



## IDENTIFICATION

Department	Position Title	
Environment and Climate Change	Climate Services Specialist	
Position Number	Community	Division/Region
23-16779	Yellowknife	Climate Change, Cumulative Impacts and Knowledge/ HQ

## PURPOSE OF THE POSITION

The Climate Services Specialist (the Specialist) is the Government of the Northwest Territories (GNWT) authoritative expert for providing technical climate change related knowledge to clients and technical staff working on climate change related initiatives in the Northwest Territories (NWT). The Specialist is a resource for historical data, trends, indices, climate projections, maps, research results, model output and methodologies to support climate change decision making, including infrastructure design, adaptation planning, hazard mapping, risk assessments, land and water use permitting, environmental assessment, contaminated sites management, resource management, agriculture, and reclamation. The specialist undertakes quantitative analysis of climate and climate change data to develop tools and assist clients including Indigenous governments and Indigenous organizations, community governments, territorial government departments, federal government departments, regulatory co-management boards, and industry/businesses that must integrate climate change into planning and decision making.

The specialist synthesizes knowledge on climate impacts and climate data to develop information products to support decision making. The specialist provides training to clients on the use of climate and climate impacts tools, resources, and methodologies, and represents the GNWT on national and international climate services organizations and initiatives.

## SCOPE

Located in Yellowknife, within the Climate Change unit, and reporting to the Senior Climate Change Scientist (Senior Scientist), the Climate Services Specialist leads climate services knowledge transfer and product development, which include direct support of clients. Climate services are information and products that enhance users' knowledge and understanding about the impacts of climate on their decisions and actions. The specialist will be responsible for system coordination and content management for online repositories of Northwest Territories climate change resources.

The Specialist is a climate change resource for Indigenous governments and Indigenous organization and communities and provides advice on appropriate climate information to integrate into infrastructure design, adaptation planning, hazard mapping, risk assessments, environmental assessment, contaminated sites management, resource management, agriculture, and reclamation. To support the delivery of climate services, the Specialist leads the establishment of climate change repositories (databases) including the development of metadata, database workflows, legal disclaimers and content sharing agreements, and acts as a system administrator to approve content. The Specialist conducts outreach and engagement on climate services related information needs, determines gaps, informs new tool development, and where possible integrates traditional knowledge into climate tools and products.

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

The Climate Change, Cumulative Impacts and Knowledge Division (Division) coordinates climate change action for the Government of the Northwest Territories, leads the implementation of the government's Knowledge Agenda, and fulfills ECC's regulatory obligation to monitor and report on cumulative environmental impacts.

The Specialist contributes to developing, implementing and assessing the “Climate and Climate Change Knowledge Framework” (the Framework) which outlines a plan to address climate change-related information, data, and research needs to inform NWT climate change decision making. The Framework is guided by the 2030 NWT Climate Change Strategic Framework (CCSF) and its corresponding Action Plan (Action Plan) as well as the GNWT Knowledge Agenda.

The Specialist works to ensure Framework activities, including climate change knowledge synthesis, product development, and sharing is undertaken collaboratively by coordinating, engaging and building partnerships with internal (e.g. GNWT departments and ECC divisions) and external partners and stakeholders (e.g. Indigenous, community, territorial, provincial and federal governments, industry, environmental and non-government organizations, co-management and regulatory boards, academia and the public).

The Specialist maintains technical knowledge of climate change, including current research, climate impacts, data and climate change projections and provides advice in a level appropriate to the audience on the most appropriate climate resources to support climate change decision making.

The Specialist prepares technical and plain language reports and public information materials about climate data, climate impacts, climate products, and climate information. The Specialist evaluates proposals for funding, requests for tenders, and prepares and administers Contribution Agreements and Service Contracts. The Specialist sources financial resources from potential funding agencies through partnerships and grants and negotiates funding or partnerships with funding agencies.

The Specialist represents the GNWT in national, intergovernmental and industry and public forums, ensuring alignment with national standards where possible, while recognizing local issues. The position maintains qualifications in professional, technical and administrative areas by attending and completing seminars, training and other professional development opportunities as identified.

The Specialist demonstrates interpersonal skills and diplomacy and develops respectful working relationships with representatives from other GNWT departments, Indigenous governments and Indigenous organizations, community governments, co-management boards, the federal government, and other external partners

The Specialist collaborates closely with the Senior Climate Change Scientist, the Climate Scientist, and the Climate Change Technical Specialist to develop, synthesize, and share climate change knowledge products, datasets, and tools. Additionally, the Specialist will work with the Senior Science Advisor, the Regional Science Coordinator, the Senior Adaptation and Outreach Advisor, the Adaptation Specialist, and the Outreach Specialist, and also work closely with staff from the NWT Cumulative Impact Monitoring Program, the NWT Geological Survey and the Water Monitoring and Stewardship Division. The Specialist also works with partners and colleagues with Indigenous governments and Indigenous organizations, community governments and federal departments including Environment and Climate Change Canada (ECCC), especially the Canadian Centre for Climate Services, Natural Resources Canada, Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) and counterparts in provincial and territorial governments and regional climate services organizations.

Work is performed under the general direction of the Senior Climate Change Scientist.

## **RESPONSIBILITIES**

### **1. Shares and translates climate knowledge and provides Northwest Territories decision makers information and support on utilizing and interpreting climate knowledge.**

- Uses broad technical knowledge to makes recommendations to clients on the most appropriate resources, historical data, climate projections, maps, research results, model output, and methodologies to use for climate decision making including infrastructure design, adaptation planning, hazard mapping, risk assessments, environmental assessment, contaminated sites management, resource management, agriculture, and reclamation, as well as how to use and interpret the information.
- Operates a climate change information help desk, provides information at the appropriate technical level, and tracks all inquiries received by email, phone and in person to ensure clients are responded to in a timely way.
- Uses a broad understanding of northern climate change science, climate impacts, climate change policy, adaptation, mitigation and climate change resources to prepare summaries and metadata of all resources to be shared on the NWT climate change portal including translation of technical materials into plain language.

- Undertakes quantitative data analysis of and provides summaries of data using various standard scientific software programs to make maps, graphs, tables and presentations.
- Reviews, evaluates and synthesizes information and documents (i.e. research, reports, studies, proposals, climate tools, climate products, policies).
- Organizes and conducts project workshops, technical sessions, leads training (including developing training materials) and conducts community information sessions.
- Provides climate change technical climate change advice on regulatory processes such as environmental impact assessments and at department in public hearings.
- Utilizes a broad understanding of climate change and a network of professional contacts to assist clients in accessing resources from other levels of government or organizations.

**2. Designs, develops and maintains a central repository(ies), portals, system(s) to collect, warehouse, access and share a wide range of climate change knowledge, information, data, and visual products (photographs, drawings, maps, etc.) and research.**

- Leads scoping in collaboration with departments, stakeholders and GNWT information technology business units to assess the most appropriate architectures and database systems to house or link to information central climate change repositories.
- Develops and maintains appropriate information collection, cataloguing and storage methods and systems in alignment with GNWT internal planning process for Information technology / Information management projects.
- Liaises with GNWT departments, industry, regulatory boards, and researchers on matters related to the collection and stewardship of NWT climate change related resources.
- Develops standards for metadata and updates metadata for climate change resources.
- Performs regular scans of climate change-related datasets, resources and information in the NWT and develops a roadmap for making priority information available.
- Maintains partnerships with and knowledge of external data/information catalogues.
- Coordinates the collection and cataloguing of traditional, local and scientific knowledge and information concerning climate change research, monitoring, mitigation and adaptation processes and actions in the central repository.
- Acts as a system administrator to ensure timely review and approval of resources and information submitted by others.

**3. Develops and enhances climate change resources, tools and products.**

- Works collaboratively with partners to enhance climate change knowledge to develop new products, tools, compendiums, plain language summaries, including products integrating Indigenous Knowledge.
- Leads and manages projects using project management skills to develop new resources including the administration of contracts and contribution agreements and associated funds.
- Undertakes user needs surveys on required climate knowledge projects and prepares summary reports.

- Works with the GNWT Department of Justice to develop disclaimers for external partner resources.
- Develops and administers data and resource sharing and partnership agreements with third parties
- Develop workflows for approving external resources in conjunction with GNWT Information Technology and communications staff.
- Provides and synthesizes critical information and data reports to meet various needs
- Analyzes and reports on the climate change data and information in the central repository to support policy and program decision-making.
- Develops and supports territorial, national, and international partnerships to improve climate change information sharing standards.
- Represents the GNWT in territorial, national, and international meetings on climate data and information.
- Supervises casual and term staff involved in climate change knowledge projects.

**4. Works to implement the Climate Change Knowledge Framework and supports the Climate Change Unit.**

- Provides technical review of climate change proposals and makes recommendations for funding.
- Leads the planning and organization of meetings, workshops, conferences and training events to provide public information and planning sessions as needed to advance objectives of the Unit.
- Supports ECC and Division Business Planning and Operations.
- Assists with the development, reporting and evaluation of the of the Climate Change Strategic Framework Action plan.
- Identifies climate change knowledge gaps including resources, research, modelling, data, downscaling, and tools that will inform climate change strategic framework action plan actions, business planning and operations.

**WORKING CONDITIONS**

**Physical Demands**

Much of the incumbent's time is spent working in an office environment. The incumbent travels to communities and travel to meetings outside the territory. While the incumbent will not lead field work, due to Health and Safety requirements to always have two people in the field, the incumbent may be required occasionally to assist the larger team with field work preparations and in-frequently assist with field work which may include the ability to lift and maneuver heavy monitoring equipment; walk/hike/stand in outside situations to maintain and operate equipment; climb ladders to access equipment; and work in awkward positions.

**Environmental Conditions**

Exposure to various weather conditions such as extreme cold. Travel to communities may involve travel in small aircraft, driving on winter roads and periodic exposure to adverse weather conditions, biting insects and wildlife.

### **Sensory Demands**

The incumbent is subject to long periods of concentrated focus while working with computer programs, reviewing reports and other related documents.

### **Mental Demands**

The position requires tact while dealing with community and non-government organizations and other government agencies. The incumbent is required to present to scientific peers, collaborators, community groups, etc.

The incumbent may be periodically required to travel to attend NWT community meetings and national meetings up to six times a year, and isolated locations for field work up to three times a year.

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

- Knowledge of climate projections, climate models and climate downscaling methodologies.
- Knowledge of climate and climate change science including northern climatology, climate monitoring and quality control of climate data, future climate projections and Intergovernmental Panel on Climate Change Scientific Assessments.
- Knowledge of climate change impacts, climate adaptation and mitigation.
- Knowledge of Geographic Information Systems (GIS), spreadsheets, databases, presentation and word processing software.
- Knowledge of programming or statistical analysis packages such as Python, R, Fortran, C, VBA, SPSS, SAS, MATLAB or other similar software to analyze and visualize large amounts of scientific data.
- Knowledge of statistical methods to review, analyze and interpret data and produce reports.
- Knowledge of federal and territorial climate change programs, research, and approaches.
- Research and analytical skills
- Project management skills, including experience with project charters, work plans, etc.
- Organizational and time management skills, including the ability to plan, coordinate, prioritize activities, and meet deadlines.
- Communications skills both written and verbal.
- Negotiation and dispute resolution skills to resolve conflicts and differences of opinion.
- Ability to manage politically sensitive and controversial matters with sensitivity, tact, and diplomacy.
- Ability to think strategically, using experiential judgment as well as the analysis and synthesis of multiple concepts and priorities.
- Ability to work effectively both independently and in collaboration with other professionals in a team situation.
- Ability to develop and deliver communications and knowledge transfer products and

- tools including presentations and digital products, such as maps, brochures etc.
- Climate change experience, experience in translating knowledge into plain language, northern experience.
  - 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:**

Completion of a master's degree in environmental science or other relevant fields, with two (2) years of related experience.

Equivalent combinations of education and experience will be considered.

**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