IDENTIFICATION

Department	Position Title	
Environment and Climate Change	Coordinator, Water Monitoring and Stewardship	
Position Number	**Community**	**Division/Region**
23-14256	Yellowknife	Water Monitoring and Stewardship/ HQ

PURPOSE OF THE POSITION

The Coordinator, Water Monitoring and Stewardship (Coordinator) is responsible for assisting in the delivery of water monitoring programs, including water quality, quantity and biological programs, and is accountable for all handling and storage of field equipment, gear, and data collected, to meet the water and aquatic monitoring goals of the Department, including any collaborations with northern communities, government agencies and academics.

SCOPE

Located in Yellowknife and reporting to the Lead Coordinator, Water Monitoring and Stewardship (Lead Coordinator) in the Water Monitoring and Stewardship Division, the Coordinator, Water Monitoring and Stewardship is a member of a team of staff that are responsible to ensure that environmental research and monitoring programs are properly supported by planning, preparing, and executing fieldwork. This includes all tasks related to data collection, deployment/retrieval of field equipment, field safety and training, equipment maintenance, calibration and testing, datalogger programming, downloading data, and management of assets with support of the Lead Coordinator and divisional scientists.

The Department of Environment and Climate Change (ECC) works to promote and support the sustainable use and development of natural resources and to protect, conserve and enhance the NWT environment for the social and economic benefit of all residents.

The Water Monitoring and Stewardship Division bears the primary roles and responsibilities related to water-related research and monitoring, water quality and quantity data analysis, testing, and interpretation, and water stewardship and planning. The Division, in cooperation with others such as Environment and Climate Change Canada (ECCC) and other federal and territorial departments, collects and interprets information about water and aquatic quality

and water quantity in the NWT. The Division works with its water partners on a collaborative approach to water stewardship and planning in the NWT, including transboundary water management agreements.

The Northwest Territories (NWT) is the ultimate downstream jurisdiction in the Mackenzie River Basin (MRB), and understanding the hydrology and water movements in the basin and its tributaries is critically important for understanding the availability and health of water in the NWT. The MRB drains an area that consists of a fifth of Canada's land mass. It is the tenth largest river basin in the world and the flow of the Mackenzie River plays a significant role in regulating oceanic circulation and maintaining arctic climate systems. The MRB is subject to industrial activity which has the potential to influence water flow and quality and it is experiencing the brunt of climate change as one of the nation's northern watersheds.

The Coordinator works within a legislative and regulatory framework that includes the: *Waters Act*, *Environmental Protection Act,* NWT Water Stewardship Strategy and Action Plan, 2030 NWT Climate Change Strategic Framework and Action Plan, as well as other Government of Northwest Territories (GNWT) and ECC policies and programs, including transboundary water management agreements with neighbouring jurisdictions.

The Coordinator collaborates closely with the Lead Coordinator and divisional scientists. The Coordinator works collaboratively with other colleagues within Department but also with external clients and contractors (e.g., communities, Indigenous governments and Indigenous organizations, local monitors and academics). The Coordinator must follow all safe work practices and ensure safe work practices are followed by other field personnel in all aspects of work.

A variety of water monitoring, data collection, data management and equipment maintenance duties are assigned to the Coordinator who regularly work with the Lead Coordinator and divisional scientists to assess and prioritize projects in order to achieve a successful outcome. Assisting in data quality assurance and quality control is an important part of the position, including preparing data for upload into databases and public viewers.

The Coordinator has some degree of latitude in conducting their work, provided safety policies and program requirements and standards are complied with.

RESPONSIBILITIES

1. **Supports the preparation for and the execution of field programs.**
    - Supports the development of annual field work schedules and ensuring water monitoring programs are adequately supported.
    - Prepares field safety training and field trip planning for all field staff including scientists, interns, summer students, community monitors, academics, and other

collaborators.
- Inventories monitoring equipment and assets (trucks, boats, skidoos, quads, etc.).
- Leads day-to-day organization of the warehouses including equipment and gear as well as ensures the warehouses and equipment are properly maintained at regular intervals.
- Assists in the delivery of all water quality, quantity and abiotic monitoring programs.

2. **Manages and maintains monitoring equipment and extracts instrument data for data analysis and interpretation.**
   - Manages and maintains field instruments for all programs for the Division, including annual maintenance and seasonal calibration activities.
   - Assists in the setup of field monitoring stations and instruments with assistance of colleagues and scientists.
   - Ensures proper organization, inventory, and maintenance of all assets relating to operational field program equipment.
   - Downloads data from field equipment and conducts preliminary data validations in a timely matter in order to support dissemination.

3. **Supports the preparation and dissemination of compiled data and scientific reports in an appropriate and timely manner.**
   - Prepares figures, maps, and other materials to meet project goals and deadlines.
   - Assists in the delivery of project workshops, technical sessions, and training exercises as required.
   - Supports the preparation of non-technical promotional and educational materials about the databases, their derived products, and other information on water quality and quantity conditions.
   - Conducts or contributes to community information sessions and outreach activities.
   - Compiles, organizes, and archives water quantity and quality data collected by the GNWT, partner organizations, researchers, and industry.
   - Conducts preliminary data verification.
   - Conducts and coordinates data recovery projects and generates data compilations for addition to the database.
   - Works with partners to facilitate data compilations.

3. **Works with communities to ensure that fieldwork and monitoring conducted by the Division is addressing their needs.**
   - Supports engagement activities with communities and Indigenous governments and Indigenous organizations to identify community questions and priorities for local water monitoring programs.
   - Supports the implementation of the NWT-wide Community-based Water Quality Monitoring (CBM) program with communities and Indigenous governments and

Indigenous organizations across the NWT as outlined in the NWT Water Stewardship Strategy.
- Supports capacity building in communities by hosting training programs for community monitors.
- Works with community monitors in the field to support data collection efforts, where required.
- Assists in data dissemination efforts to address community concerns about water quality and the health of the aquatic environment.

4. **Ensures efficient and safe work practices in all aspects of work.**
   - Supports development of and follows internal safety procedures for field work and working in remote areas.
   - Stays up to date on all safety and developmental training to ensure safe work practices.
   - Promotes a safe work environment in context of GNWT legislation and regulation (e.g. Occupational Health and Safety (OHS), Workers' Safety and Compensation Commission (WSCC), etc.).
   - Drafts and consults with colleagues on the development of Standard Operating Procedures (SOPs) for field safety and sampling methods.
   - Works with GNWT staff, contractors, and communities to ensure compliance with SOPs.

WORKING CONDITIONS

Physical Demands

The incumbent usually works in a normal office environment with intermittent field work up to twelve (12) weeks per year. In the summer field season, the incumbent will be hiking over rough terrain with a backpack and collected samples (up to 50 pounds) for eight hours per day, up to twelve weeks per year; will be travelling in small aircraft and helicopters for up to eight hours per day, up to three weeks per year; will be travelling in small watercraft for up to one hour per day, up to twelve weeks per year. In the winter field season, work involves travelling by snowmobile, work at extreme cold temperatures, and operation of one-person ice augers or other equipment.

Environmental Conditions

The incumbent usually works in a normal office environment with intermittent field work. While in the field, the incumbent can be exposed to rapidly changing weather and to conditions such as cold (hypothermia), intense sun (burn), wind, rain; helicopters, airplanes, ATVs, road vehicles (physical injury, hearing loss, gas/fumes); insects and insect bites; dangerous, unforeseen, uncontrolled field situations such as vehicular accidents, attack by wild animals, falls; and other accidents while on traverse (cuts, muscle sprains, broken bones, etc.). The incumbent will be exposed to these environment conditions every day up to twelve weeks per year every day.

The incumbent will be exposed to noise from helicopters, airplanes, ATVs, snowmobiles, and outboard motors as well as other equipment such as ice augers, chainsaws, firearms, and generators. The incumbent will be exposed to these noise conditions every day up to twelve weeks per year.

Sensory Demands

The incumbent usually works in a normal office environment with intermittent field work.

Mental Demands

The incumbent will usually work in a normal office environment with intermittent field work. While in the field, the incumbent is subject to substantial disruption of family life due for field work in distant locations. The incumbent is also responsible for the continuous management of scientific and logistical activities and safe work practices while in the field, including the prediction and mitigation of potentially hazardous situations and managing personality conflicts amongst field staff. The incumbent will be exposed to these demands every day up to four or more months per year.

The incumbent may also be required to present data and preliminary results to colleagues and non-technical audiences, collaborators, community groups, etc. and may attend workshops or water monitoring and research meetings outside of the NWT.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of scientific measurement equipment and preliminary analysis techniques.
- Knowledge of methods to screen raw data for quality control and quality assurance.
- Knowledge of current NWT water initiatives, such as the NWT Water Stewardship Strategy and Action Plan, Climate Change Strategic Framework and Action Plan, NWT Cumulative Impact Monitoring Program, and the Knowledge Agenda.
- Knowledge of land claim agreements in the context of northern water management.
- Knowledge of the cross-cultural environment and its effect on communication and effective working relationships with Indigenous people in communities, Indigenous government and Indigenous organizationsand other agencies.
- Knowledge of computer systems and commercial/specialty software applications including Geographic Information Systems (GIS); statistics packages; spreadsheets; databases and word processing software.
- Knowledge of arctic survival, transportation of dangerous goods, first aid, firearms, remote communications, equipment repair and navigation techniques.
- Ability and experience driving and repairing a boat and other recreational vehicles while in remote areas (e.g., snowmobile, quads).
- Ability to exercise tact, diplomacy, and good judgment.

- Ability to work in an autonomous, flexible, discreet, and trustworthy fashion.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion and cultural awareness, as well as safety and sensitivity approaches in the workplace.

Typically, the above qualifications would be attained by:

A diploma in Natural Resources or Environmental Science plus at least two (2) years of experience in watershed management related to field monitoring, research programs, data management and analysis, public consultation, and reporting of scientific findings.

Equivalent combinations of education and experience will be considered.

Assets include:
- Field experience conducting water or aquatic sampling.
- Field experience conducting cold regions hydrology.

ADDITIONAL REQUIREMENTS

Position Security (check one)

☒ No criminal records check required
☐ Position of Trust – criminal records check required
☐ Highly sensitive position – requires verification of identity and a criminal records check

French language (check one if applicable)

☐ French required (must identify required level below)
Level required for this Designated Position is:
ORAL EXPRESSION AND COMPREHENSION
Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
READING COMPREHENSION:
Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
WRITING SKILLS:
Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
☐ French preferred

Indigenous language: Select language

☐ Required
☐ Preferred