



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

7/14/2026 Board Meeting

7-2

Subject

Authorize an increase of \$2,750,000 to an existing agreement with Pure Technologies U.S. Inc. for a new not-to-exceed amount of \$9,750,000 for inspections and analysis of Prestressed Concrete Cylinder Pipe; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA

Executive Summary

The Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program is a comprehensive, long-term effort to manage the rehabilitation of Metropolitan's PCCP. One of the PCCP Program's core pillars involves prioritization of pipeline rehabilitations based on systematic pipeline inspections and assessments. This action authorizes an amendment to an existing agreement with Pure Technologies U.S. Inc. (Pure Technologies) to perform additional inspections and pipeline assessments under the fifth cycle of PCCP inspections to enable monitoring and prioritization of PCCP rehabilitation work. Amending the agreement with Pure Technologies will allow critical inspections of the Foothill Feeder and Allen-McColloch Pipeline to take place with upcoming scheduled late-2026/early-2027 shutdowns, instead of deferring this work to later shutdown cycles. See **Attachment 1** for Allocation of Funds.

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

Staff Recommendation: Option #1

Option #1

Authorize an increase of \$2,750,000 to an existing agreement with Pure Technologies U.S. Inc. for a new not-to-exceed total amount of \$9,750,000 for inspections and analysis of Prestressed Concrete Cylinder Pipe.

Fiscal Impact: Expenditure of \$2,750,000 in capital funds in the current biennium.

Business Analysis: This action will enhance the reliability of Metropolitan's PCCP feeders and reduce the risk of costly urgent repairs.

Option #2

Do not proceed with the amendment to the PCCP inspection agreement.

Fiscal Impact: None

Business Analysis: This option would defer PCCP inspections until a new agreement is in place. This option would defer monitoring PCCP pipelines for potential deterioration, thereby increasing the risk of pipeline failures.

Alternatives Considered

Staff initially considered deferring the remaining inspections for the fifth cycle and incorporating the work into the sixth cycle of PCCP inspections under a new Request for Qualifications (RFQ). This approach would forgo a near-term opportunity to utilize the current inspection services provider's patented technologies to inspect the Foothill Feeder without the need for a costly and complicated dewatering effort.

The selected alternative would take advantage of planned shutdowns of the Foothill Feeder and Allen-McColloch Pipeline, as well as allowing for completion of the remaining fifth cycle of PCCP inspections. This option will also allow staff time to vet new PCCP inspection provider capabilities under a new RFQ.

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 to the General Manager to perform CEQA functions

Related Board Action(s)/Future Action(s)

By Minute Item 52936, dated August 16, 2022, the Board authorized the fifth round of electromagnetic inspections of PCCP pipelines.

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 (CIP) for Fiscal Years 2026/27 and 2027/28.

Summary of Outreach Completed

These inspections are coordinated in advance with member agencies to minimize impacts on water deliveries.

California Environmental Quality Act (CEQA)

CEQA determination for Option #1

The environmental effects from the design, construction, and operation of the proposed project were evaluated in the Prestressed Concrete Cylinder Pipe Rehabilitation Program Final Programmatic Environmental Impact Report (SCH No. 2014121055), which was certified by the Board on January 10, 2017. The Board also approved the Findings of Fact (Findings), the Statement of Overriding Considerations, the Mitigation Monitoring and Reporting Program, and the Program itself. The current actions are solely based on increasing funds to existing agreements, and not on any changes to the approved program itself. Hence, the previous environmental documentation acted on by the Board in conjunction with the proposed action fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act on the proposed action.

CEQA determination for Option #2:

None

Details and Background

Background

In response to several PCCP failures experienced within the water industry, Metropolitan's Board authorized the PCCP Rehabilitation Program in September 2011 to develop a comprehensive, long-term plan for the replacement or relining of Metropolitan's at-risk PCCP lines. Metropolitan's strategy for maintaining PCCP reliability consists of four coordinated elements: (1) continued assessment and monitoring of PCCP lines; (2) monitoring of stray currents near PCCP lines and installation of cathodic protection as necessary; (3) near-term repair of PCCP segments as needed; and (4) long-term rehabilitation of priority pipelines. This action authorizes an amendment to a technical services agreement for further monitoring of the PCCP lines in Metropolitan's system.

Metropolitan currently inspects all approximately 140 miles of PCCP lines within its distribution system on an approximately five year cycle, based on pipeline condition, repair history, and operational constraints. These inspections utilize electromagnetic technology, the industry's primary method for detecting wire breaks, to enable proactive condition monitoring, identification of changes from baseline conditions, tracking of prestressing wire breakage, and identification of distressed pipe segments. Electromagnetic inspections typically require the

pipeline to be dewatered and for pipeline inspectors to enter the pipeline and traverse its length with an electromagnetic wire-break detection instrument.

Metropolitan has conducted systematic inspections of its PCCP lines since the 1990s. In August 2022, Metropolitan's Board authorized a \$7 million agreement with Pure Technologies to inspect its PCCP pipelines under the fifth cycle of inspections. The agreement with Pure Technologies also allowed for optional development of PCCP risk curves, charts derived from finite-element model analyses of specific pipe segments that help assess the risk of failure for a given state of deterioration and operational conditions. Inspection data coupled with risk curves are critical for prioritizing PCCP rehabilitation. Data from this ongoing cycle of inspections has been used to prioritize and schedule PCCP rehabilitation work, including recently completed rehabilitations along the Second Lower Feeder, the Allen-McColloch Pipeline, and the Sepulveda Feeder. In total, 120 miles of PCCP have been inspected under the current agreement, and approximately \$6.2 million has been expended under the existing Pure Technologies agreement.

Most of the inspections planned under the Pure Technologies agreement were to be carried out in dewatered pipelines. In this kind of inspection, called "manual" inspections, people walk along the pipeline pulling a wheeled, electromagnetic inspection tool. Manual inspections cost less than inspections using an alternative free-swimming inspection tool, which avoids the need to dewater the pipeline. Although the free-swimming tool saves dewatering the line, it requires much more labor and higher costs on the part of the consultant to analyze the inspection data owing to the lower resolution of the data produced. During this fifth inspection cycle, consultant costs increased due to switching Sepulveda Feeder inspections from manual to free-swimming in early 2023, due to operational restrictions. In addition, the need to prepare dozens of risk curves in late 2024 to early 2025 to support the Allen-McColloch Pipeline Urgent PCCP Rehabilitation project was unplanned. Combined, these unforeseen costs will require an amendment to the existing agreement to allow completion of the remaining inspections for the fifth cycle.

Furthermore, staff originally expected the Foothill Feeder to be inspected as part of the planned Foothill Feeder Acoustic Fiber Optic Monitoring project. However, the recent discovery of invasive golden mussels in the source water for the Foothill Feeder has postponed that project until a viable mussel control system is identified, tested, and deployed. Seven years have elapsed since the last Foothill Feeder PCCP inspection. Amendment of the existing agreement will also allow staff to take advantage of a planned Department of Water Resources outage in 2026 to inspect the Foothill Feeder using a recently upsized free-swimming inspection tool.

To ensure continued reliability of Metropolitan's PCCP pipelines, staff recommends amending the existing inspection agreement with Pure Technologies to allow the added inspection of the Foothill Feeder in the fall of 2026 with a free-swimming inspection tool, perform a follow-up re-inspection of PCCP portions of the Allen-McColloch Pipeline, and complete the remaining PCCP inspections for the fifth cycle. In parallel, staff will begin the solicitation process to select a consultant for the sixth cycle of PCCP inspections in support of the PCCP rehabilitation program.

Electromagnetic Pipeline Inspections and Assessments

Planned Metropolitan activities to complete the remaining fifth cycle of electromagnetic inspections include scheduling and coordinating pipeline shutdowns; conducting internal visual inspections; analyzing the inspection results; and reviewing comprehensive inspection reports. The electromagnetic inspections will be performed by Pure Technologies as described below.

A total of \$3,100,000 is required for this work. Funds to be allocated include \$2,750,000 for the electromagnetic inspections by Pure Technologies; \$158,000 for internal visual inspections by Metropolitan forces; \$47,000 for shutdown planning and analysis of inspection results; \$75,000 for local agency permitting and project management; and \$70,000 for the remaining budget. See **Attachment 1** for the Allocation of Funds.

Once the amended agreement for the fifth cycle of inspections is in place, staff will begin preparation of a Request for Proposal (RFP) to solicit vendors to undertake the sixth cycle of PCCP inspections. It is anticipated that this RFP will be issued in late 2026, with the board authorization of a new agreement no later than mid-2027.

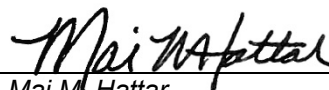
Agreement Amendment (Pure Technologies U.S. Inc.)

Pure Technologies scope of services includes inspecting up to an additional 40 miles of pipeline utilizing manual or free-swimming electromagnetic inspection devices. After each inspection, the results will be analyzed and compared with previous inspection results to determine the rate of deterioration and the pipeline's condition. The consultant will also prepare approximately 30 risk curves to assess the risk of pipe segment failure for deteriorated segments.

This action authorizes an increase of \$2,750,000 to the existing board-authorized agreement with Pure Technologies U.S. Inc., for a new not-to-exceed amount of \$9,750,000 to perform inspections and assessments of PCCP pipelines and prepare up to 30 risk curves. Based on the specialized nature of the work, Metropolitan did not establish a Small Business Enterprise participation level for this agreement.

Project Milestone

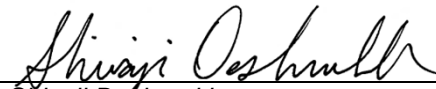
September 2027 – Completion of the fifth round of PCCP inspections



Mai M. Hattar
Chief Engineer
Engineering Services

6/24/2026

Date



Shivaji Deshmukh
General Manager

6/24/2026

Date

Attachment 1 – Allocation of Funds

Ref# es12706804

Allocation of Funds for Electromagnetic Pipeline Inspections

	Current Board Action (July 2026)
Labor	
Studies & Investigations	\$ 205,000
Final Design	-
Owner Costs (Program mgmt., envir. monitoring)	75,000
Submittals Review & Record Drwgs.	-
Construction Inspection & Support	-
Metropolitan Force Construction	-
Materials & Supplies	-
Incidental Expenses	-
Professional/Technical Services	-
Pure Technologies U.S. Inc.	2,750,000
Right-of-Way	-
Equipment Use	-
Contracts	-
Remaining Budget	70,000
Total	\$ 3,100,000

The total amount expended to date is approximately \$7.5 million. The total estimated cost to complete five cycles of electromagnetic pipeline inspections, including the amount appropriated to date, and funds allocated for the work described in this action, is \$10.6 million.