



Request for Board Action

Attachment 6.5

Agenda Item: St. Anthony Regional Treatment Facility Phase 1 Improvements

Presenter: E. Resseger

Meeting Date: 14 July 2026

Flexibility: ☐ Yes ☒ No

Estimated Time: ☐ Consent Agenda ☒ 10 Min. ☐ 15 Min. ☐ 30 Min. ☐ 45 Min. ☐ 1 Hour

Action Request: ☐ Information/Review ☒ Motion to approve ☐ Budget Change ☐ Other

Board Action: ☐ Approved ☐ Denied ☐ Tabled ☐ Accepted Report ☐ Other

Date of Action: 14 July 2026

Background

In 2016, the Mississippi Water Management Organization (MWMO), City of St. Anthony Village, City of Minneapolis, and Hennepin County collaborated to construct an underground stormwater treatment system that diverts stormwater runoff from approximately 600 acres of fully developed urban land use in the City of St. Anthony Village and County State Aid Highway 88 (CSAH 88). The treatment facility consists of a primary treatment cell and two secondary treatment cells operating in parallel. Construction of the facility was completed in 2016, and the MWMO has been monitoring its performance since.

This Saint Anthony Regional Treatment Facility (SARTF) has been experiencing performance challenges over the past several years. In March 2025, a performance assessment of the facility was completed to identify the reasons for the performance challenges and to identify potential options for the MWMO to consider addressing those challenges. Based on the results of that assessment, in July 2026, a feasibility study was completed that recommended moving forward with the following improvements to address the identified challenges: 1) installing a backflow preventer on the outlet pipe from the distribution well to prevent backflow into the system; 2) adjusting pump set points for the secondary treatment chambers to keep the media from being overloaded; and 3) replacing the

treatment technology in the iron-enhanced sand filter secondary treatment chamber to a technology that would perform better under system conditions.

Because of the complex nature of the SARTF, it was recommended that retrofit improvements be completed with an adaptive management approach in at least two phases, with the first phase incorporating:

- An elevation survey of the entire SARTF both below and above ground,
- Design, bid, and installation oversight of a backflow preventer,
- Development of monitoring guidance, operations support, and a summary memorandum.

The elevation survey will ensure pump set points and media replacement elevations are accurate for the current and future designs. The backflow preventer is proposed to be installed ahead of any additional improvements to the SARTF so that staff have sufficient time to monitor and ensure that the previous tailwater conditions that have been impeding performance in the SARTF are alleviated. Monitoring guidance and operations support will ensure that MWMO staff are collecting the right information to successfully evaluate the impact of the backflow preventor, as well as allow for optimization of the device.

Once improved flow condition performance has been established, a second phase of improvements at SARTF can proceed, which will involve replacing media in the secondary treatment chambers, servicing the pumps, updating pump set points, and revising the overall system operations and monitoring plans. If flow conditions continue to be problematic in the SARTF even with the backflow preventer, additional engineering and troubleshooting will occur ahead of Phase 2 improvements.

Staff is requesting a not-to-exceed amount of \$42,000 to pay for professional engineering services to conduct the St. Anthony Regional Treatment Facility Phase 1 Improvements project.

Mississippi Watershed Management Organization

RESOLUTION 2026-020

A RESOLUTION APPROVING FUNDING FOR THE ST. ANTHONY REGIONAL TREATMENT FACILITY PHASE 1 IMPROVEMENTS PROJECT

WHEREAS, the MWMO strives to protect and improve water quality and habitat within its jurisdiction through the planning and implementation of stormwater best management practices; and

WHEREAS, the MWMO strives to partner with other entities to find cost-effective ways to manage stormwater and improve habitat collaboratively; and

WHEREAS, the MWMO, City of St. Anthony Village, City of Minneapolis, and Hennepin County collaborated to construct an underground stormwater treatment system in 2016; and

WHEREAS, The MWMO has found that the St. Anthony Regional Treatment Facility system no longer functions optimally, and has identified updates and improvements to allow the system to provide enhanced stormwater treatment; and

WHEREAS, the MWMO has sufficient Capital Improvement funds available; and

WHEREAS, staff recommends the Board of Commissioners approves up to \$42,000 in Capital Improvement funds for design of a first phase of improvements at the St. Anthony Regional Treatment Facility.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approve up to \$42,000 in Capital Improvement funds for professional services to design a first phase of St. Anthony Regional Treatment Facility improvements and authorizes MWMO staff to take all necessary administrative actions to implement the resolution.

Adopted this the 14th of July 2026.

Review for the Board: _____

Connie Buesgens, Chair

Review for Administration: _____

Kevin Reich, Executive Director