



## IDENTIFICATION

Department	Position Title	
Environment and Climate Change	Geographic Information Systems Specialist	
Position Number	Community	Division/Region
23-1523	Norman Wells	Sahtu

## PURPOSE OF THE POSITION

The Geographic Information Systems (GIS) Specialist is responsible for the development and implementation of specific GIS and digital mapping projects in support of wildlife management, environmental stewardship, and forest management within the Sahtu Region.

## SCOPE

Reporting to the Regional Superintendent, Forest and Wildlife and located in Norman Wells, the incumbent works closely with ECC staff, various boards, agencies, land claim organizations, consultants, community organizations, and individuals to provide GIS and digital mapping services to provide mapping products for effective resource management.

## RESPONSIBILITIES

### 1. Development and implementation of GIS and Digital Mapping Projects.

- Consults with ECC staff on project requirements to support research and monitoring of wildlife.
- Consults with Sahtu Renewable Resources Board, Renewable Resources Councils, Indigenous governments, and other co-management partners to design GIS projects to support stewardship program delivery.

### 2. Produce High Quality GIS Products.

- Collects and manipulates datum to create unique mapping products.
- Generates high quality maps, printouts, and digital multi-layer interactive mapping tools for use in field research.
- Documents processes and procedures for data collection.
- Archives and stores data to GNWT GIS servers.



**3. Supports Wildlife Research and Monitoring Activities.**

- Collects field data by use of handheld or fixed mounted GPS.
- Flies in small aircraft to collect data for creation of maps.
- Gathers satellite collar data and renders raw inputs for composite data sets.
- Assists with physical collection of samples in the field and documents GPS coordinates.

**4. Provides support to Fire Management.**

- May be deployed to a fire incident as part of an Incident Command Team.
- Provides support to regional forest management staff in documentation of fires.
- Provides technical support to fire managers in the field as required.
- Inputs, manipulates, refines, and renders raw data to create fire maps.
- Fly in a detection and/or observation aircraft to map fire growth as directed.

**5. Supports Regional Operations and Program Delivery.**

- Produces a wide range of GIS maps, posters, for use by Renewable Resource Officers.
- Supports field investigations by producing maps for documentation required for court.
- May accompany Renewable Resource Officers and other field staff while traveling on the land to gather detailed geo-spatial information about landforms.

**6. Supports Regional Operations and Program Delivery.**

- This includes environmental exposures/conditions beyond what is required in a standard office environment.
- Examples: toxic or unpleasant fumes, loud noise, vibration, dirt, dust, etc.

**WORKING CONDITIONS**

**Physical Demands**

Field work requires walking and riding in or on various ATVs, snowmobiles, boats over rough terrain, rough water, and deep snow for long periods of time.

**Environmental Conditions**

Field work may cause exposure to extreme temperatures, high winds, snow, and smoke and limited visibility when working on fires.

**Sensory Demands**

High level of concentration is required to accurately collect, manipulate, store and retrieve data to create high quality mapping products.

**Mental Demands**

Duty Travel, field work and deployment may require separation from family for periods of time. High demand to perform under pressure may cause stress.

### **KNOWLEDGE, SKILLS AND ABILITIES**

- Use of microcomputers and associated software, including:
- Adobe Photoshop Illustrator, Microsoft PowerPoint, Microsoft Word, and Microsoft Excel.
- Use of plotting/printing devices, such as Inkjet printers, large-format plotters LaserJet printers.
- Skill in communicating orally and in writing (English), analyzing problems, preparing reports, providing advice organizing and in assessing situations.
- Good written communication skills, strong interpersonal skills, and good organizational skills.
- Experience working in a cross-cultural environment.
- The incumbent must be able to work independently under minimal supervision.
- The incumbent must be able to deal with complex technical information.
- The incumbent must be able to meet assigned deadlines.
- The incumbent must be able to develop attractive multi-media presentations.
- The incumbent must be able to quickly learn new software and hardware.
- 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 MSc Geomatic Science Degree or similar degree related to Geospatial Information and two years of experience.

Equivalent combinations of education and experience will be considered.

### **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