IDENTIFICATION

Department	**Position Title**	
Industry, Tourism and Investment	Manager, Mapping and Collections	
Position Number	**Community**	**Division/Region**
63-14340	Yellowknife	Northwest Territories Geological Survey / HQ

PURPOSE OF THE POSITION

The Manager, Mapping and Collections provides authoritative geoscience leadership for departmental geological mapping and collection programs. The Manager ensures these programs support a wide range of clients' needs for scientifically robust information that informs mineral exploration and development, along with the development and implementation of broader regulatory and land-use planning systems in which the mineral industry operates. Operating in a context of economic constraint and competing policy objectives, the Manager ensures programs are aligned with departmental priorities, demonstrate scientific integrity, and meet the needs of internal and external stakeholders across a range of regulatory and economic development functions.

SCOPE

Located in Yellowknife and reporting to the Director of the Northwest Territories Geological Survey (NTGS), the Manager, Mapping and Collections ("Manager") operates with considerable autonomy over project design, field execution and data stewardship for NTGS geological mapping and collection programs. The NTGS is a division of the Department of Industry, Tourism and Investment (ITI) in the Government of the Northwest Territories (GNWT). The Manager leads a team of four geoscientists that deliver high-quality research, geological mapping, data acquisition, and collection management projects that underpin evidence-based decision-making across the Northwest Territories (NWT) and partner jurisdictions.

The resource sector is a foundational contributor to the Northwest Territories' economy and socio-economic well-being. The sector has direct and indirect economic impacts that account for up to a third of the NWT's Gross Domestic Product. It is essential that these resources are responsibly regulated and managed to ensure northerners receive maximum benefits from the sector while negative impacts are minimized and effectively mitigated.

Geoscience data produced by the NTGS drives mineral-exploration investment, informs land-use planning, environmental assessment and Indigenous-government processes, and supports broader public-policy priorities for economic sustainability. By interfacing with intergovernmental mechanisms such as the Intergovernmental Geoscience Accord, the Manager ensures program delivery aligns with shared objectives and cost-effective partnership arrangements, thereby contributing directly to territorial economic growth and risk-reduction for private-sector investors. Through senior scientific leadership, regulatory oversight, and stakeholder coordination, the Manager is accountable for ensuring that the geoscience programs in the Manager's unit deliver robust, actionable data, reduce exploration risk, support land-use and environmental decision-making, and uphold the credibility of government science in the NWT and beyond.

Mapping programs are the backbone of Canada's provincial, national and territorial geological surveys, providing enduring results and benefits. This position holds critical accountability for directing bedrock and surficial geological mapping programs essential to informed resource development, land-use planning, and natural hazards mitigation. The management of these core geological survey activities delivers significant economic returns, as comprehensive mapping reduces uncertainty in public and private decision-making and provides the scientific basis upon which industry can plan investments in the NWT. These mapping programs are instrumental in providing foundational data for mineral, energy, and water resources while supporting understanding of natural hazards, climate change, economic development, and sustainability.

The Manager provides professional and managerial leadership for three to five concurrent projects, each typically lasting two to five years. Core responsibilities include co-developing, implementing and evaluating project scopes, timelines and budgets (annual operational budget ≈ $150 k, supplemented by external funding ranging from $50 k to $2 M); securing grants, negotiating agreements with academic, industry and governmental partners and fostering collaborative networks; overseeing production, quality control and public release of geoscience datasets and peer-reviewed publications; ensuring project milestones are met; and resolving complex technical issues as they arise.

The Manager's scientific supervision role cultivates a safe supportive and inclusive workforce that encourages continuous learning and professional development. This encompasses promoting safe work practices for remote field operations, developing health-and-safety plans, coaching staff to advance technical expertise and professional competencies, reviewing and approving maps and manuscripts for publication, supporting collaboration within and between the NTGS work units as well as external partners, and managing workloads and performance.

The Manager's scientific role extends to support of regulatory functions, expressed in three distinct capacities: (1) The Manager leads enforcement support of geoscience-related provisions of the NWT's Mineral Resources Act (MRA) and the NWT Mining Regulations,

supervising the management of industry-submitted drill core information. (2) The Manager, as a proponent of field programs, ensures that all field programs themselves comply with the applicable legislation governing land and water use, conduct of scientific activities and professional practice accreditation. This requires the manager to integrate regulatory compliance and stakeholder engagement into project design, permitting and execution. (3) The science products produced by the Mapping and Collections team provide expert information and support to external regulatory boards and agencies—including those operating under the Mackenzie Valley Resource Management Act—supplying geoscientific data that supports consideration of mineral resource potential in broader initiatives such as land use or conservation planning.

As a key member of the NTGS management team, the Manager ensures high standards of scientific excellence and client-service by collaborating with the Director to shape public geoscience strategies, allocate human and financial resources, and define dissemination standards. Work is performed under the direction of the Director, with the Manager having significant latitude over geoscience projects, provided that the policies, guidelines, and interests of the NTGS and the GNWT are upheld. The role represents the organization in governance forums, aligning geoscience programs with intergovernmental priorities and ensuring that collaborative agreements deliver measurable economic, scientific, and societal benefits.

Overall, the Manager's portfolio blends scientific excellence, regulatory integrity and strategic partnership to drive responsible resource development, sustain economic opportunity, support land use decisions, and maintain the long-term credibility of government science in the Northwest Territories.

RESPONSIBILITIES

1. **Ensures the Northwest Territories Geological Survey (NTGS) delivers authoritative, high-impact geoscience knowledge through the leadership of mapping and collection programs, productive technical partnerships, and scientific information stewardship.**

    - Provides NTGS-wide leadership and accountability for a comprehensive portfolio of bedrock and surficial geology mapping programs and geological collection projects that advances the organization's mandate, public policy, and economic decision-making.
    - Defines scientific strategy and program priorities by integrating emerging scientific advances, intergovernmental responsibilities, client needs, and organizational objectives, and by approving project portfolios and resource allocation to maximize scientific relevance and organizational impact.
    - Exercises senior professional and managerial authority over geoscience activities, including field programs, methodologies, data acquisition, interpretation, and safety

governance, to ensure work meets the highest territorial, national and international scientific, regulatory, and professional standards.

- Directs and is accountable for the quality, integrity, and timely release of geoscience data, publications, and information products by establishing expectations, reviewing and approving scientific outputs, and ensuring products are defensible, accessible, and fit for public and stakeholder use.
- Leads and sustains complex, multi-jurisdictional scientific partnerships and alliances with other geological surveys, governments, universities, funding agencies, and the private sector by negotiating and administering MOUs and contribution agreements and aligning responsibilities to achieve shared outcomes.
- Builds long-term scientific capacity and organizational credibility by mentoring, coaching, and guiding professional staff
- Fosters collaborative research networks by co-supervising graduate student projects and contributing expert authorship, peer review, and thought leadership.

2. Leads the effective administration, enforcement, and transition of geoscience-related mining regulations to support responsible mineral development.

- Provides authoritative geoscientific and managerial leadership for the administration and enforcement of the NWT Mining Regulations by supervising the management of drill core information submitted by industry to meet regulatory requirements, and ensuring regulatory decisions are scientifically sound, consistent, and defensible.
- Advises on the development, interpretation, and application of regulatory policies, standards, procedures, and guidelines governing geoscience-related requirements, including mediating complex or contentious issues to support fair, timely, and transparent regulatory outcomes.
- Oversees the provision of expert geoscience advice and information to internal and external clients, including management of public geological collection resources, to improve mineral exploration and geoscience project outcomes.
- Supports the Regulatory Division and contributes to technical geoscience discussions related to the administration and enforcement of the NWT Mining Regulations the Mineral Resources Act.
- Maintains situational awareness of the impacts of mining regulation on mineral sector activities and emerging issues by engaging with industry, monitoring regional and national developments, and representing the organization on cross-jurisdictional and cross-sector committees to anticipate client needs and inform regulatory and program responses.
- Leads the development and implementation of new geoscience-related regulatory frameworks under the Mineral Resources Act and its regulations by conducting jurisdictional research, contributing subject-matter expertise to draft regulations, interpretative bulletins, and advising senior management, central agencies, the Minister and Cabinet on policy and regulatory implications.

- Manages the transition of staff roles, processes, and capabilities through the transformation of the regulatory regime for mineral management by assessing impacts on the incumbent's work unit, guiding change implementation, and ensuring the team is prepared to deliver regulatory functions effectively in a transformed legislative environment.

3. **Ensures NTGS geoscience expertise and program outputs for mapping and collections are aligned with departmental objectives and are actively translated, communicated, and applied through engagement and expert advice to inform regulatory, planning, and public decision-making.**

- Leads provision of trusted, senior geoscience advice and influence across governments that integrates scientific evidence with an understanding of departmental mandates, and decision-making processes to inform mineral exploration, development, and the broader regulatory regime in which mineral management takes place (land-use planning, land and water regulation, conservation planning, and environmental assessment).
- Leads the synthesis, interpretation, and translation of geoscience programs and results into information, tools, and practices that can be applied by regulators, planners, policy analysts, and other disciplines, ensuring advice is relevant, understandable, and fit for diverse public purposes.
- Establishes and sustains influential internal and external relationships with clients, partners, and scientific communities across all levels of governments that the NTGS engages with, to build trust, align interests, and foster cooperative approaches to evidence-informed policy, economic and regulatory outcomes.
- Manages a client- and partner-centered approach by actively engaging stakeholders to understand their perspectives, needs, and constraints, and by managing advisory and knowledge-sharing processes in ways that support effective service delivery and contribute to the success of other organizational business lines.
- Directs the preparation and delivery of authoritative scientific briefings and exchanges using appropriate communication vehicles to clearly convey geoscience concepts, uncertainty, and implications, and to build confidence in NTGS' ability to deliver the relevant timely cost-effective projects to support the needs of NWT residents, businesses and governments.
- Represents and advances the NTGS' scientific role and priorities by promoting coherent messages, products, and services within strategic forums, identifying and pursuing national and international partnering opportunities, and positioning the organization as a credible, collaborative contributor to science, policy, and regulatory initiatives.

4. **Leads and manages administration of the business unit's people, resources, and operations to enable high-quality scientific and regulatory outcomes in a safe, ethical, inclusive, and collaborative work environment.**

- Provides overall leadership and management of the business unit's human, financial, and administrative resources to ensure the timely, efficient, and fiscally responsible delivery of scientific and regulatory services and outputs aligned with approved work plans and organizational priorities.
- Builds and sustains a diverse, inclusive, and supportive scientific workforce by leading recruitment, retention, mentoring, and succession planning in ways that uphold scientific standards while recognizing and addressing systemic barriers to participation, and by fostering a workplace culture of mutual support, teamwork, knowledge-sharing, and professional development.
- Leads, supports, and develops professional staff by establishing clear expectations, encouraging senior scientists to mentor and coach junior and new staff, and ensuring ongoing performance management, training, and career development practices build long-term organizational capacity and expertise.
- Ensures regulatory responsibilities are discharged impartially and independently by guiding staff to apply evidence-based judgment, scientific integrity, and consistent standards in regulatory and advisory roles, and by reinforcing ethical conduct and public service values.
- Ensures a safe and respectful workplace and field environment by monitoring workloads, approving health and safety plans for remote and field-based activities, ensuring staff maintain appropriate training and competencies, and promoting a culture of shared responsibility for physical and psychological safety as well as personal and team well-being.
- Manages financial, contractual, and funding activities by completing budget forecasts and monthly variance reports, securing and administering external funding, and directing procurement, contract management, and contribution agreements to ensure resources are used effectively and in compliance with financial and administrative requirements.

5. Contributes to integrated NTGS, ITI, Intra and Interdepartmental leadership teams and intergovernmental management structures to ensure geoscience programs are aligned with policy objectives, governance frameworks, and collective management accountabilities.

- Participates as a member of the NTGS and ITI management structure by working collaboratively with peer managers to establish common approaches, shared standards, and mutual accountability for the delivery of geoscience programs and regulatory functions within an integrated organizational framework.
- Represents the business unit within interdepartmental and intergovernmental management and governance forums related to geoscience programs to coordinate roles, align priorities, and ensure effective collaboration across jurisdictions and levels of government.

- Provides strategic advice and analysis to senior management by contributing to briefings, reports, and decision-support materials that integrate scientific evidence with policy considerations, enabling informed decisions by departmental leadership, central agencies including the Financial Management Board and Cabinet.
- Ensures alignment between scientific activity and policy intent by actively balancing the freedom of scientific inquiry with the need for relevance to legislative mandates, government priorities, and public outcomes, and by advising on the implications of scientific work for policy development and implementation.
- Contributes to strategic planning by bringing forward insights on emerging geoscience issues, client and partner needs, and interjurisdictional trends, and by helping translate long-term organizational vision into coherent, achievable priorities across business units.
- Supports the senior management team in the development and continuous improvement of shared management frameworks by contributing expertise and leadership to common approaches related to governance, work and budget planning, partnerships, and accountability systems that enable coordinated delivery and oversight across the organization.

WORKING CONDITIONS

Physical Demands

Office work involves minimal physical demands.

Fieldwork involves sustained physical exertion over extended periods including hiking over rough and uneven terrain for full workdays while carrying field equipment and geological samples (with individual loads up to 25 kg) for 8 hours a day. Field operations also require participation in physically demanding logistical activities typical of remote camps such as equipment handling, camp setup, loading and unloading vehicles, boats and aircraft. The physical demands are experienced daily during field deployments which may extend several consecutive weeks.

Environmental Conditions

Normal office environment for most of the year, with periodic extended field deployments of up to approximately eight weeks annually in remote locations.

During fieldwork, the incumbent is regularly exposed to uncontrolled outdoor environments and occupational hazards inherent to remote operations including: rapid and adverse changing weather; uneven terrain; aviation-supported, off-road and/or marine travel; wildlife and other safety risks. These conditions are experienced daily during field deployments.

Sensory Demands

Normal office environment outside of the field season.

Field work requires sustained vigilance, situational awareness and a state of heightened alertness to the safety of the team and operations in dynamic and potentially hazardous environments. Workdays may be extended requiring continues monitoring of environmental and operational conditions. The incumbent is subject to impacts associated with long hours of field work (e.g. fatigue). These demands are present throughout field assignments.

Mental Demands

Ongoing management of multiple concurrent responsibilities including scientific leadership, regulatory oversight, human and financial resource management and stakeholder engagement, often under time constraints.

During field deployments, the incumbent assumes continuous responsibility for scientific decision-making, logistical coordination, and staff safety, requiring real-time judgment under conditions of uncertainty and risk. The incumbent is also subject to substantial disruption of family life. These demands are experienced daily during field assignments, which may extend for a couple of months.

The incumbent is also responsible for the timely delivery of reports and results, presenting research or work plans to scientific peers, collaborators, community groups, etc. and attending geoscience meetings in Southern Canada two to four times per year.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of theories, principles, methods, and practices relevant to geoscience mapping initiatives, sufficient to serve as the organization's senior technical authority.
- Knowledge of the NWT's bedrock and surficial geology to guide scientific programs, to serve as a subject matter expert for clients, academia and senior management, and to represent the organization within national and international geoscience communities.
- Knowledge of mineral exploration drill core data and metadata and documentation practices.
- Knowledge of the legal, ethical, and professional obligations of a registered professional geoscientist (P.Geo.), including standards of independence, impartiality, and evidence-based decision.
- Knowledge of federal and territorial legislation, regulations, and policy frameworks governing mineral exploration, mining, and field-based research and operations, and the role of geoscience within regulatory systems.

- Knowledge of how scientific evidence informs government policy, regulatory decision-making, and public interest outcomes.
- Knowledge of the balance between scientific independence and the organizational mandate of public geoscience dissemination.
- Knowledge of intergovernmental roles, responsibilities, and collaboration mechanisms under geoscience accords and related agreements.
- Knowledge of human resource frameworks sufficient to manage staff responsibly and consistently within collective agreements and organizational policy.
- Knowledge of GNWT financial management systems, financial planning, budgeting, forecasting, and contract and contribution agreement management to ensure efficient and accountable use of public funds.
- Knowledge of health, safety, and risk management principles related to remote field operations, including ensuring appropriate training, planning, and mitigation measures.
- Knowledge of standard office and project management tools required to manage complex programs and reporting obligations.
- Working knowledge of modern geoscience data systems, GIS, databases, analytical tools, and digital information delivery platforms sufficient to oversee data stewardship and dissemination.
- Demonstrated skills in geoscience leadership, including conducting fieldwork, writing and reviewing geoscience technical reports and publications, managing project budgets and teams, writing annual performance reviews, mentoring scientists, and presenting the results of their original scientific work to colleagues and stakeholders.
- Analytical and synthesis skills to integrate data from multiple sources, identify trends, and translate scientific results into usable public-sector information products.
- Interpersonal and relationship-building skills to establish and maintain effective working relationships with Indigenous Governments and Organizations, industry, academia, other governments, and internal stakeholders.
- Skills in scientific writing, peer review, and quality assurance to ensure authoritative, defensible public-sector geoscience outputs.
- Ability to anticipate emerging issues, opportunities, and risks affecting geoscience programs and to adapt strategies accordingly.
- Ability to lead, mentor, and develop highly skilled professional staff, including succession planning, recruitment, performance management, and coaching of early-career scientists.
- Ability to foster a collaborative, respectful, and inclusive workplace that values diversity, cultural awareness, teamwork, and knowledge sharing, while maintaining high scientific and ethical standards.
- Ability to conceptualize, prioritize, and oversee complex, multi-year scientific programs and portfolios, including aligning project activities with organizational, intergovernmental, and economic objectives.
- Ability to manage multiple funding sources, including leveraging external and intergovernmental partnerships to deliver cost-effective geoscience programs.

- Ability to exercise organizational influence, build support for scientific advice and program decisions, and contribute constructively within interdepartmental and intergovernmental management systems.
- Ability to understand client, stakeholder and partner perspectives and manage sensitive, complex, or contested issues with tact and professionalism.
- Ability to communicate complex scientific concepts, evidence, and uncertainty clearly and credibly to a range of audiences, including senior decision-makers, regulators, scientific peers, and non-technical audiences.
- Ability to translate scientific programs and results into information, tools, and practices applicable across disciplines and policy domains.
- 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 Master of Science degree with a specialization in bedrock geology or a related field, and five years of work experience in industry, academia or a government agency in a related capacity, including one year of supervisory experience.

The incumbent must be eligible for professional registration in the NWT and Nunavut Association of Professional Engineers and Geoscientists (NAPEG).

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