

WASHOE COUNTY

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STAFF REPORT BOARD MEETING DATE: August 26, 2025

DATE: August 7, 2025

TO: Board of County Commissioners

FROM: Dwayne Smith, P.E., Division Director, Engineering and Capital Projects

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THROUGH: Eric Crump, Director

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SUBJECT: Recommendation to authorize Interim County Manager Kate Thomas to

authorize the construction agreement for the award of the Huffaker Hills Reservoir HDPE Liner Repair Project (estimated total construction repair cost \$2,000,000 which includes \$500,000 in project contingency) to the lowest, responsive and responsible bidder following the procedures identified in Nevada Revised Statutes (NRS) 338 for competitive bidding. This recommendation is made recognizing the limited time available to initiate and complete the repair work prior to increasing reservoir water levels that would make the work area inaccessible.

(Commission District 5.) FOR POSSIBLE ACTION

SUMMARY

On March 31, 2025, a significant tear in the seam of the HDPE liner installed at Huffaker Hills Effluent Reservoir was discovered on the west side of the Huffaker Hills Effluent Storage Reservoir. Over the next several weeks, a large crack was discovered in the maintenance roadway, also located on the west side of the reservoir, near the location of the liner failure. Monitoring of the crack was initiated and once water levels declined sufficiently in July, allowing the areas of concern to be seen, it was identified that failure of the slope in the area had begun. Of further concern is that the slope failure will continue to increase, resulting in significantly greater repair costs and additional damage to the reservoir liner. While this failure is critical to the overall performance of the reservoir, since the slope failure is along the north-west area of the reservoir and opposite the dam, there is no risk of failure of the embankment or dam leading to a failure of the reservoir.

Recognizing the critical need and limited opportunity to identify the extent of the slope failure, develop a reasonable repair strategy then contract for the repair work, Washoe County directed the design engineer to develop an emergency response plan and design for the repair before the water levels in the reservoir reach their seasonal low and start to rapidly rise again.

The required design and bid documents were prepared and in accordance with NRS 338, a competitive bid was released on August 11th, 2025, with the opening of submitted bids to be performed on August 29th, 2025. To accomplish the field work before the reservoir water levels rise and cover the work area, staff requests that the Commission authorize the Interim County Manager, Kate Thomas, to sign the construction agreement to authorize the critical and necessary work to stop the slope failure and repair the liner.

The estimated construction schedule for the repair work is estimated to be eight (8) weeks which requires work to begin no later than September 8, 2025, and be completed before the end of October, the approximate date when the lowest reservoir waters levels occur. A third-party cost estimate was developed with a total repair cost of approximately \$1.5M and understanding that a portion of the damaged area is below water at the time the repair plan was developed, a \$500,000 contingency has been included in the estimated project cost. Recognizing the fact that portions of the failure area are below water, the final project costs may exceed the estimates.

Washoe County Strategic Objective supported by this item: Fiscal Sustainability: Long-term sustainability

PREVIOUS ACTION

On May 20, 2025, the Board of County Commissioners (Board) adopted the Washoe County Final budget for Fiscal Year 2026 as well as adopting the Capital Improvement Plan (CIP) for Fiscal Years 2026-2030.

On May 21, 2024, the Board adopted the Washoe County Final budget for Fiscal Year 2025 as well as adopting the Capital Improvement Plan (CIP) for Fiscal Years 2025-2029.

On May 26, 2020, the Board approved the Guaranteed Maximum Price (GMP) #1 in the amount of \$10,997,549 with MWH Constructors and KG Walters Construction (MWH&KGW), a joint venture, as the Construction-Manager-At-Risk (CMAR) for the South Truckee Meadows Water Reclamation Facility 2020 Expansion Project and approve the initial Project Owner-CMAR Construction Agreement between Washoe County and MWH&KGW.

On January 12, 2020, the Board approved an Agreement between Washoe County and MWH Constructors/KG Walters Construction for CMAR Pre-Construction Services for the South Truckee Meadows Water Reclamation 2020 Facility Expansion Project within the South Truckee Meadows Water Reclamation Facility service territory [\$631,280].

On August 20, 2002, the Board adopted the South Truckee Meadows Water and Wastewater Facility Plan.

BACKGROUND

Washoe County provides wastewater collection and treatment service to residents in the South Truckee Meadows of Reno, Nevada. All treated wastewater, treated effluent, is used for beneficial purposes such as construction dust control, concrete batching, with the predominate use as irrigation water, preserving potable water for regional needs. The

treated effluent is stored in the Huffaker Hills Effluent Reservoir, located immediately above the South Truckee Meadows Water Reclamation Facility (STMWRF) during the non-irrigation season. During the irrigation season, the water is distributed throughout the South Truckee Meadows. Subsequently the reservoir experiences significant changes in water surface elevation throughout the year.

On March 31, 2025, a significant tear in the seam of the HDPE liner installed at Huffaker Hills Effluent Reservoir was discovered on the west side of the Huffaker Hills Reservoir. During a follow-up site walk, a large crack was discovered in the maintenance roadway, also located on the west side of the reservoir, near the location of the liner failure. Concerned with the potential for a catastrophic slope failure, Washoe County hired the original design engineer to begin weekly inspections of the roadway crack and monitor any potential movement in the crack and the surrounding area. At the same time, the County initiated the repair to the significant seam tear that had occurred in the same location.

As the water levels began to further expose more of the area, it became apparent that a slope failure had already occurred, and larger failures of the area became an additional and significant concern. Recognizing the limited opportunity to identify the extent of the slope failure and then to develop a reasonable repair strategy and then to contract for the repair work, Washoe County directed the design engineer to develop an emergency response plan and design for the repair before the water levels in the reservoir reach their seasonal low and start to rapidly rise again.

As part of this approach, the County temporarily opened and pulled back the liner near the area of the roadway crack and slope failure. This clearly revealed that the liner bedding was saturated and the underlying liner bedding and fill material had moved, causing the slope to fail. While on site, additional tears were found at several panel seams and a large "blister" was observed in the liner adjacent to the slope failure. Immediately staff directed the design engineer to begin developing a repair strategy, understanding the difficulty since significant portions of the area were underwater. With this work complete, staff initiated a competitive bid process for the repair work in accordance with NRS 338 provisions and requirements.

FISCAL IMPACT

There is sufficient funds and budget authority in FY26 in the Utilities Fund (566), Non-Oper/R&R Construction (664950), Repairs and Maintenance (710205) to perform the repair work as identified. In the event that the damage is greater than anticipated and that additional work is required, to mitigate project delays resulting in additional fund expenditure, the information will be brought back to the Board at the next regularly scheduled meeting to seek further authorization, as necessary.

RECOMMENDATION

It is recommended the Board of County Commissioners authorize Interim County Manager Kate Thomas to authorize the construction agreement for the award of the Huffaker Hills Reservoir HDPE Liner Repair Project (estimated total construction repair cost \$2,000,000 which includes \$500,000 in project contingency) to the lowest,

responsive and responsible bidder following the procedures identified in Nevada Revised Statutes (NRS) 338 for competitive bidding. This recommendation is made recognizing the limited time available to initiate and complete the repair work prior to increasing reservoir water levels that would make the work area inaccessible.

POSSIBLE MOTION

Should the Board agree with staff's recommendation, a possible motion would be: "Move to authorize Interim County Manager Kate Thomas to authorize the construction agreement for the award of the Huffaker Hills Reservoir HDPE Liner Repair Project (estimated total construction repair cost \$2,000,000 which includes \$500,000 in project contingency) to the lowest, responsive and responsible bidder following the procedures identified in Nevada Revised Statutes (NRS) 338 for competitive bidding. This recommendation is made recognizing the limited time available to initiate and complete the repair work prior to increasing reservoir water levels that would make the work area inaccessible."