

Agenda Item: {{section.number}}B

December 4, 2023

TO: THE ENGINEERING, OPERATIONS, AND WATER RESOURCES COMMITTEE

Director Gracie Torres

Director Fauzia Rizvi

FROM: Tim Barr, Deputy General Manager

APPROVE AN INCREASE IN THE BUDGET OF THE MOCKINGBIRD CANYON RECYCLED WATER PIPELINE EMERGENCY REPAIR PROJECT (SPECIFICATION W-322)

RECOMMENDATION:

Staff requests that the Engineering, Operations, and Water Resources Committee recommend the Board of Directors:

1. Approve an Increase in the Board-adopted Fiscal Year 2023-2024 Operating Budget for the Riverside Non-potable Water Operating Fund 210, Contract Service – Engineering and Design Account 51115, in an amount of \$320,000 for additional costs associated with the Mockingbird Canyon Pipeline Emergency Repair Project (W-322).

EXECUTIVE SUMMARY:

On July 5, 2023, the Board of Directors declared a condition of emergency and authorized a Fiscal Year 2023-2024 Operating Budget increase of \$900,000 for the Riverside Non-potable Water Operating Fund 210, Contract Service – Engineering and Design Account 51115 for the Mockingbird Canyon Pipeline Emergency Repair Project. Due to the nature of this emergency, the budget was based on limited information regarding the actual condition of the pipe and the unforeseen challenges at the repair site. After preparing a plan and receiving formal permission to proceed from the Army Corps of Engineers, the effort commenced immediately to mitigate the emergency. Now that the project is fully underway and nearing completion, staff has a better understanding of the extent of the challenges with this repair. As such, additional funding is necessary due to the complexities of the repair.

BUDGET IMPACT:

A budget amendment to the Board-adopted Fiscal Year 2023-2024 Operating Budget under Riverside Non-potable Water Operating Fund 210, Contract Services – Engineering and Design Account 51115, is necessary to accommodate a \$320,000 budget increase from \$900,000 to \$1,220,000.

DETAIL:

A portion of the 20-inch diameter Mockingbird Canyon Pipeline (MCP), a recycled water transmission main, located in an existing streambed, was exposed due to severe erosion of the surrounding slopes. The heavy rains last winter further exacerbated the issue. Stabilization of the pipeline and the surrounding area was required to prevent further undermining and arrest erosion to avoid a catastrophic rupture. On July 5, 2023, the Western Municipal Water District (Western Water) Board of Directors declared a condition of emergency and authorized repair. The budget estimate at the time was \$900,000. The Board Letter from July 5, 2023, is attached to this staff report (Attachment 1).

As the project was an unplanned emergency, the original budget estimate had to be developed based on the limited information available. Because of the environment through which the pipeline passes, the project has required a more flexible approach. Staff have collaborated with engineering and environmental consultants to effectuate an elegant solution in a difficult streambed environment. TK Construction, the project contractor, started construction as soon as Western Water received authorization from the Army Corps of Engineers.

During construction, several unplanned events have led to scope expansion and the need to increase the project's budget. As planned work was in process, a leak in the 80-year-old pipe occurred. The leak event added a sizable delay requiring an unplanned shutdown and dewatering of the pipeline. Additionally, the leak required a repair unrelated to the planned scope of work. Compounding the challenges, the length of the bypass channel to divert the active stream had to be increased to accommodate wholesale removal and replacement of the pipe. The number of gabions, a wirework container filled with rock, used in the construction of dams, retaining walls, etc., was also increased to properly stabilize the surrounding environment and protect the new pipeline. Further adding to the difficulties, groundwater continually seeped into the exposed trench for the new pipeline alignment. The contractor was required to pump the water out of the trench and provide concrete encasement for the new pipeline to meet the minimum construction standards and provide long-term stability.

The following table provides more detail for the changed budget conditions resulting from the more complicated repair effort.

PROJECT COSTS TO DATE AND COMPLETION COSTS:

MOCKINGBIRD CANYON PIPELINE EMERGENCY REPAIR PROJECT BUDGET ESTIMATES

	Original (7/5/23)	Update (11/8/23)
Construction	\$495,000	\$750,000
Environmental Emergency Permitting	\$90,000	\$118,200
Surveying	\$50,000	\$15,400
Design services (GHD and MKN)	\$50,000	\$65,413
traffic control/permitting	\$20,000	\$0
Inspection	\$25,000	\$60,000
Operations and Engineering Staff time	\$25,000	\$0 ¹
Subtotal	\$755,000	\$1,009,013
Contingency/Additional Scope (Leak response, dewatering, bypass channel increased length)	\$145,000 ²	\$210,987
Total	\$900,000	\$1,220,000
Additional Funding Necessary		\$320,000

1. Project-related internal staff labor and overhead cost are now estimated to be \$50,000. However, internal labor and overhead do not require a budget amendment since these costs are already accommodated in Western Water's adopted budget.
2. The original budget estimate included \$145,000 in contingency funding which at the time was approximately 20% of the presumed project budget.

Reason for Action:

Significant and substantial project complications require an increase in the budget.

Solution:

Increase the project budget by \$320,000 to \$1,220,000.

STRATEGIC PRIORITIES REFERENCE:

This project is consistent with Western Water's 2022-2025 Strategic Priority of Superior Service.

PROPOSED DATE OF ACTION:

If approved by the Committee, this item is scheduled for consideration by the full Board of Directors at their meeting on December 20, 2023.

LEGAL COUNSEL REVIEW:

Not applicable.

Respectfully submitted by:

Tim Barr, Deputy General Manager

Attachments:

1. Approved Board Letter, July 5, 2023
2. Pipeline Repair Presentation