plant, is nearing the end of its service life. However, the steel pipe segment is only experiencing light rust at present. Staff considered amending the Capital Investment Plan (CIP) to include the lining rehabilitation as a new unplanned project and adding the lining rehabilitation to the existing contract to expeditiously complete the work in a cost-effective manner.

However, staff selected to defer the Eastside Pipeline lining rehabilitation to the next biennium when the project can be implemented as a planned project. The selected option considers the relative priority of the lining work versus the projects already planned for the current biennium, the cost of lining rehabilitation (approximately $2 million), and the urgency of the lining work. In the interim, staff will include the installation of approximately 60 sacrificial anodes in the subject change order to protect the Eastside Pipeline from corrosion until the lining can be rehabilitated. The cost of each magnesium anode is approximately $500.

Applicable Policy

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

Related Board Action(s)/Future Action(s)

By Minute Item 52938, dated August 16, 2022, the Board awarded a $5,647,405 contract to Sojitz Machinery Corporation of America to furnish three 84-inch diameter butterfly valves to improve the water supply reliability of the Rialto Pipeline.

By Minute Item 53095, dated January 10, 2023, the Board awarded a total of $14,820,500 contract to Steve P. Rados Inc. to construct a bypass pipeline at the Wadsworth Pumping Plant as part of water supply reliability improvements in the Rialto Pipeline service area.

By Minute Item 53598, dated April 9, 2024, the Board appropriated a total of $636.5 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is exempt from CEQA (Public Resources Code Section 21080.21) because it is a project of less than one mile in length within a public street or highway or any other public right-of-way for the installation of a new pipeline or the maintenance, repair, restoration, reconditioning, relocation, replacement, removal, or demolition of an existing pipeline. (Public Resources Code Section 21080.21.) The proposed action is exempt from CEQA because it involves the operation, repair, maintenance, permitting, or minor alteration of existing public structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use and no possibility of significantly impacting the physical environment. (State CEQA Guidelines Section 15301.) The proposed action is exempt from CEQA because it consists of replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced. (State CEQA Guidelines Section 15302.)

CEQA determination for Option #2:

Not applicable

Details and Background

Background

The Rialto Pipeline, constructed in 1972, is approximately 30 miles long with a diameter ranging from 96 inches to 144 inches in diameter. It conveys untreated water from the Department of Water Resources' Lake Silverwood to Metropolitan's Live Oak Reservoir and ultimately into the F.E. Weymouth Water Treatment Plant in La Verne.

Metropolitan's DVL provides emergency storage in the event of a major earthquake, carryover storage as a reserve for drought conditions, and seasonal storage to meet annual member agency demands. DVL is Metropolitan's largest reservoir, with a maximum storage capacity of 810,000 acre-feet. Currently, the Rialto Pipeline cannot access the water stored in DVL due to infrastructure and hydraulic limitations.

In December 2021, the Board authorized four projects (the Wadsworth Pumping Plant Bypass Pipeline, the Inland Feeder/Rialto Pipeline Intertie, the Inland Feeder Badlands Tunnel Surge Protection Facility, and the Inland Feeder/Foothill Pump Station) to improve water supply reliability in the Rialto Pipeline service area. These incremental infrastructure improvements will greatly increase operational flexibility and enhance the ability to move water from DVL, and potentially the Colorado River Aqueduct, into the Rialto Pipeline. Completion of these projects will significantly reduce the dependency of member agencies on State Water Project (SWP) supplies.

The Wadsworth Pumping Plant Bypass Pipeline improves Metropolitan's ability to deliver flows north of the Wadsworth Pumping Plant. Currently, water can be conveyed from DVL by gravity to the Henry J. Mills Water Treatment Plant through the Inland Feeder. The Wadsworth Pumping Plant can also be used to pump water from the DVL forebay into the Inland Feeder toward the Rialto Feeder area, which is at a much higher elevation than the Mills plant. Currently, once the forebay is emptied, pumping to the Inland Feeder must stop so that the forebay can be refilled with DVL water. The bypass pipeline allows the forebay to be filled continuously from DVL without disrupting the pumping operation.

In August 2022, the Board awarded a procurement contract for three 84-inch diameter butterfly valves to be installed as part of water supply reliability improvements in the Rialto Pipeline service area. Moving forward with valve procurement early allows time for the long fabrication and delivery cycle associated with these large valves. One of these valves is planned to be installed at the Wadsworth Pumping Plant Bypass Pipeline.

Construction of the Wadsworth Pumping Plant Bypass Pipeline was then planned to be implemented in two stages. Under Stage 1, the contractor would install an approximately 600-foot-long, 96-inch-diameter steel pipeline with an isolation valve structure. Under Stage 2, one 84-inch diameter butterfly valve would be installed within the valve structure to improve operational flexibility. Due to the long lead time to procure the valve, Metropolitan had planned the Stage 2 contract and shutdown to install the valve. In January 2023, the Board awarded a contract to Steve P. Rados for construction of the Wadsworth Pumping Plant Bypass Pipeline (Stage 1). Stage 1 construction is approximately 83 percent complete. Although initially planned to be completed by July 2024, the contractor is experiencing delays in procuring long-lead-time electrical equipment. The revised completion date is now July 2025. Additionally, the 84-inch valve was delivered to Metropolitan in July 2024 and is now available for installation.

With the Stage 1 contractor currently mobilized at the site and idled by procurement delays, staff decided to negotiate a favorable price for Stage 2 work as a change order under the existing contract. The Stage 2 work to be completed under the change order is similar in nature and scope to the Stage 1 work that was previously competitively bid. Adding the valve installation by change order to the existing contract also eliminates an additional shutdown and the costs for preparing, advertising, and administering a second contract, as well as additional contractor mobilization. The valve would be installed during the planned February 2025 shutdown for the Inland Feeder/Rialto Pipeline Intertie.

Metropolitan's Administrative Code authorizes the General Manager to execute change orders on construction contracts in an aggregate amount not to exceed five percent of the initial amount of the contract or $250,000, whichever is greater. If changes occur on a construction contract that will exceed this total, additional authorization from Metropolitan's Board is required.

In accordance with the April 2024 action on the biennial budget for fiscal years 2024/25 and 2025/26, the General Manager will authorize staff to proceed with the additional work at the Wadsworth Pump Plant Bypass, pending approval of the increased contract change order authority described below. Based on the current CIP expenditure forecast, funds for the work to be performed pursuant to the subject contracts during the current biennium are available within the CIP Appropriation for fiscal years 2024/25 and 2025/26 (Appropriation No. 15535). 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 Drought Mitigation – SWP Dependent Areas Program.

Wadsworth Pump Plant Bypass Pipeline– Increase in Change Order Authority (Contract 2020)

The recommended work to be added to the contract includes the installation of a Metropolitan-furnished 84-inch diameter isolation valve, testing, and commissioning. At the entrance to the Wadsworth Pump Plant facility, the contractor will need to relocate the operator and card reader from the automated security gate from the center island to the side of the gate to allow entry of the 84-inch diameter butterfly valve. A programmable logic controller will be supplied and installed by the contractor to control valve operations. Finally, as mentioned above in the Alternatives Considered section, anodes will be installed inside the Eastside Pipeline to protect the steel pipe from corrosion.

Per Metropolitan's Administrative Code, the General Manager has the authority to execute change orders for this contract in an aggregate amount not to exceed five percent of the initial amount of the contract or $250,000, whichever is greater. For this contract, the maximum change order authority is $741,025. To date, staff has executed change orders on this contract for $347,000. To perform the needed extra work, staff recommends that the change order authority be increased by $840,000 for a new maximum change order authority of $1,581,025 for the Wadsworth Pumping Plant Bypass Pipeline contract. This action authorizes an increase in change order authority to an existing contract with Steve P. Rados for the installation of an isolation valve.

Wadsworth Pump Plant Bypass Pipeline– Metropolitan Staff Activities

In order to install the isolation valve, additional Metropolitan staff activities will be required including: (1) shutdown of the feeder and establishment of clearances; (2) final disinfection and water quality testing; (3) return of the pipeline to service; and (4) construction inspection and technical support during construction. A total of $1.9 million is required for this work. The increase to the existing contract amount for the work described above is approximately $840,000, with other budgeted funds including the following: $429,000 for shutdown-related activities and materials by Metropolitan staff; $373,000 for construction inspection; $69,000 for submittals review, technical support during construction, responding to requests for information, and preparation of record drawings; $121,000 for contract administration, and project management; and $68,000 for remaining budget.

As described above, Metropolitan staff will perform construction management and inspection. For this change order, the performance metric goal for inspection is 11.8 percent of the total construction cost ($3,152,000), which includes the construction contract ($840,000), the cost of the isolation valve ($1,883,000) and Metropolitan force construction ($429,000).

Project Milestone

July 2025 – Completion of Construction

7/24/2024

Mai M. Hattar *Date*
Interim Manager/Chief Engineer
Engineering Services

8/1/2024

Deven Upadhyay *Date*
Interim General Manager

Attachment 1 – Allocation of Funds

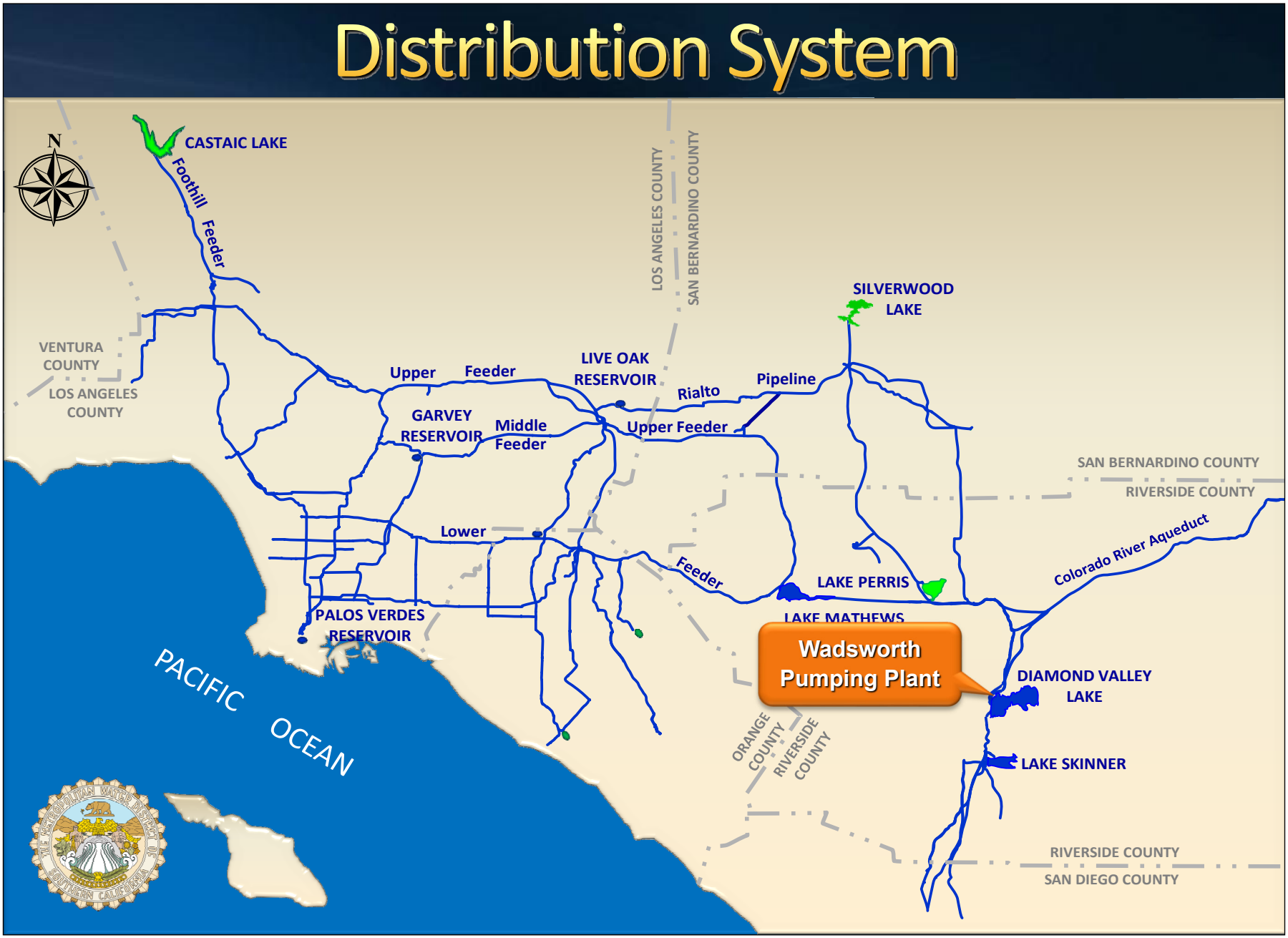
Attachment 2 – Location Map

Ref# es12699719

Allocation of Funds for Wadsworth Pump Plant Bypass Pipeline Intertie

	Current Board Action (Aug. 2024)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	121,000
Submittals Review & Record Drwgs.	69,000
Construction Inspection & Support	373,000
Metropolitan Force Construction	429,000
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Right-of-Way	-
Contracts	
Steve P. Rados	840,000
Remaining Budget	68,000
Total	**$ 1,900,000**

The total amount expended for the Wadsworth Pumping Plant-Eastside Pipeline Intertie is approximately $19.6 million. The estimated cost to complete this project, including funds allocated for the work described in this action and remaining construction work, is $22.1 million.


Distribution System
N
CASTAIC LAKE
Foothill Feeder
VENTURA COUNTY
LOS ANGELES COUNTY
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
SILVERWOOD LAKE
Upper Feeder
LIVE OAK RESERVOIR
Rialto Pipeline
GARVEY RESERVOIR
Middle Feeder
Upper Feeder
SAN BERNARDINO COUNTY
RIVERSIDE COUNTY
Lower Feeder
Colorado River Aqueduct
LAKE PERRIS
LAKE MATHEWS
PALOS VERDES RESERVOIR
Wadsworth Pumping Plant
DIAMOND VALLEY LAKE
PACIFIC OCEAN
ORANGE COUNTY
RIVERSIDE COUNTY
LAKE SKINNER
RIVERSIDE COUNTY
SAN DIEGO COUNTY