



IDENTIFICATION

Department	Position Title	
Environment and Climate Change	Information Systems Analyst	
Position Number	Community	Division/Region
23-14193	Yellowknife	Land Management and Administration/HQ

PURPOSE OF THE POSITION

The Information Systems Analyst (the Analyst) is responsible for managing data and workflow systems, as well as providing data analysis and technical support services to the Land Management and Administration Division (the Division) in the daily use and application of various land administration systems. The Analyst also supports Divisional staff by engaging with and understanding their system needs, targeting system enhancements, business process changes and analysis that provide the most accurate information for tracking, reporting and planning their activities. The position plays a crucial role in enabling effective and efficient decision support and reporting in areas of land use and land management.

SCOPE

The Information Systems Analyst is located in Yellowknife and reports to the Manager of Geomatics and Information Technology (Manager). The Analyst's primary responsibility is to provide system management and technical support services to system users in the Division, who are tasked with tenure administration and management of public land in the Northwest Territories (NWT).

The mandate of the Department of Environment and Climate Change (the Department) is 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 NWT residents. Natural resources include both renewable and non-renewable resources.

Within this mandate, the Division must operate within an ever-changing legal environment, including contract, property and administrative law, Indigenous Rights law and common law. Various parties, including Indigenous governments and organizations, community governments and the private sector, can have competing rights, priorities and land interests that need to be balanced.



The Division must manage, administer and plan for the sustainable use of public land in the Northwest Territories in a fair and transparent manner that reflects the interests of the people of the Northwest Territories. The Department operates within the central belief that land management is a core public good and critical asset that needs to be effectively and efficiently administered.

The management and administration of land in the Northwest Territories occurs in a unique context and is influenced by distinct social, economic and cultural factors and complex regulatory considerations. The Northwest Territories land management system features a unique land ownership structure that includes public lands, Indigenous-owned settlement lands, federal lands and private lands; a complex regulatory regime governing the use of land, water and resources; Lands, Resources and Self-government Negotiations and Agreements; and Indigenous Rights and Consultation requirements.

The Division provides overall leadership, management, expertise and technical advice on the development of operational policies and procedures for the administration of public land with respect to land tenure. Responsibilities include managing and administering land dispositions and grants, land valuation and pricing, securities, regulatory coordination, consultation and engagement, survey applications, record keeping, maintaining land tenure databases, revenue collection and unauthorized use and occupancy processes.

The Analyst operates within a legislative framework that includes the *Northwest Territories Lands Act and Regulations*, the *Commissioner's Land Act and Regulations*, the *Public Land Act and Regulations*, the *Community Planning and Development Act and Regulations*, the *Area Development Act and Regulations*, the *Mackenzie Valley Resource Management Act and Regulations*, *Mining Regulations*, and the various settled Lands, Resources and Self-government Agreements within the Northwest Territories. The position also operates within a Cabinet-approved policy framework that includes, but is not limited to, the Land Pricing Policy, the Limitation of Land Sales Policy, the Land Use and Sustainability Framework, Northern Lands-Northern Leadership, and the Recreational Leasing Policy.

The Analyst's key responsibilities include management and quality control of the information systems for the Division, and analysis and implementation of the Division's ever-evolving system needs. This includes analyzing and validating data from the various land tenure systems where interests on Northwest Territories land are reviewed and recorded. The systems connect to the Geographic Information System (GIS) to represent information spatially and are profoundly integrated with the Northwest Territories' financial system, System for Accountability and Management (SAM) and document management system, Digital Integrated Information Management System (DIIMS). The systems must be both reliable and precise to ensure the accurate and verifiable transfer or conveyance of legal rights in land. The Analyst must ensure data integrity by evaluating system workflows and implementing the configuration of updates to business rules where validation can be improved and efficiencies



can be gained. The Analyst facilitates land use information access by ensuring it is provided conveniently and reliably, enabling responsible and appropriate decisions to be made efficiently and effectively.

The Analyst is also responsible for providing technical support, advice and training to ensure the legal data is captured, accessed, and used accurately. The Analyst also assists in providing spatial data analysis to ensure effective and efficient development and delivery of GIS information and services to the Division and make it publicly accessible to external clients.

The Analyst's work is performed under the direction of the Manager. The Analyst meets regularly with the Manager to review work in progress, discuss future work requirements and prioritize projects or assignments.

RESPONSIBILITIES

1. Conducts analysis and recommends, develops and manages projects required for system enhancements and business process improvements.

- Collaborates closely with Departmental staff and stakeholders to define business requirements.
- Translates business requirements into design specifications for system development, ensuring program objectives, business rules, policies and user needs are addressed.
- Reviews and assesses any system changes to ensure alignment with Departmental legislation, policies, procedures and standards.
- Investigates, documents, and understands technology and advancements that may benefit the Division and encourage innovation.
- Provides recommendations for the development of functional enhancements, including gathering and assessing information across business lines.
- Leads analysis on the integration of existing systems and data, ensuring a consistent merged experience for users.
- Seeks user feedback and incorporates it into enhancements and improvements to the information systems.
- Project manages the procurement of third-party support for applications, including project scoping and the development of Terms of References.
- Manages contract resources to ensure projects are delivered on time, within budget and consistent with defined deliverables.
- Coordinates the development, testing and implementation of new software versions reflecting effective changes.
- Maintains and updates system user manuals as processes and workflows change to ensure efficiency and transparency.
- Establishes and monitors processes to measure and evaluate the effectiveness of the services provided.



2. Monitors the appropriate use of Departmental information and manages the protection of access to personal privacy.

- Ensures that the public portal to the systems is operational, current, and always available.
- Monitors access on day-to-day basis and oversees audits to the system to ensure private information is kept confidential and secure.
- Collaborates with the Departmental Communications staff on the sharing of Divisional information posted to the Department's websites, including forms, data, and process information.
- Works with stakeholders and end users to enhance the quality and quantity of data available while protecting the sensitive personal information of clients.
- Conducts regular assessments to ensure data integrity and security, and the accessibility of publicly shared information.
- Ensures consistency and clarity of publicly shared information with current processes and procedures.

3. Leads and supports information sharing to Divisional and Regional staff and clients.

- Develop and maintain updated training programs for the Division's information systems, including for public use of the online portal of the systems.
- Identify system deficiencies, document user dissatisfaction and plan and recommend system enhancements.
- Research and recommend training courses for software applications for all Divisional staff.
- Provide training to all users of the Division's information systems and maintain updated training logs.
- Liaise with Information Systems Shared Services to manage user access and system security permissions.
- Respond to requests for information related to software applications, data and reporting.
- Initiate and monitor actions to resolve system and service problems.
- Identify and investigate problem causes and implement appropriate remedies and preventative measures.
- Coordinate digital information transfer between government departments and boards, subject to privacy protocols.
- Support capacity building within the Division and Regional Offices to meet Departmental needs.

4. Maintain and support core business processes and procedures for the Division.

- Develop, update and maintain template forms, documents, letters and notifications for all users, ensuring current versions of each are accessible from a single repository.



- Document, develop, review and maintain Divisional Standard Operating Procedures, ensuring the current version is accessible to staff from a central repository.
- Track Divisional performance against Client Service Standards and report on targets regularly.
- Provide support in reporting business performance measures for senior management, including business planning, collaborating with the Policy, Legislation, Evaluation and Communications Division.
- Identify, review and update business processes and documentation to reflect legislative and policy initiatives or amendments.
- Represent the Division in information technology and systems-related initiatives.

5. Provides support to the Division for the provision of GIS services

- Help to maintain the operation, currency and accuracy of the spatial information in the GIS system.
- Validate the quality of spatial data for integration with the other systems.
- Draft mapping of the boundaries of dispositions and ownership of land in the Northwest Territories and help maintain the accuracy of the mapping of the parcels in the GIS.
- Provide advice and drafts standard GIS products and services, including maps and sketches, to attach to legal documents.
- Provide support and advice to applicants so that subdivision and land applications are processed efficiently and in a timely manner.
- Provide support and training to clients, including GNWT users and public clients, in the utilization of the ATLAS GIS system.

WORKING CONDITIONS

Physical Demands

The job involves sitting for long periods while working on a computer, reading, and consulting with staff and stakeholders. Daily tasks include lifting files and registries, bending, stretching, and reaching for filing for up to an hour a day.

Environmental Conditions

The job involves constantly dealing with various issues amidst interruptions and multiple demands from clients, contractors, phone calls, and staff. This is further complicated by time constraints, conflicting priorities, repetitive tasks, and, sometimes, irregular hours.

Sensory Demands

No unusual demands.



Mental Demands

No unusual demands.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of database theory, design, modelling and administration to manage and integrate legislation with data.
- Knowledge of troubleshooting and problem-solving techniques for system implementation issues.
- Knowledge of software/hardware component trends to recommend upgrades to enhance technological capabilities.
- Knowledge of data entry, manipulation, retrieval techniques and the ability to utilize automated systems such as ArcGIS and various software and database applications (e.g., SQL Server, Microsoft Office Suite).
- Knowledge of technical training techniques, including communicating complex ideas in simple terms.
- Knowledge of geographic information systems, principles, aerial imagery, topographic mapping and their appropriate use.
- Knowledge of the external consulting and contracting industries for project-specific information and services.
- Knowledge of general information on record management policies and practices.
- Demonstrated ability to analyze complex issues, identify options and support sound decision-making.
- Familiarity with SQL relational databases and related software.
- Good understanding of project management principles, approaches, tools and techniques for system development, integration and implementation.
- Interpersonal skills and meeting facilitation abilities, including the ability to perform oral presentations and train colleagues
- Critical thinking and analytical skills.
- Oral and written communication skills, including the ability to understand and effectively communicate complex technology concepts to both professional and non-professional audiences.
- Sensitivity, tact, discretion and effective communication are necessary for training and communicating with colleagues, clients and others.
- Ability to interpret relevant legislative acts and regulations.
- Ability to decipher, organize, and analyze large volumes of data and identify trends or problems.
- Ability to consistently practice personal diversity, inclusion, cultural awareness, safety and sensitivity approaches in the workplace.

- 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 bachelor's degree in computer science, computer engineering, or a related field, along with three (3) years of relevant experience in a related field.

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