



Office of the Water Engineer

Position Description: Hydrologist or Hydrogeologist

Position Title	Hydrologist or Hydrogeologist
Date Effective	2024-01-30
Job Level(s) Being Hired	Level I (entry), Level II (experienced), Level III (senior)
Immediate Supervisor	Water Engineer
Position Type	Full-time
Supervision	Level II and III may be assigned supervisory responsibilities
Classification	Exempt from FLSA
Schedule	Flex, focused on Mon-Thu 8:30-5:30
Duty Station	Office of the Water Engineer Primary: Ronan, Montana Some Remote Work Possible
Benefits	Defined by OE Personnel Policy
Pay	\$31.00 to \$55.00/Hour
Requirements	Must be able and authorized to work in the United States
	Must hold a valid driver's license
	Must pass a background check

Who We Are:

The Office of the Water Engineer (OE) is a group of resource professionals coalesced around the mission of providing consistent, fair, and informed water administration and enforcement on the Flathead Indian Reservation. Our office is unique; we are not a Tribal, State, or Federal Office but a standalone entity created by the Water Compact as authorized by Tribal, State, and Federal laws. We operate under the direction of the Flathead Reservation Water Management Board (FRWMB or Board). OE staff must be self-reliant, capable of independent completion of complex tasks, and prepared to make quality decisions that stand up to the rigor of review. As a team, we rely on each other to manage workload, public services, safety, and work-life-balance while getting things done. The OE needs people who enjoy solving unique problems, can produce quality work, thrive on technical and logistical challenges, consistently complete the job, and cultivate comradery in the workplace. We are public servants to an amazing community in need of help with their water management issues and we take pride in providing quality services.

Position Overview:

The Hydrologist or Hydrogeologist is responsible for performing a broad variety of duties associated with managing water resources within the Flathead Indian Reservation (FIR) under the direction of the Water Engineer, Board and the Unitary Administration and Management Ordinance (“Ordinance”) of the Water Compact between the Confederated Salish and Kootenai Tribes (Tribes), the State of Montana, and the Federal Government. The Hydrologist or Hydrogeologist works closely with the Office of the Engineer’s staff, the Tribes’ water resources staff, the Montana Department of Natural Resources and Conservation (DNRC) Water Resources Division, the Flathead Indian Irrigation Project (FIIP), and the citizens and water uses on the Flathead Indian Reservation. The Hydrologist or Hydrogeologist serves as a trusted expert for the public and is expected to provide thoughtful, informed, and accurate information and recommendations. The Hydrologist or Hydrogeologist routinely writes complex technical documents, directly interacts with the public and partners, analyzes and presents technical information, reviews and improves OE water right applications, and thinks on their feet to solve a range of complex problems, not all of which relate directly to water.

Essential Duties, Responsibilities, and Expectations:

These essential duties are not inclusive of all the duties that may be assigned.

A. WATER USE ANALYSIS AND ADMINISTRATION OF THE ORDINANCE 55%

1. Implements the Ordinance, analyzes and makes recommendations regarding the use, availability, and management of water resources.
2. Processes water right applications, especially those with complex aspects, under the Ordinance and evaluates the accuracy and extent of the applicants request and for claimed and authorized water uses – **trains OE staff to do this work.
3. Prepares advanced water use maps using Geographic Information System (GIS) and other mapping technology;
4. Prepares scientific reports, technical reports, memorandums, and letters tailored to specific situations reflecting analysis of water use;
5. Creates methods used to evaluate proposed and existing water uses;
6. Reviews and researches scientific literature, technical literature, county records, historic water right documents, legal records, deeds, trust

documents, articles of incorporation, and other information needed to resolve water use applications and issues – **trains OE staff to do this work;

7. Participates in water right database administration and development.
8. Consults with the Water Engineer, staff legal counsel, water right specialists, and other resource professionals to gain information needed to resolve technical and legal issues relating to proposed and existing water uses;
9. Provides ** and helps develop ** information regarding policies, positions and viewpoints to stakeholders, Tribal, State, and local entities such as conservation districts, local planning boards, and student groups;
10. Assists the OE with developing policies, forms, procedures, and work processes needed for start-up and implementation of the Ordinance - **trains OE staff to do this work;
11. Provides OE reports and written products and technical review.

Level II & III Specialists duties, responsibilities, and expectations also include:

12. Provides expert hydrology and hydrogeology reports and publications that are appropriate for professional and scientific publication in peer-reviewed journals and similar government venues;
13. Provides expert hydrology and hydrogeology reports that may be used for litigation and advanced water use assessments;
14. Provides independent and autonomous supervision of OE employees as assigned by the Water Engineer;
15. Provides significant policy and technical work toward the implementing the Compact;
16. Provides advanced and professional review and assessment of groundwater management area, other instream flow, new appropriation, change in use application, and other types of advanced water right applications; and
17. Provides autonomous and sometimes longer duration services as the acting Water Engineer in full-capacity as directed by the Water Engineer.

B. PUBLIC ASSISTANCE, COMPLAINTS, AND DISPUTE RESOLUTION 15%

1. Routinely supports, sometimes independently, opening, operating, and closing the OE for all phases of general office operations including greeting and direct interface with the public, either at the office or at remote meetings;
2. Researches advance water use information, well log information and land ownership records specific to individual requests from the public;
3. Provides precise information and interpretations using a variety of sources including the Ordinance, county clerk and recorder records, county assessor tax records, and other records.
4. Compiles research information to develop reports and create GIS maps for

the general public, attorneys, water users, and consultants. The Hydrologist or Hydrogeologist must often present information that is contrary to the opinions of others and may face debate and confrontation. Considerable economic investment and land use decisions may be based on the accuracy of the information provided by the Hydrologist or Hydrogeologist.

Level II & III Hydrologist or Hydrogeologist duties, responsibilities, and expectations also include:

5. Directly supports the OE water use complaints and enforcement actions;
6. Directly supports OE appeals and hearings actions including providing expert testimony, acting as a hearings examiner, administering meetings, and serving in all functions of the process;
7. Provides substantive, original, and creative contributions toward modernized water solutions designed to implement the Compact, promote water conservation, and reduce water user conflicts;
8. Provides expert court testimony as needed; and
9. Resolves complex water user problems including assistance in the design of infrastructure, advanced water measuring schemes, and cutting edge technologies that can be deployed to track and assess water uses as pertaining to compliance with the Ordinance.

C. Hydrological Investigations

15%

This position designs, conducts, and manages hydrological investigations to ensure that accurate and appropriate information is available to support the resolution of water resource management issues identified by local water users, or local, State, Tribal, and Federal agencies. Typical investigations revolve around questions of basin water supply (physical availability), implementation of the CSKT-MT Water Compact, irrigation efficiency, drought and flood risks, stream dewatering, instream flow needs, and the distribution of water by court degree. Hydrological investigations are conducted in consultation with the Water Engineer and interested stakeholders that may include water users, watershed groups, Tribal agencies, elected officials and government agency personnel. This position also works closely with other Tribal, State and Federal agencies in collaborative partnerships. The position communicates complex information through fact sheets, written reports, oral presentations, and web-based applications.

Level II & III Hydrologist or Hydrogeologist duties, responsibilities, and expectations also include:

D. OTHER DUTIES AS ASSIGNED

15%

1. Provides budget, check writing, bill tracking, coordination with payroll services, venter coordination, and other office operation functions.

2. Performs a variety of other professional and technical duties in support of the Office of the Engineer and the Board. This includes activities such as attending training and educational programs, meetings, and conferences;
3. Representing the Board to local groups and communities; and reviewing and commenting on administrative and technical policies and procedures;
4. Completes administrative functions including providing input on OE annual work plans, and other related duties as assigned;

Level II & III Hydrologist or Hydrogeologist duties, responsibilities, and expectations also include:

5. Provides substantive contribution to the design, implementation, building, and acquisition of OE fundamental infrastructure elements;
6. Provides direct assistance to the Water Engineer in Business Management Aspects of the OE including budget, purchasing, contract management, and other essential activities.

Direction Received:

The incumbent receives direction from the Water Engineer who makes general and broad assignments. The incumbent is expected to use technical experience and education to complete assignments in a timely and professional manner.

Due to the “start up nature” of the FRWMB compact implementation, the incumbent is expected to discuss precedent setting situations with the Water Engineer, prior to implementation. The Hydrologist or Hydrogeologist will resolve most situations using expertise and experience.

Working Relationships:

Incumbent works with other professionals as an official representative of the FRWMB and the Water Engineer. Most contact is giving direction, offering clarification and advice to applicants. Will work directly with complex situations and complicated water rights applications. Is expected to communicate professionally and clearly so that processes are understood and transparent to the public.

Will interface with State, Tribal and Federal staff as part of a team in support of full compact implementation.

Minimum Qualifications (Education and Experience):

Level I (entry) typically starting at \$31.00/hour

Two years of progressively higher-level graduate education (36 semester hours, 54 quarter hours or the equivalent) leading to a master's degree in a field related to hydrology, earth science, geology, civil engineering, agricultural engineering, or water resources, with some emphasis in water resources or agricultural land management is required.

Level II (experienced) typically starting at \$40.00/hour

In addition to the basic education requirement stated above for a Level I Hydrologist or Hydrogeologist, applicants must meet one of the following to qualify for the Level II:

Three years of progressively higher level graduate education (54 semester hours, 81 quarter hours or the equivalent) leading to a Ph.D degree in hydrology or other directly related field of study or Ph.D or equivalent doctoral degree in hydrology or other directly related field of study if it provided the knowledge, skills and abilities necessary to do the work of the position.

****OR** one year of appropriate professional experience in hydrology that is equivalent to a Level I Hydrologist or Hydrogeologist.

Examples of such experience include independent responsibility for a well-defined study or for a phase of a larger study that required the planning and carrying out of routine hydrologic work. This work would have required the individual to select and make minor adaptations to procedures and accepted practices and handle unexpected conditions arising in the normal course of the work. At this level, Hydrologists and Hydrogeologists have a sound working knowledge of the principles of hydrology and the ability to independently perform moderately difficult and responsible scientific work.

Level III (senior) typically starting at \$51.00/hour

In addition to the basic education requirement stated above for a Level II Hydrologist or Hydrogeologist, applicants must meet one of the following to qualify for the Level III:

Two years of appropriate professional experience in hydrology that is equivalent to a Level II Hydrologist or Hydrogeologist.

Examples of such experience include planning, executing and reporting on original hydrologic studies or ongoing hydrologic studies requiring a fresh approach to resolve new problems. The complexity of this work typically required extensive modification

and adaptation of standard procedures, methods, and techniques, and the development of totally new methods and techniques to address novel or obscure problems for which guidelines or precedents were not substantially applicable. At this level, Hydrologist or Hydrogeologist has extensive knowledge of the principles of hydrology and highly developed ability in their application, and wide latitude for the exercise of independent judgment to perform scientific work of marked difficulty and responsibility.

For Level I, II, and III positions, alternate combinations of education and experience may also be considered at the discretion of the Water Engineer.

Competencies or Knowledge, Skills, and Abilities:

Knowledge: The work requires extensive knowledge of water resource-related management theories, principles, concepts, and practices; field investigation methodologies; and negotiation, mediation, and conflict resolution techniques. Knowledge of the CSKT-Montana Compact and Ordinance or other reserved compacts recommended. Knowledge required of local water availability, water use practices, water measurement techniques and devices, irrigation methods and designs and land ownership records. Knowledge includes:

- 1) Principles, theories, and methods of hydrology, hydrogeology, geology, geomorphology, integrated remote sensing, meteorology, geospatial analysis, and groundwater and/or surface water modeling.
- 2) Extensive knowledge of water use and water conservation methods in Montana
- 3) Practical understanding of a multitude of topics, including State and Federal water policies and the implications of water policy decisions.
- 4) Hydrologic field methodologies and use of appropriate instrumentation for water measurement.
- 5) Methods for conducting hydrologic investigations, including techniques and methods for analyzing data, developing hydrologic models, and reporting findings.
- 6) Irrigation system design and practices common to Montana including sprinkler and flood irrigation systems.
- 7) Spatial information development, data management and visualization, GIS software (ArcGIS), spatial data analysis and mapping principles.
- 8) Mathematics, statistics, (especially statistical inference, regression, and probability), and computer methods in hydrologic analysis.
- 9) Water Law and use in Montana, water allocation, interstate and international river basin issues and compacts, water rights, Indian and non-Indian federal reserved water rights.

Skills: The position requires skill in effective communication with people of varied technical levels. Must be skilled in operation of computers, MS365, Word, Outlook, Excel, and Adobe. Must be skilled in project management, conducting legal research, and reading technical data and reports. The incumbent must be capable of becoming proficient in GIS application (ArcView) and accessing and manipulating data in a computer database environment. Skills include:

- 1) Adaptability and skills in trouble shooting and problem solving.
- 2) Strong writing and public speaking skills necessary to effectively convey complex concepts.
- 3) Effective working relationships with landowners on issues and projects that are sometimes contentious.
- 4) Ability to clearly and accurately express position(s) of the agency while maintaining cooperative working relationships among participants.
- 5) Hydrologic data collection, organization, and interpretation, and analysis using quantitative techniques including models.
- 6) Stream gage installation, collecting stream discharge measurements, and building stage-discharge rating curves.
- 7) Use of computers for hydrologic, mathematical, GIS, mapping, and graphical analyzes, and various electronic instruments for measuring water quantity.
- 8) Project management, preparation of funding proposals, contractor oversight and contract management.
- 9) Mentoring, motivating, leading and encouraging other team members.
- 10) Use of hand and power tools.

Abilities: The position requires the ability to analyze and appraise facts, evidence, legal documents, and records to make defensible decisions. Must communicate effectively verbally and in writing. Demonstrated proficiency in adjusting to meet changing priorities while simultaneously working on multiple projects. Communicates objectively when providing information, advice, and guidance to technical and non-technical individuals and groups on complex and controversial issues. Initiative and motivation to act independently and take responsibility for evaluating and responding to challenging situations, problems, and opportunities. Establishes and maintains effective working relationships with coworkers, supervisor, the Board, State and Tribal agencies, local governments, and the public. Models high standards of honesty, integrity, trust, and openness. Knows and follows through with the correct standards of conduct and moral judgement. Communicates and demonstrates actions in a

consistent manner. Respects others, regardless of individual capabilities, agendas, opinions, or needs. Focuses to achieve results. Actively participates and respects the ideas of others. Looks for alternative ways to work with others that will create better results and working relationships. Abilities include:

- 1) Ability to synthesize technical information on a wide range of water resource topics.
- 2) Communicates objectively when providing information, advice, and guidance to technical and non-technical individuals and groups on complex and controversial issues.
- 3) Initiative and motivation to act independently and take responsibility for evaluating and responding to challenging situations, problems, and opportunities.
- 4) Establishes and maintains effective working relationships with subordinates, supervisors, staff, the Board, DNRC, local, state, and federal agencies, elected officials, special interest groups, and the public.
- 5) Models high standards of honesty, integrity, trust, and openness. Knows and follows through with the correct standards of conduct and moral judgment. Communicates and demonstrates actions in a consistent manner. Respects others, regardless of individual capabilities, agendas, opinions or needs.
- 6) Focuses to achieve results. Actively participates and respects the ideas of others. Looks for alternative ways to work with others that will create better results and working relationships.

Physical Demands & Working Conditions:

[described demands are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.]

The position is based in Ronan, Montana and approximately 75% of the work occurs in a normal office setting. Frequent travel and field work are required between the months of April and November. Travel may exceed 1,500 miles per month and will occasionally be two (2) to three (3) days in duration. The position requires the ability to walk over rough and steep terrain to carry field equipment to data collection sites. The Hydrologist or Hydrogeologist must be able to work outdoors during bad weather. The Hydrologist or Hydrogeologist must rely on experience and judgement as to what safety precautions are prudent. The Hydrologist or Hydrogeologist must have good, driving skills required for both on-road and off-road travel and during times of inclement weather. Some irregular hours, evenings, and weekends are involved.

Pay Boost for Specific Skillsets, Experience, and Education:

- Business management, budgeting, budget projections;
- Computer IT management and services including MS365 Domains, Website

content management and editing, networks, and computer app installations/removals, computer and network security; and

- Water Measurement using flow meters, well probes, weirs, flumes, and other hydrologic devices.

To Apply:

Submit a letter of interest and resume to contact@frwmb.gov

Resumes should clarify if you are eligible to work in the United States and should also contain start and end dates (including the month and year), hours worked per week, level of experience and examples for each work experience and accomplishment that demonstrates you can perform the tasks at the level required for the position as stated in this Job Description.

The quality and format of submitted letters of interest and resumes will be factors in ranking selections.

Your experience needs to address every required qualification and/or pay boost skill sets for which you have experience or education.

You may be asked to provide certified college transcripts, 3-5 references, examples of your writing skills, proof of a valid driver's license.

You may be asked to provide your most recent supervisor's contact information and permission for the OE to call for a reference. Successful applicants will need to pass a background check and show proof of a valid driver's license.

Priority screening begins **March 1st, 2024, open until filled.**

The **Office of the Water Engineer and the Flathead Reservation Water Management Board** are Equal Opportunity Employer and do not discriminate on the basis of race, religion, color, sex, gender identity, sexual orientation, age, non-disqualifying physical or mental disability, national origin, veteran status or any other basis covered by appropriate law. All employment is decided on the basis of qualifications, merit, and business need.