



**MISSISSIPPI
WATERSHED
MANAGEMENT
ORGANIZATION**

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POSITION DESCRIPTION

Water Resources and Instrumentation Specialist

Job Class: Environmental Technical Specialist II
Reports to: Monitoring, Assessment, and Research Program Manager
Classification: Non-Exempt
Date: October 2023

Primary Objective

Responsible for installing, operating, and maintaining manual and automatic water monitoring equipment and instruments throughout the watershed and performing water quality monitoring field work and data storage.

Major Areas of Accountability

- Manage the installation, operation, programming, and maintenance of monitoring equipment and instruments in the field necessary to implement the water resources monitoring program.
- Design, plan and provide documentation and schematics for all equipment and instruments associated with water resources monitoring programs.
- Perform programming, calibration, and maintenance of instrumentation and control systems both in the field and remotely.
- Manage MWMO's real-time monitoring network instrumentation and data collection, including setting up radio networks and cellular modems.

- Participate in the management and review of continuous water quantity and quality data, including organizing data files and working with WISKI database software. Ensure that data QA/QC procedures are in place and followed.
- Perform field work related to all areas of the monitoring program including but not limited to surface water, stormwater, and BMPs.
- Conduct inspections of green stormwater infrastructure (GSI) and underground stormwater practices to support ongoing maintenance.
- Advise the Monitoring, Assessment, and Research Program Manager and other MWMO staff on the integration of monitoring equipment into new stormwater and green infrastructure project installations.
- Administer and manage projects and contracts for monitoring 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 monitoring technologies and 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 required. 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 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 three (3) years professional experience in environmental monitoring, data collection, instrumentation, inspection and reporting is required. Experience with stormwater monitoring, water quality monitoring, electronics and computer programming is preferred. Must have current training on confined space entry procedures or be able to obtain training in first six months of employment.

Education

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

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

Additional Skills Required

- Able to troubleshoot and repair equipment in the field, including electronics, sensors, dataloggers, pumps, and samplers.
- Experience setting up and programming data loggers such as Campbell dataloggers (CR800 or CR1000) using CRBasic or EnviroDIY Mayfly Data Loggers using an Arduino based programming language.
- Experience using water data storage and interface software, such as Kisters WISKI, Campbell Loggernet, ISCO Flowlink, In-Situ Win-Situ, Solinst Levelogger, or Onset HOBOWare.

- Experience operating automated water quality samplers, such as those from Campbell, Global Water, ISCO or Sigma.
- Able to work successfully with considerable independence.
- Able to display excellent verbal, written, organizational, and interpersonal communication skills.
- Able to develop/coordinate/facilitate work teams and individuals.
- Proficiency with a personal computer (PC) and Microsoft software packages for word processing, spreadsheet, database management and computer generated graphics. 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 require some or all of the following activities:

Activity, Field Work, and Equipment Fabrication

Lifting/physical labor and general building skills will be required. Stress level varies from low to very high.

Type of Activity	Frequency (S = Significant M = Moderate O=Occasional)
Walking/standing:	M/S
Sitting:	M
Standing in one place:	M
Climbing:	O
Pulling/Pushing:	M/S
Crawling/Kneeling/Squatting:	M/S
Bending/Stooping:	M/S

Twisting/Turning:	M/S
Repetitive movement:	M/S
Lifting waist to shoulder:	M/S
Lifting knee to waist:	M/S
Lifting floor to knee:	M/S

The field work component of this position is significant and includes, but is not limited to, the following:

- Installing steel enclosures.
- Working outdoors under all weather conditions.
- Installation of equipment in confined spaces (min 3' diameter stormwater pipes).
- Working in cold water flows with gloves and stream waders.
- Carrying 50 lbs. over uneven surfaces and slopes.
- Removing manhole covers.
- Hand trenching for cable chases.
- Post hole digging and setting 4"x4"x10' posts.
- Building rain gauge platforms.
- Constructing PVC enclosures.
- Anchoring cables/probes into concrete culverts.
- Field surveying and using a transit.
- Driving monitoring trucks and towing trailer with a boat on it.
- Operating a boat on the river.
- Monitoring & collection of physical/chemical/biological data.
- Using the following hand tools: a pick axe, 15lb maul, posthole digger, 20lb post driver, shovel, spade, tie downs, come-alongs, hammer, handsaw, screwdriver, wrenches.

- Using the following power tools: circular saw, hammerdrill, reciprocating saw, hole saw and screw gun.
- Constructing or modifying grab sampling equipment to allow for the collection of grab samples in a variety of outfall locations.
- Testing, installing, maintaining, and using stormwater and surface water flow and water quality monitoring equipment and instruments.

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