



WASHOE COUNTY

Integrity Communication Service

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STAFF REPORT

BOARD MEETING DATE: January 13, 2026

DATE: December 18, 2025

TO: Board of County Commissioners

FROM: Dwayne Smith, P.E., Division Director, Engineering and Capital Projects Community Services Department, 328-2043, desmith@washoecounty.us

THROUGH: Eric Crump, Director, Community Services Dept., 775-328-3625, ecrump@washoecounty.gov

SUBJECT: Recommendation to approve the Interlocal Research Agreement between Washoe County and the Board of Regents of the Nevada System of Higher Education (NSHE), obo the University of Nevada, Reno, an institution of higher education of the State of Nevada, for a period of three years (February 1, 2026 through January 31, 2029) for research services on several of Washoe County's water reclamation facilities to address items identified in the agreements scope of work [at a cost of \$777,169.00]. (All Commission Districts.) FOR POSSIBLE ACTION

SUMMARY

Washoe County Community Services Department owns and operates three Water Reclamation Facilities: South Truckee Meadows (STMWRF), Cold Springs (CSWRF), and Lemmon Valley (LWRF). All three of the facilities face operational challenges that the Community Services Department wishes to have the Nevada Water Innovation Institute (NWII) address. The NWII is within the University of Nevada system and Washoe County is a founding member of the institute.

The contract is for three years, February 2026 through January 2029, and includes a scope of work that outlines six priorities that Washoe County and NWII staff have identified as being critical for the operation of all three of the reclamation facilities.

Washoe County Strategic Objective supported by this item: Safe, secure and healthy communities.

PREVIOUS ACTION

On May 20, 2021, the Board approved the Capital Improvements Plan for Fiscal Years 2026-2030.

BACKGROUND

Washoe County Community Services Department (WCCSD) owns and operates three Water Reclamation Facilities (WRFs): the South Truckee Meadows (STMWRF), Cold Springs (CSWRF), and Lemmon Valley (LVWRF). These facilities produce reclaimed water used for various non-potable applications which help increase the region's water resiliency. Despite this beneficial use, the facilities are facing operational challenges and difficulties, including capacity constraints due to operational issues or difficulties in integrating recent facility improvements. To address these problems, WCCSD requested the Nevada Water Innovation Institute (NWII) at the University of Nevada, Reno (UNR) to provide their subject matter expertise and conduct process and development tasks to improve the operations of the facilities.

The projects detailed below have been prioritized based on extensive discussions between WCCSD and NWII staff to address the most pressing needs facing the utility's water reclamation systems. The goal of this three-year initiative, spanning from February 1, 2026 to January 31, 2029, is to address critical operational challenges, enhance treatment capacity and improve water quality, thereby increasing the water resiliency of the entire region.

Outlined below is a list of the items along with their priority, project title, a brief project description, the year the project will be completed and the benefit to the utility the work provides to the utility:

Priority #	Project Title	Project Description	Projected Completion Year	Benefit to the Utility
1	Bardenpho Integration Technical Support	Provide operational support and process optimization for the newly expanded Bardenpho treatment train at STMWRF to ensure it achieves steady-state operation.	2027	Maximize the potential and capacity of the new facility expansion and improve the quality of effluent water.
2a	Sludge Dewatering Improvements at STMWRF	Conduct bench and full-scale investigations of the sludge treatment train to identify and resolve bottlenecks preventing higher cake solids.	2027	Reduce the final volume of sludge requiring transport and landfill disposal, leading to significant cost savings.

2b	Feasibility of Solar Drying of Dewatered Sludge at STMWRF	Investigate the feasibility and cost-benefits of using solar drying technology to further reduce moisture in the final sludge cake.	2026	Decrease sludge transportation needs and landfill costs by further increasing the total solids percentage in sludge cake.
3a	Lemmon Valley WRF Debottlenecking and Performance Upgrading	Assess the Lemmon Valley WRF to identify and remove operational constraints, with the goal of increasing treatment capacity from 200,000 gpd to 300,000 gpd.	2027	Restore the facility to its full permitted treatment capacity, accommodating higher flows without major capital investment.
3b	Lemmon Valley WRF Effluent Effects	Conduct a desktop study to determine if reclaimed water from the LVWRF is interacting with local lake and ground water and assess any potential impacts.	2027	Provide technical clarity on environmental interactions and ensure compliance with NDEP requirements.
4	Algae Growth in Huffaker Reservoir and pH Control	Investigate the causes of algae growth and pH fluctuations in the Huffaker reservoir and develop mitigation strategies to improve reclaimed water quality.	2028	Minimize water quality issues, reduce the need for re-filtration before reuse, and ensure stable, high-quality reclaimed water.
5	Minimize Arsenic/Boron in STMWRF Effluent	Review existing data and develop strategies to reduce arsenic and boron levels in reclaimed water, which originate from groundwater infiltration into sewers.	2028	Protect landscape growth from adverse effects and ensure reclaimed water meets all reuse quality requirements.
6	As needed services at WRFs and sewer systems	Provide on-demand technical expertise to investigate and solve emerging, undefined problems or opportunities that arise in the sewer systems or at the WRFs.	2029	Offers flexible, expert support to address unforeseen operational issues promptly and effectively as they emerge.

FISCAL IMPACT

Should the Board approve the Interlocal Research Agreement between Washoe County and the Board of Regents of the Nevada System of Higher Education (NSHE), obo the University of Nevada, Reno (UNR), an institution of higher education of the State of Nevada for a period of three years for research services totaling \$777,169.00, there is sufficient fund and budget authority in FY26 for Year 1 cost of \$250,013.00 in the Utilities Fund (566), Non-Oper/R& Construction Sewer (664950), Payment to Other Agencies (710400). Payment to UNR is on a reimbursement basis. Year 2 and 3 costs will be recommended in future fiscal year's budget. Revenues in support of the services are provided from sewer rates.

Proposed Budgets

Category	Year 1	Year 2	Year 3	Total 3 Years
Personnel	\$114,725	\$119,927	\$125,225	\$359,877
Fringe Benefits	\$29,006	\$29,920	\$30,860	\$89,786
Travel	\$2,000	\$2,000	\$2,000	\$6,000
Materials and Supplies	\$12,000	\$10,000	\$9,457	\$31,457
Services	\$10,000	\$10,000	\$10,000	\$30,000
Tuition and Fees	\$5,448	\$5,664	\$5,892	\$17,004
F&A Costs	\$78,834	\$80,768	\$83,444	\$243,046
Total Budget	\$250,013	\$258,279	\$266,877	\$777,169

RECOMMENDATION

It is recommended the Board of County Commissioners approve the Interlocal Research Agreement between Washoe County and the Board of Regents of the Nevada System of Higher Education (NSHE), obo the University of Nevada, Reno, an institution of higher education of the State of Nevada, for a period of three years (February 1, 2026 through January 31, 2029) for research services on several of Washoe County's water reclamation facilities to address items identified in the agreements scope of work [at a cost of \$777,169.00].

POSSIBLE MOTION

Should the Board agree with staff's recommendation, a possible motion would be: "Move to approve the Interlocal Research Agreement between Washoe County and the Board of Regents of the Nevada System of Higher Education (NSHE), obo the University of Nevada, Reno, an institution of higher education of the State of Nevada, for a period of three years (February 1, 2026 through January 31, 2029) for research services on several of Washoe County's water reclamation facilities to address items identified in the agreements scope of work [at a cost of \$777,169.00]".