THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

Board Action

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

11/18/2025 Board Meeting

8-1

Subject

Award a $35,722,000 contract to Kiewit Infrastructure West Co. to replace utilities at the Eagle Mountain and Julian Hinds pumping plants; and authorize an increase of $320,000 to an agreement with AECOM Technical Services Inc. for a new not-to-exceed amount of $550,000; the General Manager has determined that the proposed action is exempt or not subject to CEQA

Executive Summary

The five Colorado River Aqueduct (CRA) pumping plants are isolated facilities that rely upon on-site utility systems to treat and produce drinking water and dispose of wastewater. In these remote areas, there are no opportunities to rely on public utilities to provide such services. Many portions of these existing systems have been in operation for nearly 80 years. Despite receiving regular maintenance, major components of these systems are exhibiting signs of failure, including the domestic potable water, non-potable water, and wastewater systems.

This action awards a construction contract to replace these three utility systems at Eagle Mountain and Julian Hinds pumping plants and authorizes an increase to an existing agreement with AECOM Technical Services Inc. for technical support during construction. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the Abstract of Bids, **Attachment 3** for the Subcontractors for Low Bidder, **Attachment 4** for the Location Map, and **Attachment 5** for the List of Subconsultants.

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

Staff Recommendation: Option #1

Option #1

a. Award a $35,722,000 contract to Kiewit Infrastructure West Co. to replace utilities at Eagle Mountain and Julian Hinds pumping plants; and

b. Authorize an increase of $320,000 to an existing agreement with AECOM Technical Services Inc. for a new not-to-exceed total of $550,000 for technical support during construction.

Fiscal Impact: Expenditure of $42,000,000 in capital funds. Approximately $4 million in capital funds will be incurred in the current biennium and have been previously authorized. The remaining capital expenditures will be funded from the next capital investment plan budget.

Business Analysis: This option will enhance reliability of the Eagle Mountain and Julian Hinds pumping plants by replacing the utilities systems; thereby, reducing the frequency of repairs and long-term maintenance costs.

Option #2

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: This option would forego an opportunity to enhance the reliability of the Eagle Mountain and Julian Hinds pumping plants. Under this option, staff would make repairs to address leaking pipes and odor issues in the plant villages.

Alternatives Considered

During the design phase of the project, staff examined the feasibility of utilizing different pipe alignments, depths, and innovative materials as cost-effective alternatives to conventional utility systems. Staff has specified a combination of polyvinyl chloride (PVC) and high-density polyethylene (HDPE) pipe for the domestic water, non-potable water, and wastewater distribution and collection systems. PVC is specified as widely as possible due to its cost-effectiveness and ease of construction and maintenance. HDPE pipe is specified in areas where double containment is necessary, such as where individual lines are in proximity to each other, and cross-contamination is possible in the event of a leak. HDPE pipe is selected for double containment applications due to its fusion-welded joints, which create a continuous, leak-proof system that effectively prevents cross-contamination. Compatible utilities were also placed within a utility corridor to provide a single accessible space, eliminate conflicts between the lines, and minimize trenching.

For the planned upgrades to the roadway pavement, staff considered replacement of all the asphalt-paved roadways and surfaces at the two pumping plants. However, it was decided to replace only the areas disturbed by utility replacement at this time (approximately 12 acres for both plants). A coordinated site-wide pavement renewal project is planned as a future project that will replace the pavement in stages as future near-term subsurface utility work is completed at each area of the plant.

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 50940, dated March 10, 2015, the Board authorized replacement of the wastewater system at Hinds and Eagle Mountain Pumping Plants.

By Minute Item 51040, dated December 12, 2017, the Board authorized final design to replace the water distribution systems and pavement at the CRA pumping plants.

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 because it involves the repair, maintenance, or minor alteration of existing public facilities 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 also 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.) Finally, the proposed action is exempt from CEQA because it consists of minor public or private alterations in the condition of land, water, and/or vegetation which do not involve removal of healthy, mature, scenic trees except for forestry or agricultural purposes. (State CEQA Guidelines Section 15304.)

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, 63 miles of canals, and 55 miles of conduits, siphons, and reservoirs. The aqueduct was constructed in the late 1930s and was placed into service in 1941. The CRA pumping plants are located in remote areas of Riverside and San Bernardino Counties, where municipal water and sewer services are not available, and the harsh desert conditions cause accelerated deterioration of infrastructure and roadways.

The CRA pumping plants and villages are isolated facilities that rely on-site utility systems to supply treated drinking water, a non-potable water system to supply industrial and irrigation water needs, and wastewater disposal. Wastewater at each plant is collected and disposed through a series of collection laterals and a septic tank system. Most of the distribution system piping and ancillary features for these systems were installed in the 1940s. Major components of these systems have deteriorated over time through continuous use, and staff makes repairs to these systems as they fail. This includes the water distribution piping, which is prone to pipe breaks and leaks, resulting in costly repairs. In December 2021, the Board awarded a contract to J.F. Shea Construction Inc. to upgrade the domestic water treatment systems at all five CRA pumping plants, including replacing the water treatment units. Construction is approximately 50 percent complete and is scheduled to be complete by April 2027. Additionally, portions of the wastewater collection systems also need to be rehabilitated. The wastewater system experiences operational issues such as slow-draining collection pipes and pervasive odors.

The asphalt roadways at the pumping plants provide access between buildings and the villages for Metropolitan staff, residents, and visitors. The existing roadways need to be replaced. Potholes and cracks have developed throughout the villages as the nearly 80-year-old subgrade below the roads has deteriorated. In many areas, poor drainage has also contributed to the deterioration of the roadways. Furthermore, replacement of the utilities beneath the roadways will require cutting and trenching of the existing roadways. This work will further distress the asphalt surfaces, leaving the roadways in very poor condition and in need of replacement. Staff plans to replace sections of the roadways that will be affected by the installation of the utilities.

Metropolitan's Board has previously authorized final design to replace the domestic and non-potable water distribution systems, the wastewater system, and asphalt pavement at all five CRA pumping plants. These improvements will be implemented in a staged approach to minimize disruption to water delivery operations and to staff at each of the plants. Design for utilities replacement at Eagle Mountain and Julian Hinds pumping plants is now complete, and staff recommends award of a construction contract at this time. Design efforts to replace the utilities at the other pumping plants are in progress.

Eagle Mountain and Julian Hinds Pumping Plants Utilities Replacement – Construction

The contract work will replace the existing domestic watermains and service laterals. The contract work will also replace wastewater collector lines, which convey wastewater to the septic tanks from the pumping plant villages, and sewer laterals, which convey wastewater from individual buildings to the collector lines. The contract will also replace the septic tank and leach field at the Julian Hinds Pumping Plant. The replacement utility systems are designed to accommodate tie-ins for future housing projects.

The scope of the construction includes replacement of the existing domestic water distribution piping, non-potable water distribution piping, and portions of the wastewater collection piping; replacement of existing asphalt pavement within affected areas of the utility's replacement, including grading and drainage improvements, installation of new roadway striping and signage; and site restoration. In support of these improvements, Metropolitan forces will coordinate field activities to minimize disturbances to Metropolitan staff at their residences and provide site access as needed.

A total of $42 million is allocated for this work, including the amount of the contract and $320,000 for construction support by AECOM Technical Services Inc. (AECOM). Allocated funds for Metropolitan staff include: $295,000 for Metropolitan force activities as described above; $3,240,000 for construction management and inspection; $356,000 for construction documentation, coordination, approval, responding to contractor

requests for information, coordination with contractor during commissioning, and archiving record drawings; $674,000 for contract administration, environmental monitoring, and project management; and $1,393,000 for remaining budget. **Attachment 1** provides the allocation of required funds.

Award of Construction Contract (Kiewit Infrastructure West Co.)

Specifications No. 1935A for the Eagle Mountain and Julian Hinds pumping plants' utilities replacement were advertised for bids on April 21, 2025. As shown in **Attachment 2**, two bids were received and opened on August 26, 2025. The low bid from Kiewit Infrastructure West Co. in the amount of $35,722,000 complies with the requirements of the specifications. The second bid was $39,170,000, while the engineer's estimate for this project was $21 million. Staff investigated the difference between the engineer's estimate and the low bid. The engineer's estimate was prepared by the consulting firm. The consultant underestimated the challenges with work in remote locations, such as loss of productivity due to the rocky terrain of the pumping plants, costs associated with supporting concurrent construction at two plants, and housing of contract workers for an extended period during construction. In addition, this estimate did not account for hazardous material removal and disposal; increased fuel, material, and labor costs; and escalation. Staff considered rebidding the project and performing additional outreach to the construction industry. However, due to the remote locations of the work and the sheer volume of competing construction contracts within the Southern California region, lower bids are not anticipated. Given the urgent need to replace the failing utilities, staff recommends award of a contract at this time. For this contract, Metropolitan established a Small Business Enterprise participation level of at least 25 percent of the bid amount. Kiewit Infrastructure West Co. has agreed to meet this level of participation. The subcontractors for this contract are listed in **Attachment 3**. This work will be conducted under the terms of Metropolitan's project labor agreement.

This action awards a $35,722,000 contract to Kiewit Infrastructure West Co. to replace the existing domestic and non-potable water distribution piping, wastewater collection piping, and asphalt paving at the Eagle Mountain and Julian Hinds Pumping Plant. 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 anticipated cost of inspection is approximately 9.0 percent of the total construction cost. The total cost of construction for this project is $36,017,000, which includes the amount of the contract ($35,722,000) and Metropolitan force activities ($295,000).

Engineering Services (AECOM Technical Services Inc.) – Amendment of Existing Agreement

AECOM Technical Services Inc. (AECOM) performed the final design for the Eagle Mountain and Julian Hinds pumping plants' utilities replacement under an existing General Manager authorized professional services agreement. As the engineer of record, AECOM is recommended to provide technical support during construction. Planned activities include responding to requests for information from the contractor, reviewing submittals, advising staff on technical issues as they may arise during construction, and preparing record drawings. The estimated cost for these services is $320,000.

This action authorizes an increase of $320,000 to the existing agreement with AECOM Technical Services Inc. for a new not-to-exceed total of $550,000 to provide technical support during construction. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. AECOM Technical Services Inc. has agreed to meet this level of participation. The planned subconsultants are listed in **Attachment 5**.

Project Milestone

June 2027 – Completion of construction

10/28/2025
Mai M. Hattar *Date*
Chief Engineer
Engineering Services

10/28/2025
John V. Bednarski *Date*
Interim General Manager

Attachment 1 – Allocation of Funds

Attachment 2 – Abstract of Bids

Attachment 3 – Subcontractors

Attachment 4 – Location Map

Attachment 5 – List of Subconsultants

Ref# es12699479

Allocation of Funds for Eagle Mountain and Hinds Pumping Plant Utilities Replacement

	Current Board Action (Nov. 2025)
Labor	
Studies & Investigations	$ -
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	674,000
Submittals Review & Record Drwgs.	356,000
Construction Inspection & Support	3,240,000
Metropolitan Force Construction	295,000
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	
AECOM Technical Services Inc.	320,000
Right-of-Way	-
Equipment Use	-
Contracts	
Kiewit Infrastructure West Co.	35,722,000
Remaining Budget	1,393,000
Total	**$ 42,000,000**

The total amount expended to date to replace the Eagle Mountain and Hinds Utilities replacement is approximately $3,900,000. The total estimated cost to complete this project, including the amount appropriated to date and funds allocated for the work described in this action is $45.9 million.

The Metropolitan Water District of Southern California

Abstract of Bids Received on August 26, 2025, at 2:00 P.M.

Specifications No. 1935A
Eagle Mountain and Hinds Pumping Plants Utilities Replacement

The work includes replacement of the existing potable and non-potable water distribution piping systems, replacement of the existing wastewater piping, and replacement of existing asphalt pavement including grading and drainage improvements.

Engineer's estimate: $21,000,000

Bidder and Location	Total	SBE $	SBE %	Met SBE[1]
Kiewit Infrastructure West Co. Santa Fe Springs, CA	**$35,722,000**	**$8,931,188**	**25%**	**Yes**
Steve P Rados, Inc. Santa Ana, CA	$39,170,000	-	-	-

[1] Small Business Enterprise (SBE) participation level established at 25 percent for this contract.

The Metropolitan Water District of Southern California

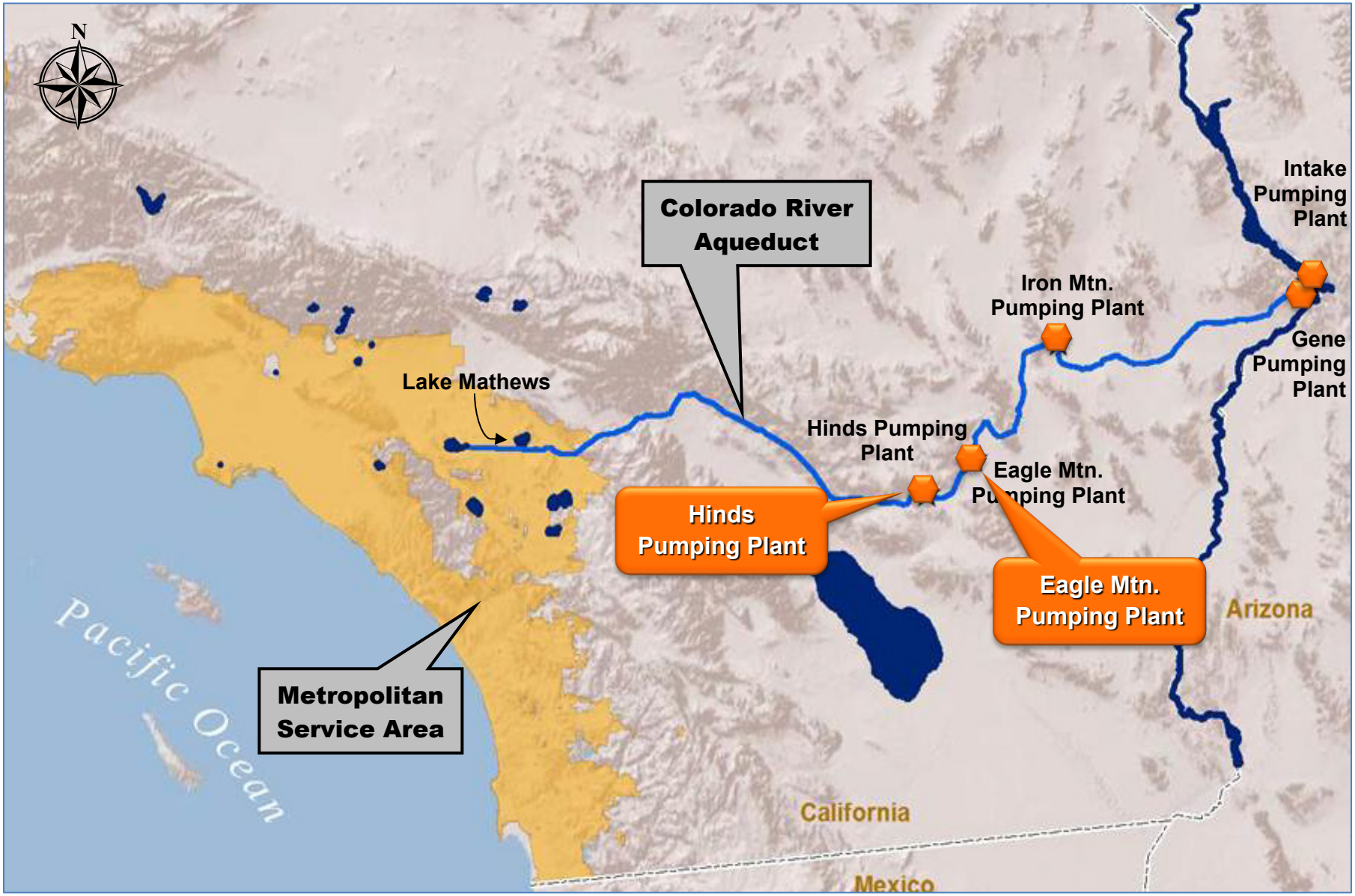
Subcontractors for Low Bidder

Specifications No. 1935A
Eagle Mountain and Hinds Pumping Plants Utilities Replacement

Low bidder: Kiewit Infrastructure West Co.

Subcontractor	Service Category; Specialty
Karcher Environmental Anaheim, CA	Hazmat Abatement
National Coating & Lining Co. Lake Elsinore, CA	Painting and Coating
Odigos Construction South Lake Tahoe, CA	Flatwork and Asphalt Paving
Sierra Landscape Company Palm Desert, CA	Landscaping

Location Map



The Metropolitan Water District of Southern California

Subconsultants for Agreement with AECOM Technical Services Inc.

Subconsultant and Location	Service Category; Specialty
ProjectLine Technical Services (ProjectLine) Costa Mesa, CA	Project Management and CAD services