DEPARTMENT OF NATURAL RESOURCES
POSITION DESCRIPTION

Working title: **Water Use Hydrogeologist**
Classification: **Hydrogeologist Program Coordinator**

Position Summary:
This position provides geologic, hydrogeologic, and technical expertise, along with project management and leadership, in evaluating complex and sensitive high-capacity well applications. It plays a key role in reviewing groundwater quantity projects, serving as a statewide expert and ensuring compliance with the Water Use Section's program responsibilities. The role requires in-depth knowledge of the DG program and other Environmental Management division initiatives to effectively address complex high-capacity well issues, including water loss approvals, well contamination, groundwater-surface water interactions, analytical and numerical modeling, private well impacts, and best practices in well construction. Additionally, this position interprets and applies NR 812, NR 140, and NR 820 administrative rules while navigating the challenges of high-capacity well sites.

As a project coordinator, this individual role oversees the department's high-capacity well impact assessment and groundwater quantity program statewide, analyzing aquifer sustainability, groundwater trends, and environmental impacts. The position is responsible for scoping, budgeting, and managing data collection associated within their programs, ensuring alignment with program priorities, statutory requirements, and fiscal constraints. The position leads multidisciplinary teams, ensuring timely and thorough evaluations of proposals for complex sites such as CAFOs, contaminated wells, and specialized well construction projects. Responsibilities include outreach and consultation with agency staff, federal agencies, state institutions, public officials, consultants, industry stakeholders, environmental groups, and the public. Given the sensitive and multifaceted nature of hydrogeological issues, the position requires sound judgment and expertise to shape departmental actions and future policy decisions. Additionally, the role provides technical and policy guidance to department staff, applying expertise in hydrogeology, water resources, geochemistry, well construction, interpretation and application of state statutes and regulatory compliance.

Location, Geographic Scope & Travel Requirements:
The incumbent in this position will be assigned to the Central Office in Madison, Wisconsin. The position is responsible for statewide program administration. Occasional in-state travel will be required with occasional overnight stays. Telework options may be available.

Scope of Authority:
This position is under general supervision of the Water Use Section Manager located in the Central Office in Madison. This position is non-supervisory.

Responsibilities and Accountabilities:

50% A. Serve as statewide expert and project manager for complex high capacity well projects involving groundwater quantity and quality issues that may be found to be potentially harming the environment or public health. Provide expertise as it relates to the coordination and evaluation of groundwater policy.

A1. Lead coordination, with support of management, of complex, multi-disciplinary high capacity well investigations. Includes scoping, budgeting, and managing programs and ensuring alignment with program priorities, statutory requirements, and fiscal constraints.

A2. Lead coordination of technical experts and consultants, with support of management, to oversee progress on complex high capacity well applications. Includes providing geological expertise on contaminants; reviewing site-specific information with responsible parties and their consultants; and identifying trends and likely sources, and policy implications.

A3. When necessary, require additional supporting technical evidence and specify the acceptable methods of collection, testing, and interpretation necessary to gather additional supporting technical evidence.

A4. Serve as a technical statewide hydrogeological expert for well construction methods, materials and

standards, drilling techniques and related technology as they relate to applicable administrative codes including NR812.

A5. Coordinate with state and federal agencies, consultants, universities, natural resource management agencies, other department programs or areas and regional and local units of government on complex high capacity well investigations and technical methodologies.

A6. Prepare and present technical updates on complex high capacity well investigations. Effectively communicate in both a written and oral fashion and be able to present analysis and results to department staff, other agencies, and public forums. Updates may be for administrative briefings, department staff, other agencies, community meetings, litigation, or the public.

A7. Act as a primary point of contact for applicants and their consultants and attorneys, outlining their responsibilities, providing general direction and advice regarding the department's use of groundwater data, groundwater tools, and the high capacity well impact assessment program.

A8. Lead in informing groundwater quantity management policy as it relates to the use of well construction and groundwater quality.

A9. Provide training, as needed, to regional staff on the implications and effects of high capacity wells on groundwater and surface water features.

A10. Serve as a statewide expert on water use program data needs, data evaluation, monitoring well networks, development of analytical tools and data collection systems needed to characterize groundwater, and interactions with surface water.

A11. Assume a lead role in evaluating, developing and revising groundwater quantity related department policies and administrative rules. Serve as a department representative to assist and advise department staff and other state agencies in evaluating, implementing, developing and revising groundwater quantity related policies and rules, as appropriate.

A12. Support the evaluation, development, and revision of groundwater quantity related department policies and administrative rules.

A13. Evaluate existing and proposed policies and administrative rules developed by the department and other state agencies to assure adequacy, consistency and conformance with statutes and rules.

A14. Review federal and interstate policies and procedures as to their impact and compatibility to Wisconsin groundwater quantity law, as needed.

40% B. Provide hydrogeologic expertise in interpreting water quantity related impacts of high capacity wells.

B1. Evaluate and complete technical reviews of high capacity well applications to assess high capacity well impacts and the complex interactions with waters of the state.

B2. Provide timely review, documentation and decisions for high capacity well applications to ensure they are technically acceptable, sufficient to determine impacts, and in conformance with applicable state statutes and administrative rules.

B3. Serve as a statewide expert on water use program data needs, data evaluation, monitoring well networks, development of analytical tools and data collection systems needed to characterize groundwater, and interactions with surface water.

B4. Coordinate hydrogeologic evaluations, environmental analyses and environmental impact statements regarding proposed high capacity wells and water quantity issues as needed.

B5. Represent the department regulatory and technical positions at public informational hearing, adjudicatory and court hearings as necessary. Prepare exhibits and statements on regulations. Testify as an expert witness on behalf of the department.

B6. Provide technical expertise while participating in initiatives to identify hydrogeologic and hydrologic data needs.

B7. Coordinate with program hydrogeologists to develop consistent approaches for high capacity well program implementation and technical review of high capacity well applications.

B8. Carrying out quantitative hydrogeologic analyses using analytical models.

5% C. Contribute to data analysis efforts to support groundwater quantity projects.

C1. Use geospatial data and tools for spatial analysis and mapping of water resources, water withdrawals and hydrogeologic data.

C2. Experience collecting, organizing, and analyzing hydrogeologic, groundwater, or water use data.

C3. Knowledge of analytical and statistical methods used to evaluate groundwater quantity and water use data.

5% D. Support the water use program with monitoring needs assessments, research evaluation, and performance of special assignments and projects.

D1. Assist with evaluation of groundwater related research proposals and water quantity monitoring.

D2. Participate in special assignments required to fulfill bureau and department responsibilities as determined by supervisor.

D3. Analyze and assemble technical hydrogeologic and hydrologic information and identify data gaps to support administrative code development.

Knowledge, Skills and Abilities:

1. Extensive knowledge of surface water hydrology, hydrogeology and geology, particularly related to Wisconsin
2. Knowledge of environmental monitoring, sampling techniques and groundwater quality standards.
3. Knowledge of hydrogeologic principles and groundwater flow systems, including aquifer characteristics and water balance concepts.
4. Knowledge with computer mapping tools, aerial photo interpretation, and data analysis. Experience using Geographic Information System (GIS) tools.
5. Skill related to quantitative and analytical water resource data analysis, statistics and models.
6. Understanding of well drilling and construction.
7. Wisconsin law related to water withdrawals and use
8. Ability to communicate effectively, including ability to present complex information clearly and concisely in a variety of formats, and demonstrated skill in written communication.
9. Knowledge of stepped enforcement process and compliance.
10. Ability to understand a complex situation, issue, or problem by breaking it down into smaller pieces and trace implications or consequences.
11. Skill in employing analytical abilities, pragmatism and other tools to resolve complex problems in a variety of situations.
12. Ability to work well in teams.

Physical Requirements and Environmental Factors:

Physical requirements include talking in front of groups, sitting for long periods of time, lifting and carrying 5 to 30 lb. Environmental factors include working indoors in an office setting and independently traveling to offices around the state.

Telework Evaluation: Telework is available, but dependent on DNR policy. Current DNR policy allows up to three days of telework per week.