



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

2/9/2016 Board Meeting

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**7-1**

**Subject**

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Authorize amendment to reimbursable agreement with the Los Angeles Department of Water and Power to refurbish solids lagoons for the Joseph Jensen Water Treatment Plant

**Executive Summary**

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This action authorizes an amendment to an existing reimbursable agreement with the Los Angeles Department of Water and Power (LADWP) for Metropolitan to refurbish four existing LADWP solids lagoons. These lagoons will be used by Metropolitan's Joseph Jensen Water Treatment Plant as part of its solids handling process for a period of 50 years.

No funds are required in this action, as all Metropolitan costs will be reimbursed by LADWP.

**Timing and Urgency**

Metropolitan entered into an agreement with LADWP in 2013 that will enable Metropolitan to use four solids lagoons on the grounds of LADWP's Aqueduct Filtration Plant for a period of 50 years. A separate agreement with LADWP was also executed in 2013, under which Metropolitan will design and refurbish the solids lagoons and LADWP will reimburse Metropolitan for all associated costs. The maximum reimbursable amount under that agreement is \$5 million.

In January 2015, Metropolitan's Board awarded a construction contract to refurbish the four existing LADWP lagoons, pursuant to the reimbursable agreement. Construction is currently underway. As the original reimbursable agreement has insufficient capacity to cover unit-price adjustable cost items and potential contract change orders during the construction, staff recommends that the maximum reimbursable amount be increased so that LADWP will be able to fully reimburse Metropolitan on a timely basis for the entire cost of lagoon refurbishment. The new recommended maximum amount of the agreement is \$6 million. Staff also recommends that the term of the agreement be extended from 28 months to the later of four years or completion of all work required under the agreement.

On January 19, 2016, LADWP's Board of Commissioners approved an amendment to the reimbursable agreement to extend the duration of the agreement and provide an increase of \$1 million in funding for:

(1) potential construction change orders and delays due to the presence of high groundwater and other differing site conditions; (2) efforts to support groundwater control and dewatering activities; and (3) quantity variations in unit-price items within the construction contract.

**Details**

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**Background**

The Jensen plant was placed into service in 1972 with an initial capacity of 400 million gallons per day (mgd). The plant was expanded in the early 1990s to its current capacity of 750 mgd. The Jensen plant exclusively treats water from the West Branch of the State Water Project and delivers it to Metropolitan's Central Pool and to an exclusive service area in the western portion of the distribution system. The facility is located in Granada Hills.

Residual solids collected from the Jensen plant's sedimentation basins are currently thickened on-site and transported via a temporary solids transfer system to two nearby lagoons at LADWP's Aqueduct Filtration Plant for dewatering and drying. This cooperative arrangement was initiated in 2005 to process 15 percent of the solids generated at the Jensen plant's maximum flowrate under design conditions. Alternatively, the Jensen plant may discharge solids to a city of Los Angeles sanitary sewer. However, sewer disposal is expensive and the quantity is limited by the discharge permit.

Metropolitan entered into a board-authorized agreement with LADWP in February 2013 that enables Metropolitan to utilize four solids lagoons on LADWP property for a period of 50 years. In conjunction with a future mechanical dewatering facility at the Jensen plant, this agreement provides sufficient capacity to meet the plant's anticipated solids handling needs. In order to take advantage of the four LADWP lagoons, two elements of work must be completed. Construction of the first element, which is a solids transfer system for conveying Jensen plant solids to the LADWP lagoons, will be completed by February 2016. The second element of work involves refurbishment of the four existing LADWP lagoons. In November 2013, Metropolitan's Board authorized a reimbursable agreement with LADWP in an amount not to exceed \$5 million for Metropolitan to design and refurbish the four existing lagoons.

The lagoon refurbishment work includes on-site screening of underdrain rock; disposal of potentially hazardous materials; installation of crushed rock; refurbishment of existing decant valve structures; installation of pipes, duct bank, and manholes equipped with submersible pumps; and installation of turbidity meters, piezometers, and electrical panels. This work will support long-term operation of the lagoons by Metropolitan, and will isolate the four lagoons from other lagoons that will be used by LADWP. The construction contract was developed in close collaboration with LADWP to control costs and risks during construction, as the lagoons were in use and as-built conditions and earthwork quantities could not be verified during design. The construction contract for lagoon refurbishment was awarded in January 2015 and is scheduled to be completed in September 2016.

Under the existing reimbursable agreement, Metropolitan is responsible for design and refurbishment of the four lagoons, and LADWP is responsible for construction and operation of a new groundwater control facility to eliminate the need for construction dewatering and ensure proper long-term lagoon operation. The agreement also requires LADWP to fund and properly dispose of any hazardous materials or contaminated soil and/or groundwater discovered during construction, if necessary, in accordance with federal, state, and local hazardous waste regulations. Metropolitan will be reimbursed for its costs including labor, equipment, materials, other services, and the Metropolitan-awarded construction contract.

#### **Amendment to Reimbursable Agreement for Lagoon Refurbishment – No funds required**

Based on the amount of the competitively bid construction contract and on the completed design work, the existing reimbursable agreement has insufficient capacity to cover potential construction contract changes and quantity variations on unit-price items that may occur on a project of this complexity. During the initial stages of construction, several potential change order and unit-price conditions have been identified, as follows:

- Construction dewatering by the contractor may be required during portions of the lagoon refurbishment work. Although LADWP recently completed construction of its long-term groundwater control facilities to fulfill its responsibility under the lagoon-use agreement, the facilities have not been fully tested during a rainy season when local groundwater levels are anticipated to rise. The validation process is ongoing and is likely to continue through 2016.
- The construction contract incorporates provisions for payment on a unit-price basis for hazardous material disposal and crushed rock placement. Unit prices are commonly used for bidding earthwork construction where actual quantities of materials to be removed and replaced cannot be readily determined in advance or may vary widely. Although the lagoon refurbishment construction is still underway, the final quantities of these two unit-price items are projected to exceed the amounts identified in the bid documents.

As a result of these circumstances, staff recommends that the existing reimbursable agreement with LADWP be amended to increase the funding and duration of the agreement to accommodate: (1) potential construction

contract change orders due to the presence of high groundwater and other differing site conditions; (2) efforts to support groundwater control and dewatering activities; and (3) quantity variations in contract unit-price items.

This action authorizes an amendment to the existing reimbursable agreement with LADWP to increase the maximum payable amount by \$1 million, for a new not-to-exceed total of \$6 million. It also extends the term of the agreement from 28 months to the later of four years or completion of all work required under the agreement. LADWP will reimburse Metropolitan for all direct and indirect costs incurred, including the fully burdened cost of Metropolitan labor. LADWP's Board of Commissioners approved the proposed amendment to the reimbursable agreement on January 19, 2016.

No funds are required in this action, as all of Metropolitan's costs for the lagoon refurbishment will be reimbursed by LADWP. See [Attachment 1](#) for the Location Map.

## Policy

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Metropolitan Water District Administrative Code Section 8121: General Authority of the General Manager to Enter Contracts

## California Environmental Quality Act (CEQA)

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### CEQA determination for Option #1:

The proposed action is not subject to CEQA because it involves other government fiscal activities which do not involve any commitment to any specific project which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed action is not subject to CEQA pursuant to Section 15378(b)(4) of the State CEQA Guidelines.

### CEQA determination for Option #2:

None required

## Board Options

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### Option #1

Adopt the CEQA determination that the proposed action is not subject to CEQA, and

Authorize increase of \$1 million to the existing reimbursable agreement with the Los Angeles Department of Water and Power, for a new not-to-exceed total of \$6 million, to refurbish solids lagoons for the Jensen plant.

**Fiscal Impact:** None. All costs will be fully reimbursed by LADWP.

**Business Analysis:** This option will enhance reliability and provide cost-effective long-term solids disposal for the Jensen plant.

### Option #2

Do not authorize the agreement amendment and direct staff to return to both Metropolitan's Board and LADWP to approve scope increases individually.

**Fiscal Impact:** None

**Business Analysis:** This option would delay completion of the lagoon refurbishment work. The Jensen plant would have insufficient solids handling capacity and may discharge solids to the sanitary sewer, which is expensive and limited by the capacity of the discharge permit.

**Staff Recommendation**

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Option #1

  
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Gordon Johnson  
Manager/Chief Engineer  
Engineering Services

1/20/2016  
Date

  
\_\_\_\_\_  
Jeffrey Kightlinger  
General Manager

1/25/2016  
Date

**Attachment 1 – Location Map**

Ref# es12639745

# Distribution System

