Job Description

**Associate Water Quality Engineer**

**Division/Department:** Environmental Services Division – Water Quality Department  
**Reports To:** Water Quality Manager  
**Type of Position:** Full-time  
**Status:** Exempt

**General Statement**

This position is responsible for assisting with the identification, assessment and resolution of water quality issues associated with Northern Water’s projects. Work assignments will primarily include assisting with data management, providing support with the preparation of and analysis of water quality data and assisting with water quality modeling.

**Duties and Responsibilities**

- With oversight and guidance from the Water Quality Manager or from Senior and Principal Water Quality Engineers, provides engineering support with special studies, analyses of complex datasets and reporting on water quality investigations;
- Prepares technical reports and analyses;
- Assists with applied watershed and water quality modeling including setting up models for scenario simulations, input preparation, processing of model outputs, model validation, documentation of results and performing model upgrades as needed;
- Performs statistical and other data analyses;
- Prepares graphical and tabular data summaries;
- Develops new tools and methods to enhance reporting and assessment capabilities of the Water Quality Department;
- Presents data analyses and reports findings to a variety of audiences (team members, partners and stakeholders);
- Manages and analyzes collected data;
- Maintains databases including uploading of collected field and lab data;
- Develops, documents and implements QA/QC protocols;
- Documents data management activities;
- Disseminates data and develops data sharing tools and interfaces.
- Acts as a liaison with other data users and data generators;

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• Provides assistance with the preparation and documentation of meetings;
• Other duties as assigned.

**Training Experience and Education Requirements**

**Education Required**

- Bachelor’s degree in Engineering (Civil, Environmental or Biosystems) with an emphasis on water resources, watershed science, or a related field with course work in watershed and/or environmental sciences (e.g. hydrology, aquatic ecology, limnology, wetlands, soils, biogeochemistry, water quality modeling, water and wastewater treatment etc.).
- Master’s degree required.

**Experience Desired**

- O-5 five years’ experience in water quality issues in Colorado.
- Experience in database management, water quality modeling and programming.

**Knowledge, Skills, and Abilities**

**Knowledge**

- Water quality issues in Colorado, watershed-based planning and watershed management principles;
- Clean Water Act and regulatory framework;
- Basic knowledge of database management;
- Working knowledge of water resource statistics and data mining techniques;
- Limnology;
- Knowledge of water quality modeling platforms such as CEQUAL-W2 and RMSi/ADYN-RQUAL desirable;
- Data mining techniques and tool: knowledge of Tableau and R highly desirable;
- Knowledge of water and wastewater treatment processes and technologies desirable.

**Skills**

- Proficient in MS Excel;
- Works collaboratively with team members and partners;
- Excellent quantitative, problem-solving skills;
- Excellent oral communication skills;
- Excellent organizational skills;
- Excellent technical writing skills required, as well as good analytical, and data management skills;
- Self-motivated;
- Attention to detail.
Abilities

- Manage technical problems of moderate complexity;
- Work well autonomously;
- Work well with others as a member of the team and with stakeholders;
- Apply engineering principles and rigorous scientific approaches;
- Work on multiple projects concurrently;
- Meet tight deadlines;
- Come up with creative technical solutions;
- Communicate highly technical content to non-technical audiences;
- Eagerness to learn.

Physical Requirements

- Sustained operation of keyboard devices.
- Prolonged sitting, standing, and walking.
- Lift, drag, or push boxes, paper, and documents weighing up to 25 pounds.
- Must be able to meet the physical requirements of a post job offer physical examination.

Reasonable accommodations will be made to enable qualified individuals with disabilities to perform the essential functions of the job.

License, Certificate, or Credential Requirements

- Valid driver’s license.
- EIT Certification or ability to obtain within one year.

Other Requirements

- Maintains a personal appearance appropriate for job position and image of Northern Water.

This job description in no way states or implies that these are the only duties to be performed by this employee.

Northern Water is an equal opportunity employer.