



- Board of Directors  
*Engineering and Operations Committee*

11/5/2019 Board Meeting

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**7-1**

## **Subject**

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Authorize design activities to reline a portion of the Lake Perris Bypass Pipeline; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

## **Executive Summary**

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This action authorizes final design to reline approximately 1,200 feet of the Lake Perris Bypass Pipeline. This work is required to accommodate Lake Perris improvements currently underway by the Department of Water Resources (DWR). This project was not included in the Capital Investment Plan (CIP) budget for fiscal years 2018/19 and 2019/20, and as such requires specific board authorization to proceed.

DWR is constructing improvements to the Lake Perris emergency release facility to reduce the risks to public safety and property. The Lake Perris Bypass Pipeline is located at the base of Lake Perris within an easement granted by DWR. Metropolitan is required to relocate or protect any portion of the Lake Perris Bypass that would be impacted as a result of DWR's planned improvements to Lake Perris. Board action is required at this time so that protection of the pipeline can be completed prior to the commencement of DWR's project.

## **Details**

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### **Background**

The Lake Perris Bypass Pipeline is a 2.44-mile-long, 120-inch diameter prestressed concrete cylinder pipeline constructed in 1981 that extends from DWR's Santa Ana Valley Pipeline to Metropolitan's Lake Perris Pressure Control Facility. The Lake Perris Bypass Pipeline is part of a conveyance system that can deliver water to Diamond Valley Lake or, under drought conditions, reverse flow and deliver pumped water from Lake Perris into the Mills Plant. The majority of the Lake Perris Bypass Pipeline was constructed in fee property that is owned by DWR. In 1982, DWR granted MWD an easement for the pipeline within a specified alignment. Under the terms of the easement, Metropolitan is required to either relocate or protect its pipeline, at its own expense, to allow for improvements by DWR.

DWR has been evaluating the need for improvements to the Lake Perris emergency release facility over the last several years. In early 2019, DWR notified Metropolitan that the planned improvements at Lake Perris would impact the bypass pipeline. The improvements will extend the Lake Perris emergency release facilities and connect directly into a nearby flood control channel to reduce risks to public safety and property. The planned work includes construction of a 6,000-foot-long levee that will cross over Metropolitan's Lake Perris Bypass Pipeline. The levee will be approximately 10 feet high at its crest, and up to 90 feet wide at its base. Due to the additional loads placed on the pipe by the new levee, strengthening or relocation of the Lake Perris Bypass Pipeline is required to protect the pipeline. Staff evaluated several pipeline protection options. Following this evaluation, staff determined that lining approximately 1,200 feet of the Lake Perris Bypass Pipeline with a steel liner is the most effective method to protect the pipeline. The relining will be complete by December 2020 to meet DWR's schedule.

In October 2018, the Board appropriated funds and authorized the General Manager to initiate or proceed with work on all capital projects identified in the CIP, subject to any limits on the General Manager's authority and CEQA requirements. This project was not included in the CIP budget for fiscal years 2018/19 and 2019/20. Any project not included in the CIP budget requires specific board authorization to proceed. The project has been

reviewed in accordance with Metropolitan's CIP prioritization criteria and is now recommended to be included in the Distribution System Reliability Program.

In accordance with the October 2018 action, the General Manager will authorize staff to proceed with design to reline a portion of the Lake Perris Bypass Pipeline, pending Board authorization. Based on the current CIP expenditure forecast, funds for the work to be performed pursuant to this action are available within the Capital Investment Plan Appropriation for Fiscal Years 2018/19 and 2019/20 (Appropriation No. 15509).

### **Lake Perris Bypass Pipeline Relining – Design**

The planned design activities by Metropolitan staff and a specialized consultant include: (1) conducting field investigations; (2) establishing final design criteria, preparing drawings and specifications, and development of a construction cost estimate; (3) acquiring temporary right-of-way for the contractor staging and work areas; (4) shutdown planning with member agencies; and (5) advertisement for, and receipt of competitive bids. Staff will return to the Board at a later date to award a construction contract.

A total of \$700,000 is required for these activities. Allocated funds include: \$110,000 for field investigations including geotechnical analysis and potholing; \$300,000 for design activities and technical assessments by Brown and Caldwell under an existing on-call agreement; \$82,000 for hydraulic analysis and technical review by Metropolitan staff; \$10,000 for acquisition of temporary right-of-way for the contractor staging and work areas; \$76,000 for preparation of environmental documentation, project controls, and project management; and \$122,000 for remaining budget.

**Attachment 1** provides the allocation of the required funds. The total estimated cost to complete relining a portion of the Lake Perris Bypass Pipeline, including the funds allocated for the work described in this action and future construction costs is anticipated to range from \$7.0 million to \$7.5 million. This is the initial action for the Lake Perris Bypass Pipeline Relining project.

As described above, final design will be performed by Brown and Caldwell. Engineering Services' performance metric target range for final design with construction greater than \$3 million is 9 to 12 percent. For this project, the performance metric goal for final design is 4.8 percent of the total construction costs. The total estimated cost of construction for this project is anticipated to range from \$6.3 million to 6.8 million

Staff will return to the Board at a later date for award of a construction contract.

### **Summary**

This action authorizes design to reline approximately 1,200 feet of the Lake Perris Bypass Pipeline. See **Attachment 1** for the Allocation of Funds and **Attachment 2** for the Location Map.

### **Project Milestone**

March 2020 – Completion of design to reline a portion of the Lake Perris Bypass Pipeline

### **Policy**

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Metropolitan Water District Administrative Code Section 11104: Delegation of Responsibilities

By Minute Item 51353, dated October 9, 2018, the Board appropriated a total of \$290 million for projects identified in the Capital Investment Plan for Fiscal Years 2018/19 and 2019/20.

### **California Environmental Quality Act (CEQA)**

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#### **CEQA determination for Option #1:**

The proposed action is exempt under the provisions of CEQA and the State CEQA Guidelines. The proposed action consists of the installation of a new pipeline or the maintenance, repair, replacement, removal, or demolition of an existing pipeline of less than one mile in length within a public right-of-way. Accordingly, the proposed actions qualify under a statutory exemption (Section 21080.21(a) of the California Public Resources Code and Section 15282(k) of the State CEQA Guidelines). Additionally, the proposed actions are categorically exempt under the provisions of CEQA and the State CEQA Guidelines. In particular, the proposed action consists of the funding, design, minor alterations, and reconstruction or replacement of existing public facilities with

negligible or no expansion of use and no possibility of significantly impacting the physical environment. Further, the proposed action consists of basic data collection, research, experimental management, and resource evaluation activities, which 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, which a public agency has not yet approved, adopted, or funded. Accordingly, the proposed action qualifies under Class 1, Class 2, Class 6 Categorical Exemptions (Sections 15301, 15302, and 15306 of the State CEQA Guidelines).

**CEQA determination for Option #2:**

None required

**Board Options**

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**Option #1**

- a. Amend current CIP to include the relining of a portion of the Lake Perris Bypass Pipeline; and
- b. Authorize design activities to reline approximately 1,200 feet of the Lake Perris Bypass Pipeline.

**Fiscal Impact:** \$700,000 in capital funds

**Business Analysis:** This option will allow Metropolitan to meet its legal obligation under the easement granted by DWR.

**Option #2**

Do not authorize design activities to reline approximately 1,200 feet of Lake Perris Bypass Pipeline.

**Fiscal Impact:** None

**Business Analysis:** This option would delay DWR's emergency release improvement project, or subject Lake Perris Bypass Pipeline to adverse impacts.

**Staff Recommendation**

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Option #1

	10/16/2019
_____ John V. Bednarski Manager/Chief Engineer Engineering Services	Date
	10/24/2019
_____ Jeffrey Lightlinger General Manager	Date

**Attachment 1 – Allocation of Funds**

**Attachment 2 – Location Map**

Ref# es12667121



# Distribution System

