THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

9/15/2026 Board Meeting

8-1

Subject

Award a $42,710,530.01 construction contract to Mountain Cascade Inc. to rehabilitate the circulating water and sump discharge piping systems at the Colorado River Aqueduct pumping plants; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The five Colorado River Aqueduct (CRA) pumping plants each have a circulating water and sump discharge piping system. The existing systems are 85 years old, have deteriorated, and need to be replaced. Failure of the circulating water systems could result in flooding of the facility and overheating of the main CRA pumps, while failure of the sump discharge piping systems could cause sump basin overflows and flooding of the pump bays. Rehabilitation of the circulating water and sump discharge piping systems will maintain Metropolitan's ability to deliver water reliably.

This action awards a $42,710,530.01 construction contract to rehabilitate the circulating water and sump discharge piping systems at the five CRA pumping plants. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the Subcontractors for the Low Bidder, and **Attachment 4** for the Location Map.

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

Staff Recommendation: Option #1

Option #1

Award a $42,710,530.01 construction contract to Mountain Cascade Inc. to rehabilitate the circulating water and sump discharge piping systems at the Colorado River Aqueduct pumping plants.

Fiscal Impact: Expenditure of $55.7 million in capital funds. Approximately $29 million will be incurred in the current biennium and has been previously authorized. The remaining capital expenditures will be funded from the next capital investment plan budget.
Business Analysis: This project will enhance the reliability of the CRA pumping plants and reduce the risk of unplanned outages.

Option #2

Do not proceed with this project at this time.
Fiscal Impact: None
Business Analysis: This option may lead to more extensive and costly repairs in the future.

Alternatives Considered

Staff initially considered phasing the project's construction by completing the work at one plant at a time across multiple contracts. This would delay the replacement of deteriorating equipment at the plants, increasing

maintenance needs and reducing the reliability of the existing piping systems. Additionally, the Metropolitan-furnished equipment would be past its warranty period by the time all the contracts are executed and completed.

The selected option will replace the deteriorated sump and circulating water systems across all five plants expeditiously, ensuring continued, reliable operations of the CRA. Additionally, bundling a larger construction contract to include all five pumping plants will provide an opportunity for a larger pool of bidders and a more competitive bidding environment since contracts in the Desert Region generally attract a very limited pool of bidders.

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 51423, dated December 11, 2018, the Board awarded a contract to rehabilitate the circulating water and sump discharge piping systems at all five CRA pumping plants.

By Minute Item 54446, dated April 14, 2026, the Board appropriated a total of $1.025 billion for projects identified in the Capital Investment Plan for Fiscal Years 2026/2027 and 2027/2028.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

On December 11, 2018, the Board approved the Circulating Water and Sump Discharge Piping Systems Rehabilitation at all five CRA pumping plants. The General Manager determined the project to be exempt from CEQA pursuant to State CEQA Guidelines Section 15301 and 15302. The current board action does not result in any substantial change to the project. Accordingly, no further CEQA determinations or documentation are necessary.

CEQA determination for Option #2:

None required.

Details and Background

Background

The CRA is a 242-mile-long conveyance system that transports water from the Colorado River to Lake Mathews. It consists of five pumping plants; 124 miles of tunnels, siphons, and reservoirs; 63 miles of canals; and 55 miles of conduits. The aqueduct was constructed in the late 1930s and was placed into service in 1941.

Within the pump house at each of the five CRA pumping plants, there are two main sumps and five auxiliary sumps that collect water leakage from the main CRA pumps, backwash flows from the domestic water treatment system, washwater from plant maintenance activities, and return cooling water after it has been used to cool the main CRA pumps. These flows can at times exceed 2,700 gallons per hour. The sumps are located at the lowest level of each four-level pump house. Each main sump is approximately 9 feet wide, 20 feet long, and 35 feet deep, while each auxiliary sump is approximately 8 feet wide, 10 feet long, and 6 feet deep. The main sump basins are located at either end of each pump house, and the five auxiliary sump basins are located at intermediate locations.

The sump basins contain portions of two separate piping systems: the sump discharge system and the circulating water system. Each of these systems includes 16-inch diameter piping, pumps, valves, and couplings. The sump discharge system pumps water from the sump basins back to the CRA or to the pumping plant forebay, depending on the pumping plant. The circulating water system pressurizes water from the pumping plant's 16-foot-diameter inlet pipe, located upstream of the plant, into a closed piping system that passes through the sump basins. This

water is delivered to separate storage tanks for the fire protection, potable water, and main pump cooling water systems. The circulating water system is also used to dewater the plant inlet pipe during shutdowns.

The sump discharge systems and circulating water systems were installed in the 1930s. These systems are partially submerged and operate in a humid and corrosive environment. Pipe leaks have become more frequent in recent years, requiring immediate system shutdowns for repair by divers. The circulating water systems are integral to the pumping plant operation. Failure of the sump discharge or circulating water systems could result in overflow from the sump basins into the main pump bays, damaging electrical and mechanical equipment, and potentially interrupting deliveries from the CRA.

In December 2018, Metropolitan's Board awarded a construction contract to rehabilitate the sump and circulating water systems at all five CRA pumping plants. The contractor completed procurement of long-lead equipment with plans to begin installation in May 2020. However, in March 2020, in response to the COVID-19 pandemic, Metropolitan suspended all on-site construction activities indefinitely due to confined working conditions and the need to protect staff health and safety. With ongoing pandemic-related uncertainties, Metropolitan elected to reduce the contract scope, eliminating all installation work. At the same time, equipment already in the procurement process was delivered and placed in long-term storage at each plant. Equipment furnished under the original contract and now available to be utilized in the new contract include new pump assemblies and valves for all five plants, as well as several structural components, such as platforms, ladders, and handrails.

Staff revised the original construction bid package to account for delivered equipment, repairs to the system made to maintain reliability, and the inclusion of the replacement of sump system piping above the sump area, which was previously not included in the original project. Design is now complete, and staff recommend awarding a construction contract at this time.

Colorado River Aqueduct Pumping Plants Sump Rehabilitation – Construction

The scope of the construction contract includes implementation of temporary pumping systems to ensure continued operations of the facilities during construction; installation of the Metropolitan furnished equipment, procurement of remaining equipment and materials, removal and replacement of the existing pumps, actuators, valves, and associated piping for each sump basin; replacement of existing platforms, grating, ladders, handrails, and sump covers, including lighting and ventilation; electrical and instrumentation and controls upgrades; and hazardous material handling and disposal. Metropolitan force activities will include: (1) dewatering and shutdown of the sump and circulating water systems and 480 V power systems; (2) facilitating contractor access; (3) installation of conduits and electrical wiring into the pump plant control rooms; (4) system integration into the Supervisory Control and Data Acquisition system; (5) refurbishment of medium voltage circulating water pump motor starters; and (6) return of the sump and circulating water systems and 480 V power systems to service.

A total of $55,700,000 is allocated for this work. Allocated funds for professional services include $325,000 for Project Labor Agreement administration and $97,000 for environmental monitoring under existing board-authorized on-call agreements. Allocated funds for Metropolitan staff include $1,950,000 for submittal review, response to requests for information, and preparation of record drawings; $2,760,000 for Metropolitan force activities described above; $5,408,000 for construction management and inspections; $488,000 for contract administration, environmental support, project management, and project controls; and $1,961,469.99 for remaining budget. **Attachment 1** provides the allocation of the required funds.

Award of Construction Contract (Mountain Cascade Inc.)

Specifications No. 2008 for the rehabilitation of the CRA Pumping Plants Sump Rehabilitation was advertised for bids on June 9, 2026. As shown in **Attachment 2**, 4 bids were received and opened on August 4, 2026. The low bid from Mountain Cascade Inc. in the amount of $42,710,530.01 complies with the requirements of the specifications. The other bids ranged from $50.9 million to $60.6 million, while the engineer's estimate was $36.3 million. Staff investigated the difference between the engineer's estimate and the low bid and attributes the high bid to recent market volatility of material costs associated with electrical equipment, challenges with work in remote locations, such as costs associated with housing of contract workers for an extended period at remote locations, fuel prices, and costs associated with supporting concurrent construction at multiple plants. For this

contract, Metropolitan established a Small Business Enterprise participation level of at least 20 percent of the bid amount. Mountain Cascade Inc. has committed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**. This contract will be conducted under the terms of Metropolitan's PLA.

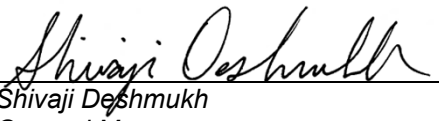
This action awards a $42,710,530.01 contract to Mountain Cascade Inc, to rehabilitate the circulating water and sump discharge piping systems at all five CRA pumping plants. As described above, Metropolitan staff will perform construction management and inspection. Engineering Services' performance metric target range for construction management and inspection of projects with construction costs greater than $3 million is 9 to 12 percent. For this project, the performance metric for inspection is 9.2 percent of the total construction cost ($58,513,794), which includes the construction contract ($42,710,530.01), previously procured Metropolitan equipment ($13,043,264), and Metropolitan force construction ($2,760,000).

Project Milestone

November 2029 – Completion of construction

8/25/2026

Mai M. Hattar *Date*
Chief Engineer
Engineering Services



8/25/2026

Shivaji Deshmukh *Date*
General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractors for Low Bidder

Attachment 4 – Location Map

Ref# es12704044

Allocation of Funds for CRA Pumping Plants Sump System Rehabilitation

	Current Board Action (Sep. 2026)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt., envir. support)	488,000
Submittals Review & Record Drwgs.	1,950,000
Construction Inspection & Support	5,383,000
Metropolitan Force Construction	2,557,000
Materials & Supplies	203,000
Incidental Expenses	25,000
Professional/Technical Services	
PLA Admin. Consultant	325,000
Environmental Monitoring Consultant	97,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Mountain Cascade Inc.	42,710,530.01
Remaining Budget	1,961,469.99
Total	**$ 55,700,000**

The total amount expended to date is approximately $25.8 million. The total estimated cost to complete the rehabilitation of the sump and circulating water systems at all five CRA pumping plants, including the amount appropriated to date, and funds allocated for the work described in this action, is $81.5 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on August 4, 2026, at 2:00 P.M.

Specifications No. 2008
CRA Pumping Plants Sump System Rehabilitation

The work includes removal and replacement of the existing pumps, actuators, valves, and associated piping at five CRA pumping plants; replacement of existing platforms, grating, ladders, handrails, and sump covers, including lighting and ventilation; electrical and instrumentation and controls upgrades; and hazardous material handling and disposal.

Engineer's estimate: $36,300,000

Bidder and Location	Total	SBE $	SBE %	Met SBE[1]
Mountain Cascade Inc. Livermore, CA	**$42,710,530.01**	**$9,204,035**	**22%**	**Yes**
Steve P. Rados Inc. Santa Ana, CA	$50,891,950	-	-	-
Caliagua Inc. Fullerton, CA	$54,826,000	-	-	-
Garney Pacific Inc. Temecula, CA	$60,569,000	-	-	-

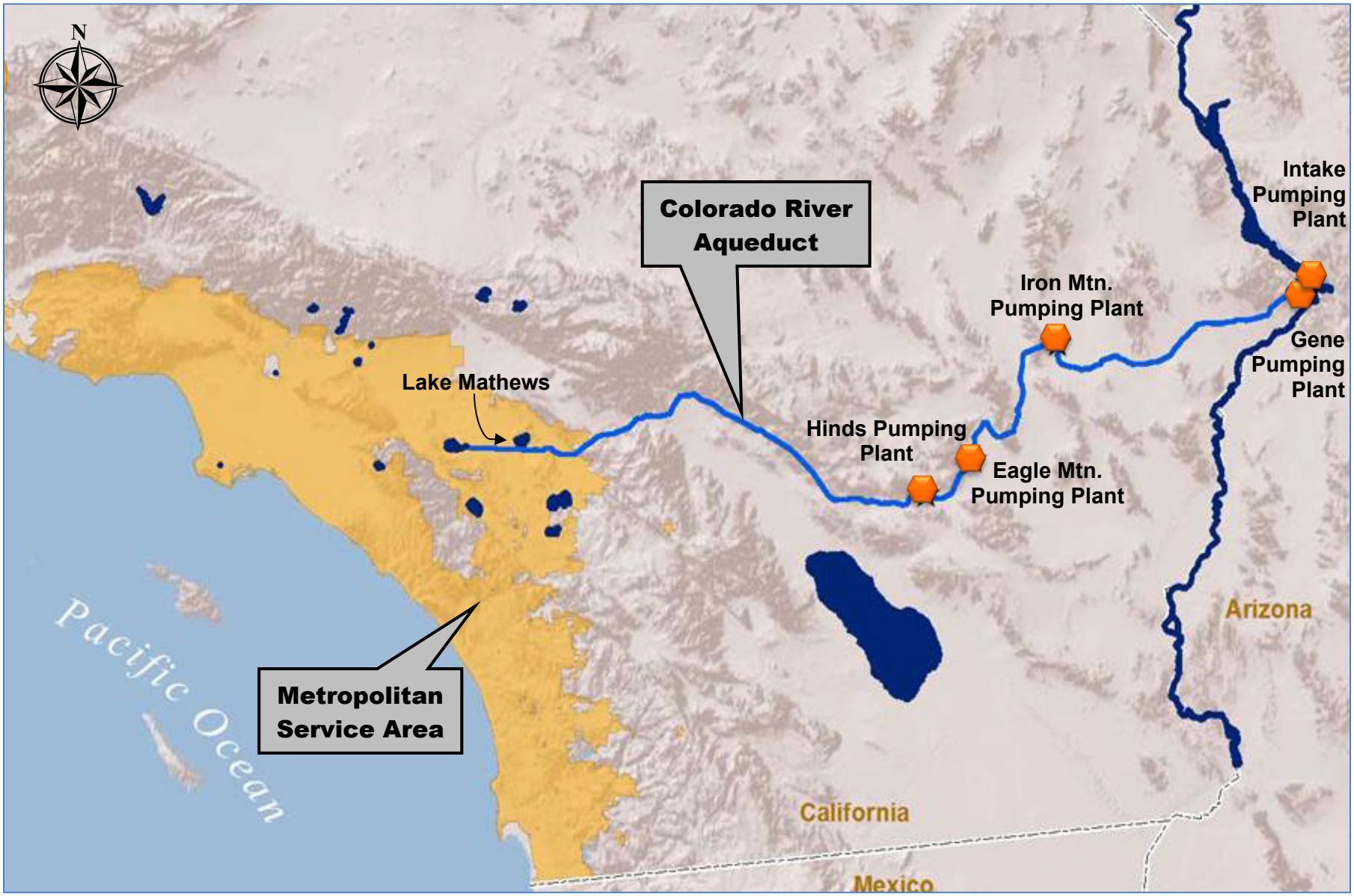
[1] Small Business Enterprise (SBE) participation level established at 20% for this contract.

The Metropolitan Water District of Southern California

Subcontractors for Low Bidder

Specifications No. 2008
CRA Pumping Plants Sump System Rehabilitation

Low bidder: Mountain Cascade Inc.

Subcontractor	Service Category; Specialty
ACCO Engineered Systems San Diego, CA	HVAC
Commerce Coating Services Carson, CA	Paintings & Coatings
D2 Industrial Services Rancho Cucamonga, CA	Lead/Asbestos Abatement
Full Armor Welding and Fabrication Menifee, CA	Furnish/Install Metal
Leed Electric Santa Fe Springs, CA	Electrical

Location Map