

Board Action

Board of Directors Engineering, Operations, and Technology Committee

4/8/2025 Board Meeting

7-4

Subject

Authorize an increase of \$3.3 million to an existing agreement with Stantec Consulting Services Inc. for a new not-to-exceed total amount of \$4.99 million for final design of a mechanical dewatering facility at the Joseph Jensen Water Treatment Plant; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEOA

Executive Summary

Metropolitan currently uses four lagoons on the grounds of the Los Angeles Department of Water and Power (LADWP) for solids processing and handling at the Joseph Jensen Treatment Plant (Jensen plant). Settled solids collected from the Jensen plant's sedimentation basins are thickened on-site and pumped through a solids-transfer system to LADWP lagoons. At the lagoons, the residual materials are dried and then transported for off-site disposal. Through an existing agreement with LADWP, Metropolitan has exclusive use of two lagoons through 2062, and the remaining two lagoons will revert back to LADWP by December 2033. A future mechanical dewatering facility is needed to meet the Jensen plant's long-term solids handling needs. Preliminary design of the new mechanical dewatering facility has been completed, and staff recommends proceeding with final design.

This action authorizes an increase to an existing agreement with Stantec Consulting Services Inc. (Stantec) for final design of the mechanical dewatering facility at the Jensen plant. See **Attachment 1** for the Allocation of Funds, **Attachment 2** for the List of Subconsultants, and **Attachment 3** for the Location Map.

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

Staff Recommendation: Option #1

Option #1

Authorize an increase of \$3.3 million to an existing agreement with Stantec Consulting Services Inc. for a new not-to-exceed total amount of \$4.99 million for final design of a mechanical dewatering facility at the Jensen plant.

Fiscal Impact: Expenditure of \$5.4 million in capital funds. Approximately \$3.5 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 improve the reliability of the Jensen plant's solids handling process, maintain treated water quality, and enhance operational flexibility.

Option #2

Do not proceed with the project at this time.

Fiscal Impact: None

Business Analysis: Staff would continue to use LADWP lagoons to process residual solids under the current use agreement. Since two of the lagoons must be returned in December 2033, staff would return to the Board with an alternative approach to address the needs of the Jensen plant's solids handling.

Alternatives Considered

Upon completion of preliminary design for the Jensen mechanical dewatering facility, staff reassessed the availability and capability of in-house Metropolitan staff to conduct final design, considering: (1) current work assignments for in-house staff to determine the potential availability of staff to conduct this work; and (2) specialized technical expertise needs.

After assessing the current workload for in-house staff, the relative priority of this project, and the specialized technical expertise required, staff recommends continuing the use of both a professional services agreement and in-house staff to perform final design of the subject project. This approach will allow for the completion of this program and other capital work within their current schedule and ensure the work is conducted in the most efficient manner possible.

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 49271, dated December 11, 2012, the Board authorized an agreement with LADWP for Metropolitan use of solids lagoons at the Aqueduct Filtration Plant.

By Minute Item 53247, dated May 9, 2023, the Board authorized an amendment to the use agreement with LADWP to forego construction of two new lagoons on LADWP's property and to extend the date of use of two solids lagoons and an amendment to an existing professional services agreement for preliminary design of a mechanical dewatering facility at the Jensen plant.

By Minute Item 53598, dated April 9, 2024, the Board appropriated a total of \$630 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 consists of basic data collection, research, experimental management, and resource evaluation activities that do not result in a serious or major disturbance to an environmental resource. These may be strictly for information-gathering purposes or as part of a study leading to an action that a public agency has not yet approved, adopted, or funded. (State CEQA Guidelines Section 15306.)

CEQA determination for Option #2:

None required

Details and Background

Background

The Jensen plant was placed into service in 1972 and has a rated capacity of 750 million gallons per day. Located in Granada Hills, the Jensen plant normally treats water from the West Branch of the State Water Project and delivers it to Metropolitan's Central Pool and to exclusive service areas on the west side of the distribution system.

In February 2013, Metropolitan and LADWP entered into a use agreement that allowed Metropolitan to use four lagoons on the site of LADWP's Aqueduct Filtration Plant for solids dewatering. The term of use was ten years for Lagoons 2 and 3 and 50 years for Lagoons 7 and 8. In conjunction with a future mechanical dewatering facility at the Jensen plant, this agreement met Metropolitan's long-term solids handling needs while allowing a local youth sports organization to maintain its current ballfield location on the grounds of the Jensen plant.

Residual chemicals and settled solids collected from the Jensen plant's sedimentation basins are currently thickened on-site and pumped through a solids-transfer system to the four LADWP lagoons. They are then transported for off-site disposal once they have dried.

In May 2023, Metropolitan's Board authorized: (1) an amendment to the agreement with LADWP to extend Metropolitan's use of Lagoons Nos. 2 and 3 until construction of a mechanical dewatering facility is complete or until December 31, 2033, whichever occurs first, and (2) an amendment to an existing agreement to provide engineering services for preliminary design of the mechanical dewatering facility at the Jensen plant. This mechanical dewatering facility would allow the plant to manage solids without reliance on Lagoons 2 and 3. Lagoons 2 and 3 would be returned to LADWP use once the dewatering facility at the Jensen plant is operational. Under the current design approach, Metropolitan's continued use of Lagoons 7 and 8 would be limited to scenarios including concurrent high plant flow and peak turbidity conditions.

Preliminary design work was conducted as a hybrid effort of Metropolitan staff and a specialized consultant. Staff completed surveys of the proposed site, assessed existing infrastructure, and provided recommendations for site selection, truck haul routes, facility layout, and site preparation work. The consultant established design criteria, including equipment sizing, polymer requirements, and operational requirements during periods of high turbidity.

Preliminary design for the mechanical dewatering facility at the Jensen plant has been completed, and staff recommends proceeding with final design at this time.

Jensen Solids Mechanical Dewatering Facility – Final Design

Planned improvements for Jensen's residual solids processing include site preparation and construction of a mechanical dewatering facility and associated solids conveyance piping, chemical feed, and electrical and control systems.

Final design activities include: (1) preparation of drawings and specifications; (2) development of site ground improvement criteria and methodology; (3) constructability review; (4) development of an engineer's cost estimate; and (5) advertising and receiving competitive bids. These activities are planned to be conducted by both Metropolitan staff and Stantec under an existing agreement described below. The scope of work for Stantec includes final design for civil, structural, mechanical, and electrical disciplines. Metropolitan staff will perform final design for instrumentation design, environmental support, project management, technical oversight, and review of consultant work.

A total of \$5.4 million is required for this work. Allocated funds include \$3.3 million for the final design activities by Stantec described above. Other allocated funds for professional services include \$400,000 for geotechnical investigations and value engineering, which will be performed by specialty firms under contracts planned to be executed under the General Manager's authority. Allocated funds for Metropolitan staff activities include \$700,000 for design activities described above; \$550,000 for environmental support, project controls, and project management; and \$450,000 for remaining budget. **Attachment 1** provides the allocation of the required funds.

As described above, final design will be performed by Stantec and Metropolitan staff. Engineering Services' performance metric target range for final design of projects with a construction cost of more than \$3 million is 9 to 12 percent. For this project, the performance metric goal for final design is 10.0 percent of the total construction cost. The total estimated cost for design is \$4.0 million, which includes \$3.3 million for Stantec and \$700,000 for Metropolitan design activities. The estimated cost of construction of the Jensen mechanical dewatering facility is anticipated to range from \$40 million to \$55 million.

Engineering Services (Stantec Consulting Services Inc.) – Amendment of Existing Agreement

In May 2023, Metropolitan's Board authorized an agreement with Stantec to complete preliminary design of the mechanical dewatering facility at the Jensen plant. Stantec was prequalified through Request for Qualification No. 1302 and was selected based on the firm's expertise in the design of large water/wastewater treatment plants with solids processing facilities. Preliminary design has been completed, and Stantec is now recommended to provide engineering services for final design as described above.

This action authorizes an increase of \$3.3 million to the existing agreement with Stantec Consulting Group Inc. for a new not-to-exceed total amount of \$4.99 million to perform the final design for the mechanical dewatering facility at the Jensen plant. For this agreement, Metropolitan has established a Small Business Enterprise participation level of 25 percent. Stantec has agreed to meet this level of participation. The subconsultants for this agreement are listed in **Attachment 2**.

Project Milestone

December 2026 - Completion of final design of the Jensen mechanical dewatering facility

Mai Hattar

5/24/2023

Date

Interim Chief Engineer Engineering Services

Deven Upadhyay General Manager 3/24/2025

Date

Attachment 1 - Allocation of Funds

Attachment 2 - List of Subconsultants

Attachment 3 - Location Map

Ref# es12700704

Allocation of Funds for Jensen Solids Mechanical Dewatering Facility

	Current Board Action (Apr. 2025)	
Labor		_
Studies & Investigations	\$	-
Final Design		700,000
Owner Costs (Program mgmt.,		550,000
envir. support)		
Submittals Review & Record Drwgs.		-
Construction Inspection & Support		-
Metropolitan Force Construction		-
Materials & Supplies		-
Incidental Expenses		-
Professional/Technical Services		
Stantec Consulting Inc.		3,300,000
Geotechnical Investigations		300,000
Value Engineering		100,000
Right-of-Way		-
Equipment Use		-
Contracts		-
Remaining Budget		450,000
Total	\$	5,400,000

The total amount expended to date to develop the mechanical dewatering facility at Jensen is approximately \$2.8 million. The total estimated cost to complete this project, including the amount appropriated to date, funds allocated for the work described in this action, and future construction costs, is anticipated to range from \$55 million to \$70 million.

The Metropolitan Water District of Southern California

Subconsultants for Agreement with Stantec Consulting Services Inc. Agreement No. 208770

Subconsultant and Location	Service Category; Specialty
ProjectLine Technical Services Costa Mesa, CA	Mechanical and electrical design
Beyaz and Patel Inc. San Diego, CA	Structural design

