



MISSISSIPPI  
WATERSHED  
MANAGEMENT  
ORGANIZATION

# Request for Board Action

Attachment 6.3

**Agenda Item:** St. Anthony Regional Treatment - Performance Assessment

**Presenter:** Nancy Stowe

**Meeting Date:** 10 September 2024

**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:** 10 September 2024

**Background** (Attach Supporting Documents as needed)

In 2016, the Mississippi Water Management Organization (MWWMO), 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 facility has a primary treatment component consisting of a swirl chamber to remove particulate matter, floating trash, and debris from stormwater. The facility has a secondary treatment system designed to remove the soluble pollutants from the stormwater. It is a key research component to help determine the effectiveness of available and emerging treatment technologies such as iron sand filtration, filter media with activated alumina, alum flocculation, ionization, ozone, and other future technologies. New technologies can be plugged into the system and monitored for their effectiveness at pollutant removal and cost for operation.

The MWMO has been monitoring its performance since 2016, which has revealed some performance challenges over the past few years, primarily in the secondary treatment area.

MWMO staff is recommending that the causes of the lower-than-expected performance be assessed according to the following scope of work:

1. Gather and review original design calculations, as-built plans, and several years of monitoring data;
2. Review system hydraulics and concerns related to tailwater issues, utilizing detailed simulation models that have been developed since the original design;
3. Consider alternative technologies for secondary treatment; and
4. Document findings and develop recommendations for next steps, which may include feasibility and design efforts of a potential retrofit.

Staff is requesting a not-to-exceed amount of \$28,500 to pay for professional engineering services to conduct St. Anthony Regional Stormwater Treatment Performance Assessment.

# Mississippi Watershed Management Organization

## RESOLUTION 2024-025

### A RESOLUTION APPROVING FUNDING FOR THE CORDIA ENERGY BUILDING FEASIBILITY STUDY

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 sufficient Watershed Assessment funds available; and

WHEREAS, staff recommends the Board of Commissioners approves up to \$28,500 in watershed assessment funds to complete study to identify reasons the facility is performing less than design specifications and identify potential solutions.

NOW THEREFORE BE IT RESOLVED, the MWMO Board of Commissioners approve up to \$28,500 in watershed assessment funds for professional services to complete a St. Anthony regional stormwater treatment and research system performance study and authorizes MWMO staff to take all necessary administrative actions to implement the resolution.

Adopted this the 10<sup>th</sup> day of September, 2024.

Review for the Board: \_\_\_\_\_

Randy Stille, Chair

Review for Administration: \_\_\_\_\_

Kevin Reich, Executive Director