

State of Michigan
Civil Service Commission

Capitol Commons Center, P.O. Box 30002
Lansing, MI 48909

Position Code

1. GEOLSPL2A33R

POSITION DESCRIPTION

This position description serves as the official classification document of record for this position. Please complete the information as accurately as you can as the position description is used to determine the proper classification of the position.

| | |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. Employee's Name (Last, First, M.I.) | 8. Department/Agency ENVIRON, GREAT LAKES & ENERGY |
| 3. Employee Identification Number | 9. Bureau (Institution, Board, or Commission) |
| 4. Civil Service Position Code Description GEOLOGY SPECIALIST 2 | 10. Division Geological Resources Management Division |
| 5. Working Title (What the agency calls the position) Ground Water Geology and Data Management Specialist | 11. Section Groundwater and Geological Services |
| 6. Name and Position Code Description of Direct Supervisor RUHALA, SYDNEY S; ENVIRONMENTAL MANAGER-3 | 12. Unit Groundwater Data |
| 7. Name and Position Code Description of Second Level Supervisor PAPPAS, LENA K; ENVIRONMENTAL MANAGER-4 | 13. Work Location (City and Address)/Hours of Work Constitution Hall, 525 W. Allegan St. Lansing, MI 48909 / 80 Hours per pay period |

14. General Summary of Function/Purpose of Position

This position is the Statewide Geology Specialist, system owner, and technical administrator for the new Groundwater Data Management System (GWDMS) and its integration with applicable EGLE systems and other state and federal data and reporting systems. This position is responsible for ensuring the GWDMS data is also available externally to research institutions, organizations, and the public. This position works with State of Michigan contractors and staff from the Department of Technology, Management, and Budget (DTMB) to ensure that the GWDMS meets the standards needed to maintain EGLE's groundwater data. The public, research institutions and organizations, and other state and federal agencies use Michigan's groundwater data, and this position works to ensure their electronic access. This position collaborates with Information Technology (IT) and Geographic Information System (GIS) staff in EGLE Information Management Division (IMD). This position represents the Geologic Resources Management Division (GRMD) on the EGLE Groundwater Technical Team (GWTT) and collaborates with Geologists within GRMD and other EGLE divisions.

15. Please describe the assigned duties, percent of time spent performing each duty, and what is done to complete each duty.

List the duties from most important to least important. The total percentage of all duties performed must equal 100 percent.

Duty 1

General Summary:

Percentage: 60

Act as statewide GRMD staff geological information specialist, system owner, and technical expert on GWDMS. This includes working on special projects, statewide, as assigned by the Groundwater and Geological Services Section Manager and Groundwater Data Unit (GDU) Supervisor. These projects require a great deal of experience, knowledge of groundwater related data, and skill. Nearly all of them are complex. Projects often include working with statewide agency staff members, working with research institutions, and with other governmental agencies. This work requires a great deal of expertise, independence, self-motivation, organization, and collaboration with others.

Individual tasks related to the duty:

- System owner and technical administrator of the GWDMS.
- Manage and coordinate all GWDMS application re-writes, maintenance, and enhancements with EGLE IMD and DTMB staff and contractors to ensure that the GWDMS and associated integrations meet GRMD, EGLE and State of Michigan program needs and standards.
- Analyze program effectiveness. Recommend and implement program improvements and modifications as needed.
- Assess Division and EGLE groundwater data and information technology resource needs.
- Consult and create needs assessments to develop GWDMS solutions for GRMD and EGLE program needs within established timeframes.
- Create GWDMS program budgets and align expenditures with goals. Manage grants as needed and related to GDU. Develop project plans & timelines. Set self-imposed deadlines for work.
- Create, manage, improve, and implement policies and procedures associated with GWDMS.
- Work with DTMB and IMD to resolve performance issues with GWDMS and integrated programs.
- Collaborate with EGLE IMD and DTMB staff to create links between EGLE's database(s) and the National Groundwater Monitoring Network.
- Work with DTMB, IMD, and GRMD staff on permissions and security issues such as roles, log in profiles for internal and external users for access to GWDMS.
- Resolve and Work with IMD and DTMB to address individual performance issues with GWDMS and integrated programs. Communicating issues being seen, open help desk tickets, and/or log issues for repair under maintenance contract.
- Assist DTMB and GRMD program staff with other GRMD IT issues related to data outputs (queries, reports, and integrations).
- Create and disseminate professionally written and organized documentation and reports.
- Collect and assist in the collection of geological samples, hydrogeologic information, and hydrogeologic data.
- Perform data analysis on program data.
- Distribute and communicate data analysis findings.
- Create various resources, training and informational materials, policies, and procedures to meet the needs of staff.
- Develop agency and program goals and plans to meet agency needs.
- Serve as technical consultant to stakeholders, EGLE and agencies for use of groundwater data.
- Serve GRMD as subject matter expert on groundwater data and represent the Division on related Department workgroups.

Duty 2

General Summary:

Percentage: 30

Act as statewide staff hydrogeological resource. This includes working on special projects, statewide, as assigned by the Division Director, Unit Manager, and Section Manager. Independently researches and develops proposals for new applications or enhancements of existing ones. These projects require a great deal of experience, knowledge, and skill. These projects often include coordinating other staff, managing agency resources, and implementing novel solutions.

Individual tasks related to the duty:

- Stay up to date on technological solutions for groundwater, groundwater related data and regulatory activities.
- Work with staff and management to identify program needs.
- Develop agency and program goals and plans to meet agency needs.
- Work with DTMB to acquire and institute technological solutions.
- Develop project plans and timelines. Set self-imposed deadlines for work.
- Create and disseminate professionally written and organized documentation and reports.
- Plan and coordinate staff trainings on the use of technological resources.
- Serve as technical consultant to provide data availability and integrations for industry and other governmental agencies, especially where integrations exist (ex. National Groundwater Monitoring Network, laboratories, Wellogic, etc.).

Duty 3**General Summary:****Percentage: 5**

Provide expert information and assistance to the public, industry personnel, other governmental agencies, interest groups, and co-workers. As needed provide testimony at hearings, depositions, or court appearances. Use the principles of good customer service in accomplishing the activities described above. Use expertise to assist in the training of new employees.

Individual tasks related to the duty:

- Attend and/or address public and private meetings; provide records, data, and general information.
- Mediate disputes between interested parties regarding data.
- Provide expert witness testimony at hearings, depositions, and in court.
- Provide training opportunities for new staff members in the agency.
- Offer cross-training opportunities for staff members from other agencies.

Duty 4**General Summary:****Percentage: 5**

Continued education and improvement of professional skills and knowledge regarding current and cutting-edge groundwater data and technological changes. The complex and controversial nature of groundwater data combined with the rapid changes in technology requires this position to constantly work to keep up with these changes.

Individual tasks related to the duty:

- Develop computer skills for proficiency in using division, department, and federal applications and Microsoft applications such as Excel, Word, Access, SharePoint, web content, and SQL for performing query functions in RBDMS.NET.
- Develop skills in database management, GIS and other relevant systems.
- Attend training sessions, including training available through Groundwater Protection Council, SQL training, hydrogeological modelling, and other software useful for sharing data.
- Work with experts in the groundwater research and consulting space to improve knowledge in all aspects of groundwater data sources, availability, and limitations.
- Research critical issues related to above listed job duties to maintain up-to-date knowledge in the field.

16. Describe the types of decisions made independently in this position and tell who or what is affected by those decisions.

This position makes decisions regarding information resources and data analysis of internal programs, works with IMD and DTMB to determine appropriate technological solutions for statewide staff, analyzes program effectiveness, provides data analysis of groundwater related data available from internal and external sources captured and contained within GWDMS, assess agency needs and provides solution recommendations. Provides high level expertise for GRMD Director, Section Manager, Unit Manager, and other EGLE agency staff for these issues.

Independent decisions are made for prioritizing daily requests, projects, GWDMS and integrated programs, scheduling and holding meetings, communications with internal and external customers.

Work with outside contractors and serve as the liaison between the contractors, DTMB, and management. Other decisions, made daily, affect GRMD and EGLE staff.

- Consulting and creating needs assessments to develop GWDMS solutions for GRMD and EGLE program needs within established timeframes.
- Prioritization of work.
- This position may involve field travel throughout the Lower Peninsula, and occasional field travel in the Upper Peninsula, working on one's own initiative with limited supervision from the unit supervisor or section manager.

Affected: Internal and external customers including landowners, research institutions and other organizations, EGLE, state and federal agencies, and environmental consultants who need to access Michigan's groundwater data to make sustainable, data driven decisions based on real time aquifer and hydrogeological data. Development, maintenance, and sharing of the data has direct impact on Michigan's environment and economy

17. Describe the types of decisions that require the supervisor's review.

Expenditures with significant budgetary impact; major changes to IT systems; external sharing of sensitive program data; procedures which involve policy issues related to the division, the department, or other state agencies; administrative or criminal enforcement activities above primary level. Final GRMD decisions on program enhancements, development, and implementation. [Supervisory review for this position's duties is infrequent. Most are done independently or are to provide expert advice to management. Frequent communication is essential.]

18. What kind of physical effort is used to perform this job? What environmental conditions in this position physically exposed to on the job? Indicate the amount of time and intensity of each activity and condition. Refer to instructions.

Position involves prolonged sitting at computer workstation and occasional physically challenging activities while conducting field projects, due to rugged topography, remote areas, and adverse weather conditions, including extreme heat and cold, heavy rains or snow. Involves driving, walking, hiking at potentially any time of day or night in isolated areas. Necessitates infrequent proximity to heavy drilling and construction equipment, flammable and explosive materials, toxic gases, high pressure lines and vessels and contaminated soils and waters. Infrequent exposure to excessive noise and odors associated with industrial operations.

19. List the names and position code descriptions of each classified employee whom this position immediately supervises or oversees on a full-time, on-going basis.

Additional Subordinates

20. This position's responsibilities for the above-listed employees includes the following (check as many as apply):

- | | | | |
|----------------------------|------------------------------------|----------------------------|-----------------------------------|
| <input type="checkbox"/> N | Complete and sign service ratings. | <input type="checkbox"/> N | Assign work. |
| <input type="checkbox"/> N | Provide formal written counseling. | <input type="checkbox"/> N | Approve work. |
| <input type="checkbox"/> N | Approve leave requests. | <input type="checkbox"/> N | Review work. |
| <input type="checkbox"/> N | Approve time and attendance. | <input type="checkbox"/> N | Provide guidance on work methods. |
| <input type="checkbox"/> N | Orally reprimand. | <input type="checkbox"/> N | Train employees in the work. |

22. Do you agree with the responses for items 1 through 20? If not, which items do you disagree with and why?

Yes

23. What are the essential functions of this position?

The essential function of this position is the coordination and administration of EGLE groundwater data and data management technology assets. These essential duties include:

1. System owner and technical administrator of the new GWDMS and its integration with applicable EGLE systems and other state and federal data and reporting systems.
2. Assessing agency information needs by working with agency management and staff.
3. Providing solutions that address agency needs through recommendations and implementation technology resources and data.
4. Conducting reviews of existing information systems.
5. Initiating special projects which may include gathering data, collecting samples, preparing reports and documents, and managing project progress.
6. Providing groundwater data analysis of internal and external metrics.
7. Providing technical expertise to the Division Director, Section Manager Unit Manager, and other EGLE groundwater programs.
8. Helping develop groundwater related information systems that provide for better tracking, analysis, and review of agency operations.
9. Analyzing and making recommendations on expenditures relating to data analysis and programmatic technology development.
10. Serving as a statewide program expert regarding hydrogeological information, data and technology matters.
11. Handling confidential information.
12. Conducting onsite inspections and regulatory oversight activities.
13. Serving as a liaison between GRMD management, EGLE IMD, DTMB, and contractors and providing support to resolve performance issues with GWDMS and other applications.

14. Helping develop long term IT planning for GRMD and EGLE groundwater data needs

24. Indicate specifically how the position's duties and responsibilities have changed since the position was last reviewed.

Removed previous duty 2, increased percentage of duty 1 and 3. Duty 2 will now be handled by GGSS management and some portions handled by Geologist 12 as appropriate.

25. What is the function of the work area and how does this position fit into that function?

The Groundwater and Geological Services Section (GGSS) and its Groundwater Data Unit (GDU) are responsible for the management of groundwater management data and making informed decisions on water use. The GDU is principally responsible for acquiring data generated from divisions within the department, mapping or migrating the data into GWDMS, and sharing that data to researchers and decision makers statewide. This position is the principal position responsible within the GDU for the duties associated with administration of GWDMS. This position requires advanced knowledge, skills, and experience and the ability to work independently on complex, controversial, and technically complicated assignments. This position provides expert advice and oversight statewide. This position also assists management in maintaining consistency and continuous improvement statewide. To perform this function, the position must be in constant interaction with all GRMD and EGLE groundwater staff, as well as DTMB IT and Procurement staff to be familiar with areas for database and integrations improvement, IT development and testing, and procurement policies.

Michigan has complex surficial geology and aquifer systems. Management of water withdrawal, use, and recharge requires high quality data to inform hydrogeological models, water budgets, and use decisions. The Michigan Department of Environment, Great Lakes, and Energy (EGLE), through its GDU of the GGSS is responsible for the acquisition and management of that data. The GDU manages the EGLE GWDMS and makes the data available to EGLE, other state and federal agencies, research institutions, and the public.

26. What are the minimum education and experience qualifications needed to perform the essential functions of this position.

EDUCATION:

Possession of a bachelor's degree in geology, or in geological, petroleum, mining engineering, or earth science

EXPERIENCE:

Geology Specialist 13

Four years of professional experience equivalent to a Geologist, including two years equivalent to a Geologist P11 or one year equivalent to a Geologist 12.

KNOWLEDGE, SKILLS, AND ABILITIES:

High level of knowledge of hydrogeology and groundwater related data related to many environmental statutes administered by EGLE, as well as groundwater data important to other state, local, and federal decision makers, and resource managers. Technical knowledge related to drilling, logging, completing, testing, and plugging of water and groundwater monitoring wells, evaluation of hydrogeological data, and proper methods for groundwater data acquisition in the field. Special technical knowledge relating to information systems, technology resources, data analysis, and reporting. The ability to work with others, work independently, organize, set priorities, and exercise good judgment. SQL or other software knowledge is desired to and important for the ability to query GWDMS to provide data outputs that may not be contained within standard reports.

CERTIFICATES, LICENSES, REGISTRATIONS:

Valid Michigan Driver's License.

Ability to obtain and maintain certifications for field work is preferred (if requested by supervisor).

NOTE: Civil Service approval does not constitute agreement with or acceptance of the desired qualifications of this position.

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Supervisor

Date

TO BE FILLED OUT BY APPOINTING AUTHORITY

Indicate any exceptions or additions to the statements of employee or supervisors.

None

I certify that the entries on these pages are accurate and complete.

RYAN STARKWEATHER

5/5/2026

Appointing Authority

Date

I certify that the information presented in this position description provides a complete and accurate depiction of the duties and responsibilities assigned to this position.

Employee

Date