



COMMISSION FILE NO:	25-144-11	DA	TE INTRODUCED:	November 3, 2025
INTRODUCED BY:	Executive Director (Signature on File in the Office of the Commission)			
REFERRED BY COMMISSION CHAIRPERSON TO:		Policy, Finance, and Personnel Committee		

RELATING TO: Authorization to Execute a Joint Funding Agreement with the United States

Geological Survey for Phase VII of the Milwaukee Metropolitan Sewerage

District Watercourse Corridor Study, Project M03123P01

SUMMARY:

The Commission is requested to authorize and to direct the Executive Director to execute a joint funding agreement with the United States Geological Survey (USGS) for Phase VII of the Milwaukee Metropolitan Sewerage District Watercourse Corridor Study (Corridor Study), Project M03123P01. The District is requesting \$4,479,1454,105,982 for the period beginning on January 2, 2026, and ending on April 1, 2031.

The Corridor Study – Phase VII – is a cooperative water quality research effort between the District and USGS that will continue to expand research and watershed health data from previous phases and respond to new areas of interest as identified by regulation, facilities planning, and Executive Director requests. This project also includes a 24% match based on total project cost from the United States Department of the Interior, a value of \$1,408,921, for a total project investment of \$5,888,066. of which \$373,163 will be for MMSD managed external contracts for lab analysis.

ATTACHMENTS: BACKGROUND 🖂	KEY ISSUES $oximes$ RESOLUTION $oximes$			
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BACKGROUND

Authorization to Execute a Joint Funding Agreement with the United States Geological Survey for Phase VII of the Milwaukee Metropolitan Sewerage District Watercourse Corridor Study, Project M03123P01

Since 2000, USGS and the District have been partners in the Milwaukee Area Corridor Study. USGS applies a multidisciplinary approach to monitoring and assessing stream water quality in studies of aquatic communities, geomorphology and habitat, water and sediment, and streamflow. Results are provided to the District and watershed management agencies for planning and decision making.

The efforts support the goals outlined in the District's Water Quality Monitoring Program and Regional Water Management Plan Update for the Greater Milwaukee Watersheds and are recommended in the "No Regrets Activities" outlined in the District's Climate Change Vulnerability Analysis and the Climate Change Mitigation and Adaptation Report. Major stakeholders include the Wisconsin Department of Natural Resources and the Southeastern Wisconsin Regional Planning Commission.

Direct benefits of the project include streamflow and biomonitoring data to satisfy U.S. Army Corps of Engineers monitoring requirements for grant funding for watercourse projects, development of legislation to prevent contaminants of emerging concern from entering waterways (e.g., coal-tar sealant prohibition), streamflow gaging for water quality-based effluent limit calculations and regulatory compliance, and public awareness of the threats to area waterways.

The information generated supports the goals outlined in the District's Water Quality program and Facilities plans to:

- 1. Monitor the biological, chemical, and physical characteristics of aquatic ecosystems (within the District's service area) to assess the impacts of stream improvement practices.
- 2. Monitor the water quality of Lake Michigan harbors and local waterways within the District's service area.
- 3. Provide physical, chemical, and biological data on the quality of water, wastewater, and sediment and how it relates to the District's operations and facilities.
- 4. Maintain a historical water quality database.

A brief synopsis of the District's Corridor Study phases to date is outlined below.

- Phase I (2000–2003): Developed a baseline inventory database and selection of potential areas for future study to support the evaluation of the impacts of District projects.
- Phase II (2004–2005): Conducted an intensive data collection effort to fill gaps identified in Phase I and to update historical data.
- Phase III (2006–2010): Developed additional areas of study based on Phase II analysis and continued streamflow measurement and maintenance of the database system.

BACKGROUND (Cont'd)

Authorization to Execute a Joint Funding Agreement with the United States Geological Survey for Phase VII of the Milwaukee Metropolitan Sewerage District Watercourse Corridor Study, Project M03123P01

- Phase IV (2011–2015): Extended areas of study for a more in depth understanding of biology and water quality.
- Phase V (2016–2020): Extended additional areas of study for a more in depth understanding of biology and water quality. The objectives of the Phase V activities built upon information obtained during Phases I through IV by extending the study of influences on stream biology and geomorphology, biological and water quality impacts from watershed and infrastructure influences, evaluation of restoration activities, measurement of streamflow, evaluation of toxic contaminants, and dynamics of short-term water quality changes and water quality trends over time.
- Phase VI (2021-2025): Expanded areas of study to include additional priorities for the District. Green infrastructure monitoring, characterizing Per- and Polyfluoroalkyl (PFAS) substances in the environment, and continuing to evaluate long-term changes from stream restoration activities.

KEY ISSUES

Authorization to Execute a Joint Funding Agreement with the United States Geological Survey for Phase VII of the Milwaukee Metropolitan Sewerage District Watercourse Corridor Study, Project M03123P01

Phase VII will focus on the following topical components during the five-year and threemonth study period, with specific objectives provided for each component within the scope of work:

- Ecological assessments
- Restoration evaluation
- Streamflow
- Fish migration
- Polycyclic Aromatic Hydrocarbon trends in stream sediment
- Enhanced District/USGS coordination for public outreach
- PFAS surveillance in Milwaukee area streams and sediment
- Assessment of watershed renewal through green infrastructure
- Evaluation of the performance of infiltration-based green infrastructure on the removal of organic and inorganic contaminants in urban stormwater
- Bioavailable waterborne chemicals at core ecological assessment sites
- Microplastics loading study on Menomonee River to help inform future removal metrics
- Nutrient loading from sources outside the District's planning area
- Hydrologic and ecological assessments of sites influenced by the Greenseams® and Working Soils® programs
- Water quality trends
- A retrospective analysis of the 25 years of the Corridor Study to highlight key lessons learned about how our regional environment has changed over time

RESOLUTION

Authorization to Execute a Joint Funding Agreement with the United States Geological Survey for Phase VII of the Milwaukee Metropolitan Sewerage District Watercourse Corridor Study, Project M03123P01

RESOLVED, by the Milwaukee Metropolitan Sewerage Commission, that the Executive Director is authorized and directed to execute a joint funding agreement with the United States Geological Survey for Phase VII of the Milwaukee Metropolitan Sewerage District's Watercourse Corridor Study, Project M03123P01, in an amount not to exceed \$4,479,1454,105,982 for the period beginning on January 2, 2026, and ending on April 1, 2031.