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mwmoo.org

MISSISSIPPI
WATERSHED
MANAGEMENT
ORGANIZATION

POSITION DESCRIPTION

Water Resources Data Analyst

Job Class: Environmental Technical Specialist III
Reports to: Monitoring, Assessment, and Research Program Manager
Classification: Non-Exempt
Date: February 2024

Primary Objective

Leverages environmental data collected by the MWMO to produce technical products that inform and support the organization's programs and initiatives.

Major Areas of Accountability

- Analyze water quality and quantity data, including determining water quality trends in the Mississippi River and pollutant loads in stormwater outfalls.
- Evaluate performance of projects to inform future Green Stormwater Infrastructure (GSI) design, construction, and maintenance.
- Create and present written and oral communications to MWMO leadership, the Board, partners, and the public regarding water quality statistics, issues, trends, and other related and requested topics.
- Develop Standard Operating Procedures (SOPs) to ensure data collected by the MWMO is accurately recorded, stored, analyzed, and reported to required agencies. Ensure data quality assurance/quality control (QAQC) procedures are in place and followed.

- Serve as primary contact for MWMO initiatives related to NPDES, Total Maximum Daily Load (TMDL)/Watershed Restoration and Protection (WRAP) studies, and serve as the liaison with federal and state agencies associated with these efforts.
- Propose and lead special water resources analysis projects that provide greater insight into the function of the MWMO watershed.
- Collaborate with the Monitoring, Assessment, and Research Program Manager to plan, develop and execute water resources research projects to ensure adequate conclusions can be drawn from collected data.
- Assist with field work, instrument installation, maintenance and other monitoring related tasks as needed.
- Administer and manage projects and contracts for monitoring, analysis, and research initiatives.
- Maintain knowledge and training in area of expertise as necessary to provide the MWMO with a high level of job performance; stay apprised of emerging and innovative water analysis methods.
- Participate as a member of the MWMO staff team by supporting and cooperating with other staff to plan, execute, and evaluate water resources monitoring projects and initiatives by contributing ideas and providing comments.
- Work collaboratively with, and take and provide direction to the MWMO staff; provide direction to consultants and interns or volunteers as needed.
- Perform miscellaneous office duties such as answering telephones, office support, etc. as needed. Keeps office space in a clean and publicly presentable condition.
- Perform special projects and other responsibilities as assigned by Executive Director or Monitoring, Assessment, and Research Program Manager.

Accountabilities for Collaborative and Team Participation

- Work as a team with other MWMO staff.
- Participate in decisions related to the selection of personnel; e.g. interview panels.

- Orient new employees to organizational programs and team concept.
- Clearly communicate job duties and responsibilities so individuals may proceed with certainty in the performance of their positions.
- May personally conduct portions of training for new employees to ensure established procedures are clearly understood and followed.

Knowledge, Skill, and Abilities

Experience

A minimum of five (5) years professional experience in stream/river hydrology, water quality monitoring and modeling, statistical data analysis, best management practice (BMP) evaluation, and water data management.

Education

Masters's degree in the field of biology, chemistry, hydrology, limnology, water resources, natural resources, engineering, earth science, environmental science, conservation or related field or a Bachelor's degree in one of these fields with three additional years of experience.

An equivalent combination of relevant education/experience/professional licenses may be considered.

Additional Skills Required

- Able to display excellent verbal, written, organizational, and interpersonal communication skills.
- Experience conducting statistical analysis of environmental data, including comparing means and medians between sites or time periods, calculating pollutant loads, and determining long-term trends.
- Experience formulating research questions and collecting, analyzing, and interpreting data to draw conclusions.

- Experience preparing technical reports and papers such as water monitoring reports and/or summaries of flow data.
- Experience working with data in environmental data storage systems, preferably Kisters WISKI.
- Knowledge of urban resource management and environmental issues, including stormwater management practices.
- Experience with computer programming or statistical software, preferably the R programming language.
- Experience with GIS systems, preferably ESRI ArcGIS products.
- Experience working with flow-paced water quality data such as that collected with ISCO or Sigma samplers.
- Able to work successfully with considerable independence.
- Able to develop/coordinate/facilitate work with teams and individuals.
- Proficient with a personal computer (PC) and Microsoft software, specifically, but not limited to, Microsoft Office, Excel, Word, Access, PowerPoint. Ability to effectively use email and internet applications and other common software applications.

License

By date of hire, must possess and maintain a valid Minnesota Driver's License.

Physical Demands

This position may occasionally require some or all of the following activities:

Type of Activity	Frequency (S = Significant M = Moderate O=Occasional)
Walking/standing:	M
Sitting:	S
Standing in one place:	M

Climbing:	O
Pulling/Pushing:	O/M
Crawling/Kneeling/Squatting:	O/M
Bending/Stooping:	O/M
Twisting/Turning:	O/M
Repetitive movement:	O/M
Lifting waist to shoulder:	O/M
Lifting knee to waist:	O/M
Lifting floor to knee:	O/M

The above is intended to describe the general content of and requirements for the performance of this job. It is not to be construed as an exhaustive statement of duties, responsibilities or requirements and does not imply a contract.

Employee's Signature

Date

Supervisor's Signature

Date