

Memorandum

REPORT TO: City Commission

FROM: Shawn Kohtz, Utilities Director

SUBJECT: Authorize the City Manager to Sign an Amendment 2 to Memorandum of Understanding with Montana State University to Complete Additional Pilot Project Work for Modern Treatment Wetland Technology

MEETING DATE: September 9, 2025

AGENDA ITEM TYPE: Citizen Advisory Board/Commission

RECOMMENDATION: Authorize the City Manager to sign Amendment No. 2 to Memorandum of Understanding with Montana State University to complete additional pilot project work for modern treatment wetland technology

STRATEGIC PLAN: 6.1 Clean Water Supplies: Ensure adequate supplies of clean water for today and tomorrow.

BACKGROUND: Treatment wetlands offer an inexpensive option for tertiary treatment of already high-quality effluent from mechanical systems at the City's Water Reclamation Facility (WRF). Additional data is required to determine scale up parameters to a full-scale system; the scale-up analysis will include wetlands sizing for removal of nutrients (nitrogen and phosphorus) from effluent at the WRF. The work performed by MSU will also study removal of per-and-polyfluoroalkyl substances (PFAS) through wetlands considering additional media treatments to the wetlands soil materials.

This project will help the City expand on previous work by MSU and provide a design basis to use modern wetland technology for nutrient removal at the WRF. This technology provides a cost-effective means for additional nutrient removal and will help meet future discharge requirements associated with the City's Montana Pollutant Discharge Elimination System (MPDES) permit.

This ongoing project is a partnership between MSU, the Montana State Department of Environmental Quality (DEQ), and the City. DEQ is also simultaneously providing funding and direct research support studying biological phosphorus at the WRF.

UNRESOLVED ISSUES: None

ALTERNATIVES: As suggested by the City Commission

FISCAL EFFECTS: Two rounds of funding support are included: the fiscal years 2026 and 2027

capital improvements plan (CIP) includes \$50,000 each year from the Wastewater Fund. The fiscal year 2026 budget is approved and includes \$50,000 for this year's contribution to the work.

Attachments:

[MOU with MSU Amendment No 2.docx](#)

Report compiled on: August 15, 2025