GOVERNMENT OF THE NORTHWEST TERRITORIES

Knowledge Agenda:
Northern Research for Northern Priorities

GOUVERNEMENT DES TERRITOIRES DU NORD-OUEST

Programme **du savoir**:
Recherche dans le Nord pour les priorités du Nord

Government of Northwest Territories
Gouvernement des Territoires du Nord-Ouest

If you would like this information in another official language, call us.
English

Si vous voulez ces informations dans une autre langue officielle, contactez-nous.
French

Kīspin ki nitawihtīn ē nīhīyawihk ōma ācimōwin, tipwāsinān.
Cree

Tłı̨chǫ yatı k’ę̀ę̀. Dı wegodı newǫ dè, gots’o gonede.
Tłı̨chǫ

ʔerıhtł’ís Dëne Sųłıné yatı t’a huts’elkër xa beyáyatı theɔ́ą ɔat’e, nuwe ts’ën yółtı.
Chipewyan

Edı gondı dehgáh got’ı̨e zhatıé k’ę̀ę̀ edatł’éh enahddhę nıde naxets’ę́ edahłí.
South Slavey

K’áhshó got’ı̨ne xədə k’e hederı ɔedı̨htl’é yerınıwę nídé dúle.
North Slavey

Jii gwandak izhii ginjìk vat’atr’ijąhch’uu zhit yinohthan jì’, diits’àt ginohkhìi.
Gwich’in

Uvanittuaq ilitchurisukupku Inuvialuktun, ququaqluta.
Inuvialuktun

ᑲᑦᑯᐊ ᑎᑎᖅᑲᐃᑦ ᐱᓪᒪᔨᐅᕆᑦ ᐃᓄᐹᑎᑐᓕᖅᑎᑦ, ᐅᕐᓂᑎᓐᓄᓂ ᐅᖃᑲᓪᓚᖅᑲᖅᑐᑎᑦ.
Inuktitut

Hapkua titiqqat pijumagupkit Inuinnaqtun, uvaptinnut hivajarlutit.
Inuinnaqtun

Indigenous Languages:
ECC_Communications@gov.nt.ca

French:
867-767-9348
866-561-1664 Toll Free

EXECUTIVE SUMMARY

The Knowledge Agenda: Northern Research for Northern Priorities 2025 outlines the Government of the Northwest Territories' (GNWT) research priorities for the next five years. It serves as a framework for guiding, supporting, and collaborating on research that is relevant, ethical, and designed to provide direct benefits to NWT residents, communities, and ecosystems.

The 2025 Knowledge Agenda builds on the 2017 version and reflects priorities from all GNWT departments. It promotes the use of all forms of knowledge (Indigenous, scientific, and community-based) to answer questions that are relevant and topical to NWT residents in the face of a changing climate.

Research in the NWT has a history of being extractive and without full community engagement or benefit. Researchers are beginning to shift their focus toward ensuring that projects and outcomes are co-developed by, and relevant to northerners. This updated Knowledge Agenda builds on this momentum to guide research that supports decision-making, strengthens partnerships, and addresses urgent issues.

The Knowledge Agenda identifies five main knowledge priorities, each with sub-priorities and specific knowledge areas, where researchers are encouraged to develop specific research questions. The five main knowledge priorities are:

1. Cultural Sustainability – Understanding and supporting Indigenous cultures, knowledge systems, languages, and heritage.
2. Environmental Stewardship – Expanding environmental knowledge to protect ecosystems and manage natural resources sustainably.
3. Health and Wellness – Improving health outcomes through culturally safe, responsive, and evidence-based services.
4. Natural Resource Management – Maximizing benefits and minimizing impacts of renewable and non-renewable resource development.
5. Enduring Communities – Supporting the social, economic, and infrastructure resilience of NWT communities.

In addition to identifying research priorities, the Knowledge Agenda highlights four cross-cutting themes that apply to researchers are encouraged to consider in all projects:

1. Climate Change – Understanding that human and natural environments are rapidly changing and that solutions should be forward-thinking.
2. Indigenous Partnerships and Engagement – Building respectful, meaningful relationships in all aspects of research process.
3. Data Management and Emerging Technologies – Ensuring that data collection aligns with OCAP principles, properly archiving data when appropriate, and understanding that new technologies may be able to enhance the research process.
4. Enhanced Role for NWT Residents – Increasing community participation and leadership in research.

The Knowledge Agenda also outlines clear steps for becoming a research partner in the NWT, emphasizing early community engagement, adherence to ethical and licensing requirements, and meaningful sharing of results.

By working with partners across governments, research institutions, and communities, the GNWT aims to:

- Encourage research that meets the needs of Northerners.
- Integrate research findings into programs, policies, and decision-making.
- Promote economic opportunities and capacity-building through research.
- Strengthen the NWT's role as a leader in northern and Indigenous knowledge generation.

The 2025 Knowledge Agenda promotes collaborative, respectful, and impactful research that will help build strong, resilient communities and a sustainable future for the Northwest Territories.

SOMMAIRE

Le Programme du savoir : Recherche dans le Nord pour les priorités du Nord 2025 décrit les priorités de recherche du gouvernement des Territoires du Nord-Ouest (GTNO) pour les cinq prochaines années. Il sert de cadre pour guider et soutenir des recherches pertinentes, éthiques et conçues pour apporter des avantages directs aux résidents, aux collectivités et aux écosystèmes des TNO, et pour participer à de tels projets.

Le Programme du savoir 2025 s'appuie sur la version de 2017 et reflète les priorités de tous les ministères du GTNO. Il encourage l'utilisation de toutes les formes de connaissances (autochtones, scientifiques et communautaires) pour répondre aux questions pertinentes et d'actualité pour les Ténois face au changement climatique.

Historiquement, aux TNO, la recherche a toujours été axée sur l'exploitation des ressources, sans véritable engagement ni retombées au niveau communautaire. Les chercheurs commencent à s'orienter vers des projets élaborés conjointement avec les populations du Nord, ciblant les besoins de celles-ci. Le nouveau Programme du savoir s'appuie sur cette dynamique pour orienter la recherche vers la prise de décisions, le renforcement des partenariats et la résolution des problèmes urgents.

Le Programme du savoir cerne cinq grandes priorités en matière de connaissances, chacune comportant des sous-priorités et des domaines de connaissances spécifiques, dans lesquels les chercheurs sont encouragés à étudier des questions de recherche spécifiques. Les cinq grandes priorités en matière de connaissances sont les suivantes :

1. Pérennité culturelle – Comprendre et soutenir les cultures, les systèmes de connaissances, les langues et le patrimoine autochtones.
2. Gérance environnementale – Élargir les connaissances environnementales afin de protéger les écosystèmes et de gérer les ressources naturelles de manière durable.
3. Santé et bien-être – Améliorer les résultats en matière de santé grâce à des services réactifs, adaptés à la culture et fondés sur des données probantes.
4. Gestion des ressources naturelles – Maximiser les avantages et minimiser les répercussions de l'exploitation des ressources renouvelables et non renouvelables.
5. Collectivités durables – Soutenir la résilience sociale, économique et infrastructurelle des collectivités ténoises.

SOMMAIRE SUITE

Outre le fait de déterminer les priorités de recherche, le Programme du savoir met en avant quatre thèmes transversaux que les chercheurs sont encouragés à prendre en compte dans tous leurs projets :

1. Changement climatique – Comprendre que les environnements humains et naturels évoluent rapidement et que les solutions établies doivent être tournées vers l'avenir.
2. Partenariats et échanges avec les communautés autochtones – Établir des relations respectueuses et significatives dans tous les aspects du processus de recherche.
3. Gestion des données et technologies émergentes – Veiller à ce que la collecte de données soit conforme aux principes PCAP des Premières Nations (propriété, contrôle, accès et possession), archiver correctement les données en temps opportun et comprendre que les nouvelles technologies peuvent améliorer le processus de recherche.
4. Élargissement du rôle des Ténois – Accroître la participation et le leadership communautaires dans le domaine de la recherche.

Le Programme du savoir définit en outre des étapes claires pour devenir partenaire de recherche aux TNO, en mettant l'accent sur la tenue d'échanges avec la collectivité suffisamment tôt, le respect des exigences éthiques et des conditions d'octroi de permis, ainsi que le partage significatif des résultats.

En collaborant avec des partenaires au sein des gouvernements, des instituts de recherche et des collectivités, le GTNO souhaite :

- Encourager la recherche qui répond aux besoins des Ténois;
- Intégrer les résultats de la recherche dans les programmes, les politiques et les processus de prise de décision;
- Promouvoir les débouchés économiques et le renforcement des capacités grâce à la recherche;
- Renforcer le rôle des TNO en tant que chef de file dans la production de connaissances issues du Nord et des peuples autochtones.

Le Programme du savoir 2025 encourage des projets de recherche collaboratifs, respectueux et productifs qui contribueront à bâtir des collectivités fortes et résilientes et à assurer un avenir durable pour les TNO.

TABLE OF CONTENTS

MESSAGE FROM THE PREMIER 3

1.0 WHAT IS THE KNOWLEDGE AGENDA AND WHO SHOULD READ IT? 5

2.0 WHAT IS KNOWLEDGE IN THIS CONTEXT? 6

2.1 What Does Knowledge Generation provide to the GNWT? 7

3.0 HOW TO BECOME A KNOWLEDGE PARTNER WITH THE GNWT 8

4.0 HOW WE IDENTIFY KNOWLEDGE PRIORITIES 10

5.0 CROSS-CUTTING THEMES 11

5.1 A Holistic Perspective of Knowledge Generation 11

5.2 Cross-cutting Themes Partners Should Consider 12

5.2.1 Climate Change 12

5.2.2 Indigenous Partnerships and Engagement 13

5.2.3 Data Management and Emerging Technologies 13

5.2.4 Enhanced Role for NWT Residents 13

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS 14

6.1 CULTURAL SUSTAINABILITY 14

6.1.1 Strategic Goal 14

6.1.2 Specific Knowledge Sub-Priorities 14

Cultural Sustainability in the NWT: Facts and Challenges 15

6.2 ENVIRONMENTAL STEWARDSHIP 15

6.2.1 Strategic Goal 15

6.2.2 Specific Knowledge Sub-Priorities 15

Environmental Stewardship in the NWT: Facts and Challenges 16

6.3 HEALTH AND WELLNESS 16

6.3.1 Strategic Goal 17

6.3.2 Specific Knowledge Sub-Priorities 17

Health and Wellness in the NWT: Facts and Challenges 18

6.4 NATURAL RESOURCE MANAGEMENT 18

6.4.1 Strategic Goal 19

6.4.2 Specific Knowledge Sub-Priorities 19

Natural Resource Management in the NWT: Facts and Challenges 19

6.5 ENDURING COMMUNITIES 20

6.5.1 Strategic Goals 20

6.5.2 Specific Knowledge Sub-Priorities 20

Enduring communities in the NWT: Facts and Challenges 21

TABLE OF CONTENTS CONTINUED

7.0 MOVING FORWARD ON PRIORITIES 22

7.1 Knowledge Priority Methods and Information Management 22

7.2 What Will These Knowledge Priorities Help the GNWT Achieve? 22

7.3 How the GNWT Will Support These Efforts 23

Appendix A: Additional Resources for GNWT Research Priorities 24

Appendix B: Additional Resources for Indigenous Organization Research Priorities 27

Credit: NWT Geological Survey

MESSAGE FROM THE PREMIER

The Northwest Territories is a region rich with knowledge, tradition, and innovation. The 2025 Knowledge Agenda updates and builds upon the research priorities outlined in the 2017 Knowledge Agenda. It provides a framework to strengthen our territory through research and partnerships that are driven by the unique needs of NWT residents.

The 2025 NWT Knowledge Agenda addresses the key priorities identified in our mandate. Under our strong economic foundation priority, we are working to encourage a diverse range of economic activities by fostering innovation, promoting entrepreneurship, and building meaningful partnerships in every region. The Knowledge Agenda supports this by attracting research that leads to new opportunities, ideas, and investments that benefit Northerners.

In support of our emergency management priority, the Knowledge Agenda promotes research that enhances our understanding of climate change-related threats and impacts, and supports innovative approaches to climate change mitigation and adaptation. As the North experiences the effects of climate change at an accelerated rate, locally-informed and practical research is more important than ever.

As part of our access to healthcare priority, we are advancing work that aligns with the Knowledge Agenda's health and wellness research priority. By supporting studies on community health, mental wellness, and culturally appropriate care, we are building the knowledge needed to foster healthy people and communities, and to provide support for healing across the NWT.

By embracing all forms of knowledge—scientific, Indigenous, and community-based—the Knowledge Agenda charts a path forward for ethical, inclusive, and impactful research in the Northwest Territories. It recognizes the value of strong Indigenous partnerships, community involvement, and knowledge sharing. It reflects our commitment to research that is conducted for the benefit of Northerners. It's about more than answering questions—it's about supporting strong, resilient and safe communities for Northerners, and a thriving territory for generations to come.

The Government of the Northwest Territories remains committed to supporting a strong, connected, and informed North through research that reflects and responds to the realities of Northerners.

R.J Simpson
Premier of the Northwest Territories

MESSAGE DU PREMIER MINISTRE

Les Territoires du Nord-Ouest (TNO) sont riches en connaissances, en traditions et en innovation. Le Programme du savoir 2025 reprend les priorités de recherche énoncées dans le Programme du savoir 2017 et les étoffe. Il fournit un cadre visant à renforcer notre territoire grâce à des projets de recherche et à des partenariats axés sur les besoins particuliers des Ténois.

Le Programme du savoir des TNO 2025 aborde les priorités clés cernées dans le cadre de notre mandat. En vertu de notre priorité concernant la mise en place d'une base économique solide, nous nous efforçons d'encourager un large éventail d'activités économiques en favorisant l'innovation, en promouvant l'esprit d'entreprise et en établissant des partenariats fructueux dans chaque région. Le Programme du savoir soutient cette démarche en attirant des projets de recherche qui débouchent sur de nouvelles opportunités, de nouvelles idées et de nouveaux investissements au profit des Ténois.

En ce qui concerne notre priorité en matière de gestion des urgences, le Programme du savoir appuie la recherche qui nous aide à mieux comprendre les défis et les répercussions liés au changement climatique, tout en soutenant des approches innovantes pour en atténuer les effets et s'y adapter. Comme le Nord est démesurément affecté par le changement climatique, il est plus important que jamais de mener des recherches concrètes et adaptées aux réalités d'ici.

En ce qui a trait à notre priorité en matière d'accès aux soins de santé, nous portons des projets cohérents avec les visées du Programme du savoir relativement à la santé et au bien-être. C'est en soutenant des études sur la santé communautaire, le bien-être psychologique et les soins adaptés à la culture que nous acquerrons les connaissances nécessaires pour préserver la santé des résidents et des collectivités partout aux TNO et pour faciliter la guérison.

Le Programme du savoir englobe toutes les formes de connaissances, qu'elles soient scientifiques, traditionnelles ou locales, et il nous permet de faire progresser la recherche éthique, inclusive et constructive aux TNO. Le Programme du savoir témoigne de l'importance des partenariats solides avec les communautés autochtones, de la participation des collectivités et du partage des connaissances. Il traduit notre engagement envers les recherches dont peuvent bénéficier les Ténois. Oui, nous devons répondre à des questions, mais il s'agit surtout de soutenir des collectivités fortes, résilientes et sécuritaires, et de permettre aux générations futures de profiter d'un territoire prospère.

Le gouvernement des Territoires du Nord-Ouest reste déterminé à appuyer des initiatives de recherche reflétant le contexte nordique et en phase avec les réalités des Ténois, pour un territoire fort, uni et à la pointe des connaissances.

R.J Simpson
Premier ministre des Territoires du Nord-Ouest

1.0 WHAT IS THE KNOWLEDGE AGENDA AND WHO SHOULD READ IT?

The Knowledge Agenda: Northern Research for Northern Priorities 2025 describes the research priorities of the Government of the Northwest Territories (GNWT). The GNWT develops and updates the Knowledge Agenda every five years to encourage current and new research partners to address territorial priorities using all forms of knowledge, including western science, Indigenous and local knowledge. The Knowledge Agenda reflects the knowledge priorities of all GNWT departments. It lists the research themes and questions GNWT departments collectively believe can help to improve the quality of life of Northwest Territories (NWT) residents and to maintain the integrity of NWT cultures, ecosystems, and communities. It also provides examples of desired outcomes of the research and suggests paths to achieving those outcomes.

In the past, research in the NWT was often driven by the scientific curiosity and interests of southern research institutions and academics. This resulted in many high-quality investigations, but also meant that areas of importance to NWT residents were overlooked or under-represented. Research results were often inadequately reported back to northern communities and therefore not able to be integrated into decision making or policy development in government. Notably, Indigenous Knowledge-based research has been under-represented in all areas of policy development and decision-making. The priorities in this Agenda demonstrate how this situation is changing.

This five-year renewal of the Knowledge Agenda represents an opportunity to further encourage, and direct research in the northern interest. By aligning their work and funding proposals with the priorities identified in this document, research partners can be assured that their research and knowledge generation is relevant to and benefits NWT residents. The GNWT encourages researchers and other knowledge partners interested in conducting work in the NWT to consider the main research priorities and strategic goals listed in this document and attempt to align their work, whenever possible, with the priorities outlined in Section 6.

2.0 WHAT IS KNOWLEDGE IN THIS CONTEXT?

The GNWT defines knowledge as the theoretical or practical understanding of a subject. Unlike the term "science", which connotes both a body of knowledge and a specific (scientific) methodology for acquiring that knowledge, the term "knowledge" is neutral as to how that knowledge was obtained. The Knowledge Agenda is based on the premise that knowledge on any subject can, and should, be obtained by processes conducted using the most appropriate methodologies for each specific question. The GNWT acknowledges that many different approaches can be used to increase our collective knowledge about the physical, biological, and human environments of the NWT, including research, monitoring and knowledge-sharing, through science and Indigenous ways of knowing.

The GNWT plays many roles in the process of generating and consuming knowledge (Figure 1). The Knowledge Agenda describes knowledge needs and priorities from all perspectives. Current and potential partners exploring the Knowledge Agenda are encouraged to consider how knowledge generated through partnership could influence or contribute to these different knowledge generation roles.

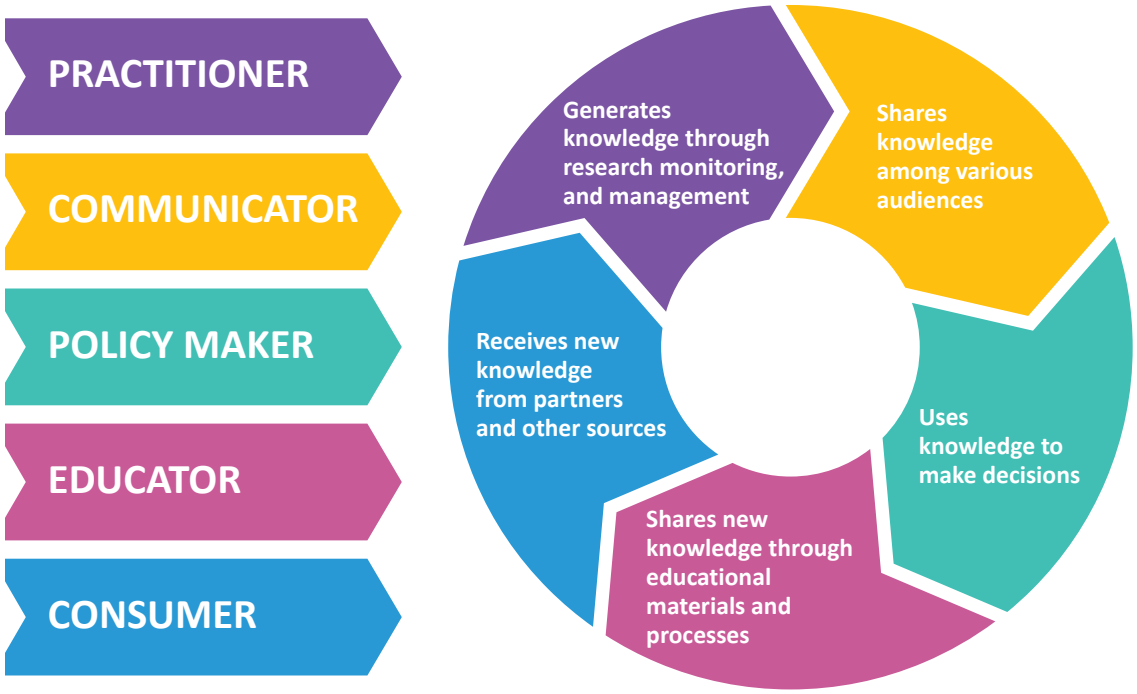

Figure 1. GNWT roles in knowledge generation. The GNWT plays different roles in the knowledge generation process, ranging from practitioner to consumer, using generated knowledge to make decisions, inform programs, and share information across the NWT. The Knowledge Agenda is intended to inform current and new partners about our knowledge priorities to encourage successful partnerships in all knowledge generation areas.

2.0 WHAT IS KNOWLEDGE IN THIS CONTEXT? CONTINUED

2.1 What Does Knowledge Generation Provide to the GNWT?

The knowledge generation process provides the information GNWT departments require to carry out their mandates and support NWT residents and communities.

The GNWT:

- requires reliable, evidence-based knowledge and information to make decisions,
- has an essential role in acquiring and managing knowledge, and ensuring that Traditional Knowledge is included in the knowledge generation process,
- directs and supports research done by internal departments, boards, agencies, and outside institutions,
- understands collaborations with other agencies are necessary to augment internal efforts to fill knowledge gaps,
- often engages as a partner, participant or reviewer of community, federal, territorial, and international research initiatives,
- faces major social, political, economic, and environmental changes, requiring multiple types of knowledge to address,
- has committed to providing evidence-based information in a series of binding agreements and strategies made at territorial, national and international levels,
- develops policies and legislation founded in evidence-based knowledge and information.

Credit: NWT Geological Survey

3.0 HOW TO BECOME A KNOWLEDGE PARTNER WITH THE GNWT

Knowledge and research partnerships are valuable for the GNWT. Knowledge partners help the GNWT achieve mandates and goals and ensure the GNWT is always working with the most up-to-date information available. This section lays out the basic steps prospective partners can take to become a knowledge and research partner with the GNWT and conduct research in the NWT.

Steps to becoming a successful research partner in the NWT:

1. Develop a research plan or proposal that links to the main priorities and sub-priorities, while also addressing the cross-cutting themes. If conducting research in a specific community or region, proposed research should also consider the research priorities identified by partner organizations and communities. Become familiar with the relevant policies, procedures, and regulations surrounding research for prospective partner departments. For example, health researchers will need to be aware of provisions in the *NWT Health Information Act*. All departments follow the research standards set out by the Tri-Council in the Ethical Conduct for Research Involving Humans policy statement.

2. Become familiar with the relevant guidelines for conducting research in the NWT:
   - The *Scientists Act*
   - Pathway to Better Monitoring in Canada's North
   - *Health Information Act*
   - Doing Research in the Northwest Territories

3. Contact the GNWT departments that are conducting work in the areas associated with the proposed research as there may be opportunities for collaboration and can confirm that the work is relevant to GNWT priorities. It also avoids the potential for duplication of effort. A list of GNWT departments, websites, and keywords based on the department's knowledge priorities can be found in Appendix A of this document.

4. It is essential to involve communities and relevant regional bodies where the research will occur to make sure the work is relevant to them. This engagement should occur early in the research process, prior to the development of specific research questions. Introductions to, and support from, communities, Indigenous governments, and Indigenous organizations in whose Traditional Territory the work will take place, as well as any relevant regional bodies, will need to happen before the work can begin.[1] Community priorities, participation and community leadership should be built into programs. Ideally there would be a community co-lead for projects.

[1] For example, to carry out health-related research work in Wek'èezhíı (Tłı̨chǫTraditional Territory), the researcher will need to establish relationships with and gain permissions from the community(ies) where work will occur, as well as bodies like Hotìı ts'eeda, a research unit hosted by the Tłı̨chǫ Government, in participation with NWT Indigenous Governments. GNWT partners may be able to assist in this process by facilitating introductions.

3.0 HOW TO BECOME A KNOWLEDGE PARTNER WITH THE GNWT CONTINUED

5. Involving community members in co-developing research wherever possible is important. If funding is secured for hiring research assistants from the community, plan sufficient time to provide training. Researchers should make every effort to maximize benefits of the research, including economic, for communities.

6. Learn about the importance of building and respecting relationships when conducting research in the NWT, through conversations with prospective partners and reports/guides such as:
   - Working Together
   - Towards reconciliation: 10 Calls to Action

7. Depending on the nature and location of the research, developing partnerships with federal departments or agencies may also be required. For example, research involving fisheries or marine mammals, or research taking place in lands administered by Parks Canada will all require additional federal partnerships and possibly permits. The document Doing Research in the Northwest Territories can provide guidance on whether or not additional relationships are needed.

8. Acquire a research licence and/or research permit, where applicable. Scientific research licences are mandated through the *Scientists Act* and issued through the Scientific Services Office, Department of Education, Culture, and Employment by the Science Administration Officer. Licence applications are submitted through the POLAR portal and are reviewed by Indigenous Governments and organizations that exist where the research is to take place. Regular communications with relevant governments and organizations on research findings is expected and upon completion of the licensed research, a research summary is required to be submitted to Scientific Services Office. This summary keeps the scientific knowledge within the NWT through an annual compendium. For more information on research licensing and permit requirements and processes, visit the apply for a research license page.

9. Communication is vital at all stages. It may be helpful to identify resources for initial meetings, in-person if possible, prior to developing research questions and submitting funding proposals so that community engagement is meaningful and research serves to answer questions that are important to the community and others. Plan to provide regular updates to and answer questions or concerns from all partners, and plan to visit and speak to community members about the project. Once research work is complete, ensure data-sharing and knowledge mobilization plans are followed. Engagement is just as important at the end of the research to ensure results are shared with the community, preferably in-person.

Credit: NWT Geological Survey

4.0 HOW WE IDENTIFY KNOWLEDGE PRIORITIES

The Knowledge Agenda is updated every five years by all GNWT departments. Main priority knowledge areas are identified based on the mandate, responsibilities, and strategic priorities of the GNWT.

This update confirms the five knowledge priorities of the current Knowledge Agenda which can contribute to improving the quality of life of NWT residents and maintaining the integrity of NWT cultures, ecosystems, environments, and communities. These knowledge priorities are:

1. **cultural sustainability**
2. **environmental stewardship**
3. **health and wellness**
4. **natural resource management**
5. **enduring communities.**

Continued research is needed to address these knowledge priorities to minimize knowledge gaps and support evidence-based decision-making. A full description of the five main research priorities and their associated research sub-priorities is provided in Section 6.

Credit: GNWT and CCMEO

5.0 CROSS-CUTTING THEMES

5.1 A Holistic Perspective of Knowledge Generation

The knowledge priorities identified in Section 4 are not isolated from each other. In fact, elements of each subject can provide valuable context for the others. For example, supporting cultural sustainability contributes to improved health and wellness. Similarly, increased interest and participation in environmental stewardship can enhance the effectiveness of many natural resource management programs. While each knowledge priority is presented individually in Section 6, it is also important to consider these subjects from this more holistic perspective. Figure 2 demonstrates some of the ways in which these interconnections influence multiple subject areas.

There are some interconnections among knowledge priorities that are especially critical for knowledge and research partners to consider. These are referred to as 'cross-cutting themes'. The GNWT has identified four critical cross-cutting themes, which affect research across all knowledge priorities in important ways. When preparing to conduct knowledge work in the NWT-partners will benefit from considering how each of these cross-cutting themes applies to their proposed work.

The four cross-cutting themes are:

1. **climate change**
2. **Indigenous partnerships and engagement**
3. **data management and emerging technologies**
4. **enhanced roles for NWT residents.**

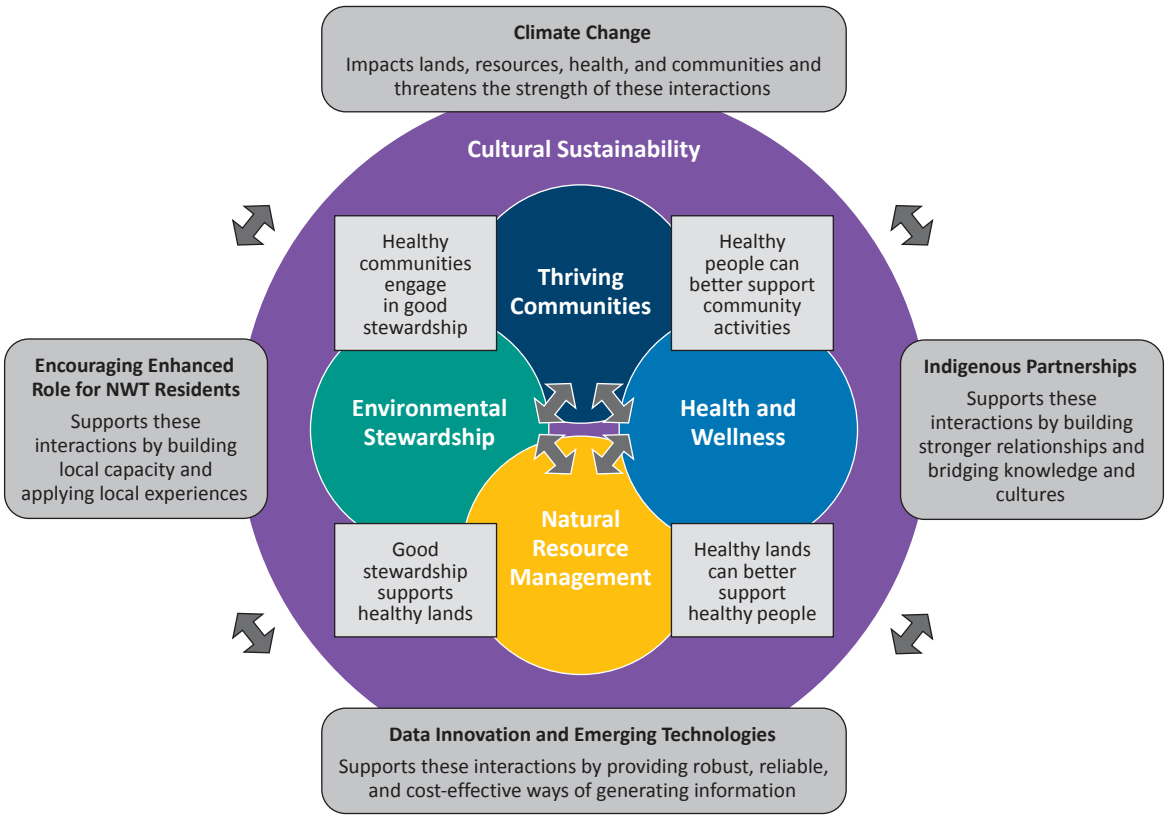

Figure 2. This diagram depicts some essential relationships among knowledge priorities and cross-cutting themes, and among the knowledge priorities themselves. The grey arrows indicate that the cross-cutting themes also influence each other in similar ways. These interconnections highlight the value of partnerships across specialties and among GNWT departments. Although this image is focused on cross-cutting themes for clarity, numerous other important relationships among these subject areas occur.

5.0 CROSS-CUTTING THEMES CONTINUED

5.2 Cross-cutting Themes Partners Should Consider

5.2.1 Climate Change

The North is experiencing rapid and extensive changes linked to climate. This phenomenon has far-reaching effects that are altering northern ecosystems and all aspects of life in the NWT, including built and natural environments, the health of residents, the territory's governance, and socio-economic future. The security of NWT heritage resources is also affected by climate change.

Climate change is a core connection because it directly and indirectly impacts the lives of all NWT residents. It is applicable, to some degree, to all knowledge priorities. An enhanced understanding of how climate change is altering environmental processes – and the challenges and opportunities these changes present for the NWT – are essential parts of the GNWT's knowledge needs. Information specific to providing stability and security to NWT residents is a priority across departments, including activities such as flood mapping, waste management, and other hazard information mapping. Northern communities have considerable need for knowledge generation, hazard mitigation, and adaptation surrounding climate change as they are required to adapt to changing environmental conditions.

Credit: NWT Geological Survey

5.0 CROSS-CUTTING THEMES CONTINUED

5.2.2 Indigenous Partnerships and Engagement

The governance and government structures of the NWT are unique in Canada. Indigenous Peoples in the NWT are keepers of many kinds of knowledge, including deep knowledge of land, water, language, culture, and tradition.

The GNWT recognizes that Indigenous governments, organizations, and communities have a critical role to play in knowledge generation and sharing. Building partnerships and relationships is a crucial part of this work for all departments. Knowledge partners are expected to engage fully and meaningfully with Indigenous communities and partners and do so from a perspective that recognizes the complex history of relationships between Indigenous and Western systems. Agreements on data sharing with Indigenous communities and partners should be finalized before research begins.

5.2.3 Data Management and Emerging Technologies

Due to the vast landscape and sparse population of the NWT, innovative data and technologies for observation, analysis, and communications are useful. There are many emerging technologies that allow for data to be collected with a lower environmental impact and with lower costs. Earth observations via remote sensing (if combined with proper with field validation) are one of the ways to address the challenges in collecting data over large, remote landscapes. The focus of the GNWT Innovation Action Plan is on accelerating the rate of innovation across all sectors (not just the technology sector).

Credit: GNWT Environment and Climate Change

Data and information management and sharing are essential for effective integration of science into policy. Knowledge partners need to be aware of the unique conditions under which data are gathered, and knowledge is generated in the North. We strongly recommend prospective partners contact relevant GNWT departments for guidance on technologies that are effective in northern research. We also expect that knowledge partners will participate fully in data-sharing processes, including communicating results across a variety of fora and making data available to GNWT employees and other researchers and information users.

5.2.4 Enhanced Role for NWT Residents

The people of the NWT need to play a greater role in the generation of knowledge about our landscapes, resources, and communities. Increased capacity to participate in the research process will lead to increasingly self-reliant individuals responsible for making informed decisions about their own health, wellness, education, and economic diversification. The ability to generate and answer research questions is an essential component of healthy, vibrant communities.

Community engagement in planning and conducting research increases the public's trust and acceptance of the results and supports the development of an NWT-based research community. A leadership role for Northerners is of particularly high importance in health and social research; however, recognizing the need to engage and involve NWT residents is a crucial planning step in the development and delivery of programs in each of our five knowledge priorities. Knowledge partners will be expected to evaluate, and where possible, provide opportunities for enhanced participation of NWT residents in their work and be able to provide avenues for residents as end users of the results they generate.

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS

In this section, the five main knowledge priorities identified in Section 4 are described in detail. We also provide prospective knowledge partners the GNWT's strategic goal for research in each area to highlight our key interests. Each main knowledge priority includes specific sub-priorities, as identified by GNWT departments, to further refine our knowledge needs.

6.1 CULTURAL SUSTAINABILITY

Community involvement at all stages of a study is vital for successful research in cultural sustainability. The GNWT is working towards a more in-depth understanding of the various pressures being felt by Indigenous governments, Indigenous organizations, and peoples of the NWT. We wish to highlight the vast breadth of Indigenous Knowledge held by Indigenous Peoples within the NWT and support effective Indigenous community-driven and community-based research.

For knowledge partners, this means learning how to work in the field of cultural sustainability. Indigenous, cultural, local and historical knowledge should always be treated with respect. Researchers must follow community and ethical protocols, seeking prior consent and other input from community and regional leaders on how to conduct their research. Researchers should ensure that they interact with knowledge they receive in ways approved by the knowledge holder, and also be sure to provide new knowledge to the partners in a way that is accessible and usable.

6.1.1 Strategic Goal

To study past and current cultural practices, traditions, and Indigenous Knowledge to better understand and support these practices and traditions in the future.

6.1.2 Specific Knowledge Sub-Priorities

There are currently two priority knowledge areas with respect to cultural sustainability:

1. **Impacts of development and climate change on northern and Indigenous cultures.**

   Knowledge is needed to improve our understanding of the impacts on:

   - Indigenous Knowledge, customs, and practices (both current and historical),
   - socio-economic opportunities,
   - heritage resources.

2. **Preservation and use of cultural practices, Indigenous Knowledge, and languages.**

   Knowledge is needed to improve our understanding of:

   - Indigenous laws, country food systems,
   - historical and present-day social support networks, the traditional economy,
   - the ways culture and heritage intersect with other knowledge priorities,
   - opportunities to support responsive development planning, heritage resources across the territory.

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS CONTINUED

Cultural Sustainability in the NWT: Facts and Challenges

- The NWT is comprised of many diverse and vibrant cultures with long and extensive histories.
- The NWT has 11 official languages, nine of which are Indigenous.
- Globalization forces are altering and impacting traditional cultures and ways of life, changing the way traditional methods and knowledge are maintained.
- Indigenous Knowledge, lifestyles and customs thrive through continued use and practice.
- The primary focus and leaders of cultural sustainability research should be Indigenous communities.
- Research related to culture and Indigenous Knowledge must recognize the knowledge holder as the proprietor of the information.

6.2 ENVIRONMENTAL STEWARDSHIP

Research helps produce the basic knowledge, predictive modeling and impact assessment expertise needed to enable effective management of the northern environment and its resources. Environmental research should investigate both biological and physical environments and their inherent connections. The results of such research allow for the potential and actual cumulative impacts of human development and natural processes to be better measured and analyzed. There is also a continuing need for environmental baseline data collection, coordination, analysis, storage and dissemination to support environmental assessments and regulatory processes.

High quality traditional knowledge, local and scientific knowledge research is needed for effective environmental regulation and management, land use planning and water resource management.

6.2.1 Strategic Goal

To expand our basic environmental knowledge and expertise with a view to supporting economic, social, and cultural progress, while maintaining healthy and resilient ecosystems.

6.2.2 Specific Knowledge Sub-Priorities

There are currently three priority knowledge areas with respect to environmental stewardship:

Improving our understanding of how climate change is impacting impact air, land, and water.

Knowledge is needed to improve our understanding of:

- Scalar differences in climate change impacts (e.g., local, regional, territorial),
- effects of range expansions of flora and fauna including invasive species, diseases, and pathogens,
- the economic costs of climate change in terms of ecosystem function,
- environmental and geotechnical implications of changes in permafrost regimes and sensitive terrains,
- changes in forest productivity, condition, carbon dynamics, fire regimes and ecosystem-scale impacts of fire regime change.

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS CONTINUED

Understanding, addressing and reducing of the impacts of human activities.

Knowledge is needed to improve our understanding of:

- how and where cumulative effects occur,
- mitigation measures, best practices, and offsets related to development,
- impacts from upstream pollution sources and pollutant transport, and contaminants,
- best practices to measure the social return on investments,
- how to enhance equitable involvement in co-management.

Increasing our understanding of northern species, landscapes, ecosystems, and climatic processes.

Knowledge is needed to improve our understanding of:

- landscape-level changes in ecology and wildlife, including changes over time due to climate change, pollution, other disturbances,
- key threats to species at risk (such as landscape changes, pollution, and diseases or parasites) and how these threats are related to climate and human activity,
- climate and hydrological processes,
- forest renewal and dynamics after disturbances.

Environmental Stewardship in the NWT: Facts and Challenges

- The northern environment is sensitive to change from local, national, and global drivers such as climate change, the long-range transport of contaminants, and habitat fragmentation (due to natural or human disturbance).
- Long-term monitoring is essential to understand the state of ecosystems throughout the different regions of the NWT and to assess climate change, cumulative impacts, and biodiversity.
- Increased understanding of geophysical, biological, climate, and hydrological processes are required to comprehend ecosystem functioning territory wide.

6.3 HEALTH AND WELLNESS

The Northwest Territories faces unique and complex health challenges shaped by geographic isolation, climate change, an aging population, and a history and legacy of residential schools and colonization. Of critical importance are culturally safe and responsive health and social services systems. In addition to significant health disparities between Indigenous and non-Indigenous residents, the NWT has a lower proportion of the population who rate their mental health status as being excellent or very good compared to the Canadian average. Knowledge partners are essential in developing nuanced, client-oriented research and advancing innovative methodologies that address social determinants of health and generate evidence that can contribute to a better understanding of health and wellness unique to NWT. Such knowledge supports continuous quality improvement of programs and services to promote the health and wellness of NWT residents and communities.

The Department of Health and Social Services (HSS) is in the process of revising their research agenda. The HSS Research Agenda is updated every five years and includes specific research priorities and more information for partnering with HSS and conducting health and social services research in the NWT.

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS CONTINUED

6.3.1 Strategic Goal

To support the health and wellness of NWT residents, families, and communities by improving capacity for evidence-informed practice and policy through data, knowledge, and research.

6.3.2 Specific Knowledge Sub-Priorities

The Department of Health and Social Services' strategic planning framework can be used to guide knowledge generation and research:

Improving health of the population & equity of outcomes.

Knowledge is needed to:

- Improve capacity to support core public health functions.
- Enhance primary health care in the communities through the delivery of culturally safe and relationship-based health and social services.
- Improve health promotion, chronic disease prevention and self-care in the communities.
- Improve availability and quality of services for vulnerable populations.

Provide better access to better services.

Knowledge is needed to:

- Identify continuous quality improvement opportunities or initiatives that may be effective in improving service delivery, access, impact, or client experience.
- Provide access to the right combination of mental health and addictions services, treatments and supports, when and where people need them.
- Reduce gaps and barriers to promote Aging in Place for seniors and elders.
- Improve services and supports for children and their families.

Improving quality, efficiency, and sustainability.

Knowledge is needed to:

- Improve quality, operational efficiency and reducing growth in costs.
- Improve capacity for evidence-informed practice and policy through data and research.
- Evaluate sustainable technology investments to keep pace with changing patient/provider needs.
- Assess strategic investments to efficiently manage our assets for the delivery of program and services.

Build a stable and representative workforce.

Knowledge is needed to:

- Improve health labour force planning to better meet the system's needs, reduce vacancies and reliance on locums.
- Remove barriers to hiring local people.
- Improve workforce engagement and develop strategies and initiatives aimed at improving hiring practices and retention.

Credit: NWT Geological Survey

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS CONTINUED

Health and Wellness in the NWT: Facts and Challenges

- The NWT healthcare system faces significant sustainability challenges due to the high cost of providing services, reliance on specialized services from other jurisdictions, and the logistical difficulties of providing healthcare across a vast and sparsely populated territory.
- NWT has a higher proportion of the population than the national average considered to be obese, who identify as smokers and who self-report as heavy consumers of alcohol. These lifestyle and behaviour indicators are risk factors for poor health outcomes and contribute to chronic disease.
- NWT has a lower proportion of the population who rate their mental health status as being excellent or very good compared to the Canadian average. Poor mental health status can lead to several negative and comorbid health outcomes including problematic substance use, hospitalization, self-injury and suicide.
- NWT population has higher rates of communicable disease, such as sexually transmitted and blood-borne infections. An outbreak of syphilis was declared in 2019 and is ongoing. From 2019 to 2022, syphilis rates in the NWT increased by over 300%. The NWT has the highest rate for infectious syphilis in Canada as of 2023, with ten times the national rate (311.1 per 100k vs 30.5 per 100k).
- NWT has higher rates of suicide compared to the national average, with this being a particularly significant issue for northern communities across Canada. Elevated suicide rates in northern communities reflect broader health and social challenges and require targeted prevention and mental health support strategies.

6.4 NATURAL RESOURCE MANAGEMENT

The NWT has a long history of resource management and development, with billions of dollars generated mainly from mining and oil and gas extraction activities. Some of these activities have led to the development of other natural resources, such as hydroelectric and wind power. Many direct and indirect benefits accrue to NWT residents, but 'boom and bust' cycles as well as environmental and social challenges also occur. There is an ongoing need to better understand and manage the NWT's natural resources to maximize economic, environmental, and social benefits while minimizing negative impacts.

Knowledge partners can support the GNWT by engaging in research to guide natural resource discoveries and sustainable development, including mineral deposits and other materials, and renewable resources such as timber and fish stocks. Knowledge partners can also support us in realizing the opportunity to manage current challenges actively and proactively, such as climate change, technological advancements, permafrost changes, and more.

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS CONTINUED

6.4.1 Strategic Goal

To expand our knowledge and expertise to manage natural resources, support economic and industrial progress, and create opportunities for the development of new resources and technologies, while minimizing environmental impacts.

6.4.2 Specific Knowledge Sub-Priorities

There are currently two priority knowledge areas with respect to natural resource management:

Discovery, assessment, and use of natural resources.

Knowledge is needed to improve our understanding of:

- Identification, assessment, value, and monitoring of natural resource potential (renewable and non-renewable) in the NWT,
- historical, current, and changing patterns of renewable resources harvest,
- potential for and opportunities associated with timber harvesting in the NWT (e.g., collecting fuel from firebreak clearing),
- development, implementation, use and export (if appropriate) of conventional and unconventional energy sources,
- exploration ways to diversify the NWT's economy to increase resiliency.

Management of environmental impacts caused by natural resource development and use in a changing environment.

Knowledge is needed to improve our understanding of:

- the opportunities and impacts (individual and cumulative) created by industrial development, community development, and climate change across sectors and communities,
- best practices for minimization, reclamation, and remediation techniques for industrial projects/ development and natural disturbances,
- best practices to adapt and mitigate rapidly changing permafrost conditions in both natural and built environments.

Natural Resource Management in the NWT: Facts and Challenges

- The NWT contains a wealth of renewable and non-renewable natural resources including water, minerals, energy (oil, gas, geothermal, biomass, wind, solar, and hydro), timber, traditional food stocks (fish, non-timber forest products and wildlife) and endemic genetic resources (genetic material found in species that are unique to the NWT).
- Natural resources development is of great economic importance to the NWT.
- Future generations in the NWT depend upon the responsible development of both renewable and non-renewable resources in the present.
- Natural resources are integral to the cultures of the NWT.

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS CONTINUED

6.5 ENDURING COMMUNITIES

The GNWT approach to supporting enduring communities is to focus on two distinct but connected aspects: social environment and civil infrastructure. We note priorities for both below and also include distinct strategic goals for each aspect.

The social environment of the NWT is characterized by a sparse, culturally diverse population with complex Indigenous, territorial, and federal government relations. Our knowledge partners should investigate ways to support social and economic development, social stability, culture, and livelihoods of all NWT residents. We need to produce information on how changes can be made in an environmentally, economically, culturally, and socially acceptable manner.

Civil infrastructure in the NWT is challenged by the size and isolation of communities and a highly variable climate. Smoothly functioning transportation systems, reliable delivery of materials and power, and ease of communication within, and between, communities are important for everyday living, business, and industrial activity. Many GNWT departments identified that research related to enduring communities must focus on alternative and unconventional energy sources to reduce the economic burden of power generation in the NWT. Our knowledge partners can provide support by generating information related to infrastructure longevity or evolving best practices under rapidly changing permafrost conditions.

6.5.1 Strategic Goals

To study, understand, and develop governance structures that best promote the health, safety, and sustainability of NWT communities.

To improve conditions for the continuing success of NWT communities to function both logistically and technically to ensure the reliability of materials, services, energy supplies and communications.

6.5.2 Specific Knowledge Sub-Priorities

Knowledge sub-priorities with respect to the social environment of enduring communities:

Promote the health, safety, and sustainability of NWT communities.

Knowledge is needed to improve our understanding of:

- supporting healthy, resilient communities with completed self-government agreements and finalized land claims,
- supporting integrated programs and services that can transition between the GNWT and Indigenous or community governments,
- economic opportunities at different scales (e.g., local, regional, territorial) that support local livelihood, job availability, and community goals.

Social well-being and economic development in NWT communities.

Knowledge is needed to improve our understanding of:

- socio-economic factors related to community longevity, sustainability, and prosperity,
- the benefits of different approaches to education, including early childhood education, in the NWT (e.g., Northern Distance Learning offers remote, synchronous learning opportunities so students can learn from their home communities; land-based learning)
- how best to implement commercial, business, land use, and recreation strategies in a northern context,
- opportunities to bolster capacity in communities,
- aligning economic development opportunities with priorities identified in land use plans and other planning and strategy documents,
- food security issues related to the high cost of living, northern agriculture, and food production.

6.0 KNOWLEDGE PRIORITIES AND RESEARCH NEEDS CONTINUED

Knowledge sub-priorities with respect to civil engineering of enduring communities:

Minimizing environmental impacts and maximizing utility and reliability in design, construction, and maintenance of civil infrastructure for communities.

Knowledge is needed to improve our understanding of:

- building and infrastructure deployment methods that increase efficiency, lower costs, and reduce waste,
- how building and road designs perform in a northern context,
- cold climate innovations and higher-performing, higher-durability community industrial and commercial buildings,
- how to base renewable energy plans on the use of local resources,
- design and management of municipal waste infrastructure, including contaminant leaching guidelines,
- infrastructure planning processes, including regionally specific variations,
- testing and implementing newer, more efficient technologies that reduce the impact associated with infrastructure on the surrounding environment.

Effects of environmental change on communities and infrastructure.

Knowledge is needed to improve our understanding of:

- how to advance home energy assessments and retrofits effectively,
- how atmospheric and aquatic contaminants impact cumulatively across socio-economic, environmental, and health systems,
- mitigation and remediation strategies for contaminants at regional scales,
- how changing hydrological and wildfire regimes impact transportation, infrastructure, and opportunities for risk reduction,
- how changes to river ice processes will impact ice-jams near communities at risk of flooding
- how changing permafrost regimes affect transportation and building infrastructure stability,
- what is needed for an efficient search and rescue system for the NWT.

Enduring communities in the NWT: Facts and Challenges

- NWT community members consistently identify issues related to enduring communities and health as their top research priorities.
- A changing climate and evolving hazards threaten the viability of current infrastructure.
- The NWT has a complex governance regime with diverse levels of interaction and partnership with agencies at the Indigenous, community, territorial, and federal government levels.
- Affordable and reliable low-carbon energy systems are key elements for sustainable communities.

7.0 MOVING FORWARD ON PRIORITIES

7.1 Knowledge Priority Methods and Information Management

There are numerous methodologies, models, and approaches that the GNWT and partners will deploy to realize the Knowledge Agenda. Some newer approaches rely on technological advances, such as using tools like Google Earth Engine to process NWT data for monitoring landscape change, something we could not do 10 years ago. The advancement of Artificial Intelligence (AI) tools and machine learning has been used to derive new datasets and to provide additional analyses to existing datasets.

Other approaches use tried-and-true methods such as using community surveys and feasibility studies to plan for new programs and services. The GNWT is also investigating new and traditional modes of energy production, assessing the potential for renewable energy development, and producing energy using forest biomass, and supporting exploration for critical minerals and oil and gas. Overall, there is much interest across departments to increase the production of baseline datasets for areas of interest and increase the amount of monitoring and number of monitoring sites. There is also interest in using datasets that have been made available more effectively, such as through conducting meta-analyses across datasets to explore correlations and connections. Knowledge and research partners can work with the GNWT to both study the effectiveness and reliability of numerous methodological approaches across the North and evaluate their use via such analyses.

The GNWT views data management, data sharing, and knowledge translation as essential components of the knowledge generation process: the work isn't complete until critical knowledge elements have been shared widely and used to inform policies and actions. The GNWT is working to create clear data collection, management and sharing protocols for the NWT. This will allow for the standardization of the collection, storage, and dissemination of observational data. Efforts must also be made to ensure this data is freely accessible and understood by GNWT employees as well as visiting researchers and other users for it to be correctly interpreted, analyzed, and incorporated into the decision-making process. Knowledge and research partners can assist by engaging in knowledge translation and public communications approaches to ensure NWT residents are aware of and can choose the degree to which they are engaged in research initiatives.

7.2 What Will These Knowledge Priorities Help the GNWT Achieve?

The priorities described for the five knowledge priorities in the Knowledge Agenda reflect the knowledge needs of the GNWT and the service and programming needs of NWT communities. Knowledge and research partner participation in achieving the strategic goals for each knowledge priority area will support the GNWT in enhancing numerous approaches, including:

- supporting community-driven and community-based research,
- integrating culture into programs and services,
- improving the accuracy of predictive models,
- connecting related information and priorities across departments,
- providing guidance on how to Indigenize programming,
- developing cultural wellness indicators,
- identifying evidence-practice gaps, and assessing intervention and implementation options for health and social services program delivery,
- developing integrated service delivery models for health and safety,
- using information gathered from traditional knowledge, harvest reporting, and contaminant monitoring to maintain healthy and resilient wildlife populations,
- improving and increasing the amount of long-term monitoring and monitoring sites throughout the NWT,
- supporting self-governing communities in taking on self-administration of justice through customary laws and legal principles,
- increasing transparent and evidence-based decision-making,

7.0 MOVING FORWARD ON PRIORITIES CONTINUED

- applying and integrating research results into government decision-making,
- reducing disparities in health status between Indigenous and non-Indigenous populations,
- delivering culturally safe programs and services,
- enhancing delivery methods related to chronic disease, communicable diseases, seniors' care, addictions, child and family services, early childhood development, and mental health,
- developing self-governance implementation models and governance strategies to coordinate and cooperate.

7.3 How the GNWT Will Support These Efforts

Progress on the research priorities listed in this Knowledge Agenda requires internal actions on the part of the GNWT.

Internally, the GNWT will:

- ensure relevant research results are integrated into GNWT decision-making at all levels of government,
- ensure research in the NWT is regulated and conducted using the most appropriate approaches and methods,
- evaluate and maintain adequate capacity (e.g., human and financial resources, collaboration, infrastructure) within departments to ensure continued progress on the identified priorities,
- maximize the efficiency and effectiveness of its knowledge efforts by using the best methods available and seeking opportunities for inter-departmental collaborations, especially related to climate change.

Meeting our goals for knowledge and research is only the first step to achieving the GNWT's ambitious mandates.

Credit: NWT Geological Survey

APPENDIX A: ADDITIONAL RESOURCES FOR GNWT RESEARCH PRIORITIES

Department/ Agency	Unit/Group	Keywords for Current Interests	Priority Strategies and Plans	Website(s)
Aurora Research Institute		• climate change adaptation • contaminants • Indigenous approaches to environmental management • mining legacy • permafrost	• Aurora Research Institute Strategic Plan 2016-2026	https://nwtresearch.com/
Education, Culture and Employment		• arts • culture and heritage • governance and authority • income security • language and interpretation	• Culture and Heritage Strategic Framework • Early Childhood Development Action Plan	https://www.ece.gov.nt.ca/en
Environment and Climate Change		• climate change • collaboration • impact and human-wildlife conflict mitigation • land use • sustainable development	• ECC Strategic Plan Implementation Plan • NWT State of the Environment Report • Sustainable Livelihoods Action Plan • GNWT Land Use and Sustainability Framework	https://www.ecc.gov.nt.ca/en
	Climate and Air Quality	• air quality • erosion • northern ocean acidification • permafrost • precipitation	• 2030 NWT Climate Change Strategic Framework	https://www.enr.gov.nt.ca/en/services/climate-change
	Conservation and Protected Areas/On the Land Unit	• culture and biodiversity • harvesting • healthy lands • healthy people • protected areas	• Healthy Land, Healthy People • Protected Areas Strategy	https://www.gov.nt.ca/ecc/en/services/learn-about-nwts-conservation-network https://www.gov.nt.ca/ecc/en/services/trapping-and-harvesting
	Cumulative Impact Monitoring Program	• caribou • fish • monitoring • research • water	• Pathway to Better Monitoring in Canada's North • NWT CIMP Water Monitoring and Research Blueprint • NWT CIMP Fish Monitoring and Research Blueprint	https://www.ecc.gov.nt.ca/en/services/nwt-cumulative-impact-monitoring-program-nwt-cimp
	Forest Management/ Forest Resources	• carbon equivalency • prescribed burning • traditional wildfire knowledge • wildfire operations • wildland fire /climate change impacts • community use • forest ecology • industrial forestry • monitoring forest health		https://www.enr.gov.nt.ca/en/services/forest-resources

APPENDIX A: ADDITIONAL RESOURCES FOR GNWT RESEARCH PRIORITIES CONTINUED

Department/ Agency	Unit/Group	Keywords for Current Interests	Priority Strategies and Plans	Website(s)
Environment and Climate Change	Water and Hydrology	• changing hydrology • flood risk • drought • water quality • water resources	• Northern Voices, Northern Waters: NWT Water Stewardship Strategy	https://www.enr.gov.nt.ca/en/services/water-management-and-monitoring/research-partnerships
Executive and Indigenous Affairs		• Arctic communities • Arctic security • healthy communities • housing • knowledge economy infrastructure	• Changing the Relationship: The GNWT Action Plan in Response to the Calls for Justice on MMIWG, and 2SLGBTQQIA+ People	https://www.eia.gov.nt.ca/en
Finance	Bureau of Statistics	• community surveys • data collection and modeling • information sharing with communities • strengthening indicators • updating analysis methods	• NWT Indicators Dashboard	https://www.statsnwt.ca/
	NWT Centre for Geomatics	• collaboration • community knowledge needs • data use and ownership • mapping • Traditional knowledge	• "Our Northern Heritage – Mapping the NWT" – Video	https://www.geomatics.gov.nt.ca/en
Health and Social Services		• aging with dignity • community-based mental health and addictions • early childhood development • health system planning • health technology • healthy choices • healthy families • improved service access • integrated service delivery • outcome equity	• Child, Youth, and Family Services Strategic Direction and Action Plan • An Alcohol Strategy for the Northwest Territories • NWT Disability Strategic Framework • GNWT Senior's Strategic Framework • NWT Aging with Dignity Action Plan • GNWT Health and Social Services Research Agenda	https://www.hss.gov.nt.ca/en https://www.hss.gov.nt.ca/en/services/health-and-social-services-research-nwt https://www.hss.gov.nt.ca/sites/hss/files/resources/equity-accessibility-inclusion-participation-nwt-disability-framework.pdf https://nwtresearch.com/sites/default/files/health_and_social_services_research_agenda.pdf
Housing NWT		• barriers in public housing • community housing plans • homeownership programs • innovation and sustainability • integrated service delivery	• Housing NWT Energy Management Strategy and Blueprint for Housing (Action Plan)	https://www.gov.nt.ca/en/department/nwt-housing-corporation

APPENDIX A: ADDITIONAL RESOURCES FOR GNWT RESEARCH PRIORITIES CONTINUED

Department/ Agency	Unit/Group	Keywords for Current Interests	Priority Strategies and Plans	Website(s)
Industry, Tourism, and Investment	Tourism and Parks	• knowledge economy • economic development • business supports • innovation and incentive structures • regional economic development plans	• SEED Policy • Rolling Action: Film and Media Strategy • Tourism 2025: Road to Recovery • NWT Manufacturing Strategy • Unlocking Our Potential	https://www.iti.gov.nt.ca/en
Infrastructure		• advanced and emerging technology • institutional knowledge retention • practical applications • transport infrastructure • weather data systems	• 2022 - 2025 Energy Action Plan • 2030 Energy Strategy	https://www.inf.gov.nt.ca/en
Justice		• family law • health and wellness • mediation services • program evaluation • rehabilitation approaches	• Victim Services Recommendation Action Plan	https://www.justice.gov.nt.ca/en/
Municipal and Community Affairs		• community capacity • e-learning • emerging technologies • knowledge development • planning and adaptation	• NWT Waste Resource Management Strategy and Implementation Plan	https://www.maca.gov.nt.ca/en
NWT Association of Communities		• community infrastructure • food security • hazard mapping and management • housing research and innovation • winter roads		https://nwtac.com/
NWT Geological Survey		• bedrock mapping • citizen science • community-based monitoring • resource potential • surficial geology		https://www.nwtgeoscience.ca/
NWT Power Corporation		• capital investment • energy efficiency and resilience • innovative monitoring and research techniques • shifting to renewable resources • socio-economic impact mitigation		https://www.gov.nt.ca/en/department/northwest-territories-power-corporation

APPENDIX B: Additional Resources for Indigenous Organization Research Priorities

Appendix B includes links to research priorities for Indigenous Organizations. Some Indigenous Organizations are in the process of developing research priorities and new links will be added when they become available.

Department/Agency	Link to Research Priorities
Gwich'in Renewable Resources Board	https://grrb.nt.ca/traditional-knowledge-research/research/research-priorities/
Inuvialuit Regional Corporation	https://irc.inuvialuit.com/research/research-at-a-glance/
North Slave Métis Alliance	https://www.nsma.net/
Sahtú Renewable Resources Board	https://www.srrb.nt.ca/research/research-in-the-sahtu-region
Tłı̨chǫ Government	https://research.tlicho.ca/

Credit: NWT Geological Survey

knowledgeagenda@gov.nt.ca