Northern Fund

Draft call for proposals June 2023





Table of contents

Part 1 - About this funding program	2
Purpose of the Northern Fund	2
Objectives of the Northern Fund	
Important dates	3
Budget for this funding program	3
Research infrastructure funding	3
Operation and maintenance costs	3
Proposal development support	4
Eligible institutions	4
Eligible research infrastructure projects	
Review process	5
Collaboration with Territorial, provincial and	_
regional autonomous governments	
Funding decisions	
Security considerations	
Public announcement	О
Part 2 - How to apply	7
Submitting a request for proposal	_
development support	
Submitting a Northern Fund proposal	
Tools to apply	
Submitting proposals	8
Part 3 – Criterion standards	
and instructions	
Objective 1	
Research in the North for the North	
Team	12
Objective 2	13
Infrastructure	13
Sustainability	13
Objective 3	14
Benefits to Northern Communities	14

About the Canada Foundation for Innovation

With a bold, future-looking mandate, the Canada Foundation for Innovation equips researchers to be global leaders in their fields and to respond to emerging challenges. Our investments in state-of-the-art tools. instruments and facilities at universities, colleges, research hospitals and non-profit research institutions underpin both curiosity- and missiondriven research that cuts across disciplines and bridges all sectors. The research infrastructure we fund mobilizes knowledge, spurs innovation and commercialization, and empowers the talented minds of a new generation.

The Canada Foundation for Innovation respectfully recognizes and acknowledges the traditional relationship that the First Nations, Inuit and Métis across Canada have with the land all Canadians share.

Cover: Research project participants (left to right), Aina Igiyok, Carole-Anne Gillis, Silasie Ajaku and Jaiku Airo, study Arctic char in Lake Tasirjuarusik, Nunavik Source: Véronique Dubos/ArcticNet

Part 1 - About this funding program

Purpose of the Northern Fund

The Northern Fund will provide Northern researchers and communities in Northern Canada with access to research equipment for projects that address the priorities of Northern communities. These research projects will be conceived, developed, led and managed by Northern institutions, researchers and communities.

For the purposes of this funding program, the North comprises Yukon, Northwest Territories, Nunavut, Nunavik and Nunatsiavut. The Northern Fund augments the Government of Canada's strategic investments made in Northern research and aims to strengthen Northern research capacity.

The Northern Fund is open for proposals from all research disciplines that can clearly demonstrate how the research directly engages and serves the needs of Northern communities, including First Nations, Métis and Inuit communities in the North.

The Northern Fund is the CFI's first funding program dedicated to Northern research led by Northern researchers. We are launching this new funding program following the Government of Canada's approval of a \$25 million allocation from the CFI for research infrastructure required for research projects in, and about, Canada's North that is conducted by Northerners.

Objectives of the Northern Fund

The objectives of the Northern Fund are to:

- Support research led by Northern organizations and First Nations, Métis and Inuit communities
- Augment research capacity in the North for the North
- Generate health, environmental, sociocultural or economic benefits to Canada's North including the training of highly qualified personnel.



The CFI's commitment to equity, diversity and inclusion

The CFI is committed to the principles of equity, diversity and inclusion. In all our activities, we recognize that a breadth of perspectives, skills and experiences contributes to excellence in research.

Equity: We aim to ensure all CFI-eligible institutions have the opportunity to access and benefit from our programs and CFI-funded infrastructure through our well-established, fair and impartial practices.

Diversity: We value attributes that allow institutions and their researchers — from any background and from anywhere — to succeed. This includes individual attributes such as gender, language, culture and career stage; institutional attributes

such as size, type and location; and attributes that encompass the full spectrum of research, from basic to applied and across all disciplines.

Inclusion: We encourage a culture of collaboration and partnership which includes contributions from and engagement among diverse groups of people, institutions and areas of research to maximize the potential of Canada's research ecosystem.

We believe that nurturing an equitable, diverse and inclusive culture is the responsibility of every member of the research ecosystem, including funders, institutions, researchers, experts and reviewers.

Important dates

Feedback on this draft call for proposals can be emailed to the CFI at <u>northern.fund@innovation.ca</u> between July 1 and October 31, 2023.

Activity	Deadline
The CFI issues the draft call for proposals	June 28, 2023
Feedback on the draft call for proposals accepted by the CFI	July 1 to October 31, 2023
The CFI issues the call for proposals	December 18, 2023

Eligible institutions can submit proposals to the Northern Fund at any time of the year (beginning in December 2023 after the CFI issues the final call for proposals). See Part 2, "How to apply," for details on how to complete the application process. This funding program is expected to run for five years.

Budget for this funding program

Over five years, the CFI will invest up to \$25 million in research infrastructure as well as funding to operate and maintain it. To support their participation, up to \$5 million will be reserved for proposals submitted by non-profit organizations in the first three years of the Northern Fund. Any funds that remain uncommitted by the end of the third year will be made available to all applicants.

Research infrastructure funding

The CFI will fund up to 50 percent of the eligible costs of an infrastructure project.

The remainder of the funds (50 percent or more) must be provided by the institution and other eligible funding partners. There are two types of eligible funding partners: those who have no direct involvement in the research and technology development activities (e.g., Territorial or provincial governments, suppliers) and those who do (e.g., vendors of specialized instruments who are seeking technological improvements, or nongovernmental organizations who will use the research results to improve public policies). While it is not mandatory for each type of partner to provide matching funds, we encourage institutions to seek out both.

Consult section <u>4.8 Eligible partner contributions</u> of our <u>Policy and program guide</u> for lists of eligible and non-eligible partners.

Operation and maintenance costs

Through our <u>Infrastructure Operating Fund (IOF)</u>, we will contribute to the costs of operating and maintaining the research infrastructure we fund. To cover those costs, eligible institutions can request an IOF amount equivalent



How much funding can an institution request for research infrastructure?

Eligible institutions can submit proposals with total CFI requests between \$250,000 and \$2.5 million to cover research infrastructure costs. For example, for a project that includes eligible research infrastructure costs of \$5 million, an institution can request \$2.5 million from the CFI and would require \$2.5 million of matching funding from funding partner(s).

to up to 100 percent of the CFI contribution to the the cost of the research infrastructure. For example, for a project with \$5 million of total eligible costs (\$2.5 million from the CFI and \$2.5 million from funding partner(s)), institutions can request up to \$2.5 million for operation and maintenance costs.

Proposal development support

Eligible institutions can request funding to help defray the costs of holding meetings, consultations and other expenses related to the development of proposals for the Northern Fund.

Each eligible institution can access up to \$50,000 per year, to a maximum of \$100,000 over the projected five-year duration of the Northern Fund for these purposes.

If you would like to access these funds, send a document of no longer than three pages to northern.fund@innovation.ca describing your proposal development process, specific activities that will be undertaken and the associated cost estimates.

See Submitting a request for proposal development support for more information.

Eligible institutions

Canadian universities, colleges, research hospitals and non-profit research institutions located in Yukon, Northwest Territories, Nunavut, Nunavik or Nunatsiavut recognized as eligible to receive funding from the CFI can apply to the Northern Fund.

Check our list of eligible institutions to see if yours is already eligible.

If your institution is already eligible, make sure your institutional agreement with the CFI is up to date before you submit a proposal.

If your institution is not yet eligible, email us at <u>eligibility@innovation.ca</u> for information about how to apply for eligibility.

Note that the CFI funds institutions and does not fund individual researchers.

Eligible research infrastructure projects

An eligible research infrastructure project involves acquiring or developing research infrastructure to augment research capacity and conduct research activities that are highly relevant to Northern communities. To be considered for funding, the requested research infrastructure must be essential for the institution's planned research activities and, in most cases, located in Yukon, Northwest Territories, Nunavut, Nunavik or Nunatsiavut.

Eligible research infrastructure costs include:

- Acquiring research equipment, including equipment that is highly and routinely used (e.g., centrifuges, balances, fume hoods, audio/video equipment) and specialized equipment (e.g., mobile laboratories, spectroscopy instruments, meteorological towers)
- Upgrading or replacing aging research infrastructure
- Shipping and transportation of equipment
- Salaries of technical personnel to design or install the equipment
- Renovating space essential to house and use the infrastructure.

To be eligible for funding, research infrastructure expenditures and in-kind contributions must have taken place on or after **January 1, 2022**. We consider expenditures incurred once goods are received, services have been rendered or work has been performed.

For more information on eligible and non-eligible costs, consult section <u>4.6 Eligible costs for infrastructure projects</u> of our <u>Policy and program guide</u>.



Review process

In collaboration with Northern institutions, communities and other stakeholders, we will create a Review Committee to review proposals submitted to this funding program. Members of the committee will have the relevant knowledge, experience and perspectives. We will invite team leaders and members of the proposed research infrastructure project to meet with the Review Committee. This will be an opportunity for the committee to ask questions and discuss the proposal with the team. The Review Committee will assess each proposal and make a funding recommendation to the CFI Board of Directors.

Collaboration with Territorial, provincial and regional autonomous governments

In the interest of collaboration with potential funding partners such as the funding bodies (e.g., ministries that fund research at postsecondary institutions) within Territorial, provincial or regional autonomous governments, the CFI may coordinate the review process with such funders to avoid duplication of efforts. Coordination of review processes may include sharing proposals or review reports with the relevant funding body, as appropriate. We will do so only in accordance with agreements between the CFI and Territorial, provincial and regional autonomous governments, as permissible pursuant to the Privacy Act.

For further information about CFI agreements with funding bodies, email us at northern.fund@innovation.ca.

We may also invite representatives of the relevant Territorial, provincial or regional autonomous funding bodies to participate as observers at Review Committee meetings.

We encourage institutions to work with their respective Territorial, provincial or regional autonomous funding bodies at an early stage in the planning and development of proposals.



What are the review criteria?

The Review Committee will evaluate each proposal based on five review criteria:

Research in the North for the North —

The research activities are of high relevance to Northern communities, are feasible, and have been co-developed with First Nations, Métis or Inuit communities.

Team — The team has the relevant knowledge and experience to conduct the research activities. First Nations, Métis and Inuit team members play meaningful roles in the research activities.

Infrastructure — The research infrastructure is necessary and appropriate and will augment research capacity in the North.

Sustainability — The research infrastructure will be well managed and efficiently used.

Benefits to Northern communities —

There are clear pathways to transfer research results to Northern communities and potential partners. The results are likely to lead to health, environmental, sociocultural or economic benefits to Canada's North including the training of highly qualified personnel.

Funding decisions

The CFI Board of Directors will make funding decisions for this funding program at its meetings in March, June and November every year. Following the meeting, we will notify institutions of the decisions and share the review material for their proposals.

Funding decisions can be expected within six months from the date the proposal is submitted.

Security considerations

To ensure the Canadian research ecosystem is as open as possible and as safeguarded as necessary, the Government of Canada introduced the <u>National Security Guidelines for Research Partnerships</u> to integrate national security considerations into the development, evaluation and funding of research partnerships. These guidelines provide a framework through which researchers, research institutions and federal research funding agencies can undertake consistent, risk-targeted due diligence to identify and mitigate potential national security risks linked to research partnerships.

The CFI reserves the right to:

- Review any proposals on national security grounds and share proposal information with security agencies as warranted
- Request additional information, as needed, to ensure that any national security risks are identified and addressed before final funding decisions are made
- Decline the participation of any proposed partner organization or recipient of funds on the grounds of unacceptable national security risk
- Refuse an award on the basis of security, should appropriate measures not be in place to mitigate potential risks
- Implement additional requirements as appropriate.

Security considerations will be independent of the review of proposals. There is no requirement for institutions to address security considerations in the proposal. However, the security and integrity of funded projects will be a condition of funding and considered before the finalization of awards. Depending on the security risks of the funded project, the CFI may require a research security, cybersecurity or data management plan. Tools and guidance are currently available through the Government of Canada's Safeguarding Your Research portal, National Security Guidelines for Research Partnerships and Safeguarding Science workshops. We will provide further guidance once the project is funded.

Public announcement

The Government of Canada makes public announcements of new funding from the CFI. We organize these national announcements in collaboration with institutions.

Public announcements provide institutions, communities, researchers and partners, along with government representatives, the media and the CFI, opportunities to highlight the research and technology development enabled by CFI-funded infrastructure.

We encourage institutions to work with local and national media after the announcement to promote the benefits of research and technology development in the North.

Part 2 - How to apply

Below, find instructions for submitting the following:

- Requests for proposal development support (up to \$50,000)
- Northern Fund proposals (\$250,000 to \$2.5 million).

Proposal development support is optional and is not required to submit a Northern Fund proposal.

Submitting a request for proposal development support

If you have an idea for a research infrastructure project, you can request financial support to develop the idea into a Northern Fund proposal.

To do so, the authorized signatory of your institution should email us at northern.fund@innovation.ca with a request of no longer than three pages that describes the following:

- The idea and rationale for the research activities that require the research infrastructure
- The names and affiliations or roles of the team leader(s) and members
- The name of the administrative institution (The administrative institution is the one that receives the CFI funds and has administrative control during the proposal development. In most cases, the applicant institution is also the administrative one. The exception is multi-institutional projects where the applicant institution does not have to be the administrative one.)
- A list of potential collaborators
- The anticipated benefits of the research activities
- A brief description of the research infrastructure you expect to request (i.e., type of research infrastructure and approximate costs)
- Your plans to develop the proposal including with whom you will engage and how, potential partners, meetings, consultations, logistics, timeline and budget development
- · A cost estimate for the proposal development activities, broken down by activity.

Each eligible institution can access up to \$50,000 per year, to a maximum of \$100,000 over the projected five-year duration of the Northern Fund. The CFI will reimburse these expenses based on the actual costs incurred.

Eligible costs for proposal development support include:

- Travel and accommodation expenses for proposal development team and partners
- Audio and video equipment rental
- Third-party facilitation of proposal development activities
- Third-party grant-writing or editing support
- Other expenses pre-approved by the CFI.

Requests for proposal development support will be assessed by CFI staff rather than as part of the Northern Fund review process. Funding for proposal development support does not require matching partner funding.

Submitting a Northern Fund proposal

Tools to apply

Use the <u>CFI Awards Management System (CAMS)</u> to prepare, share and submit your proposals. This call for proposals and the <u>Getting started with CAMS</u> documents on our website contain all the information you need to apply to this funding program, including guidelines to prepare proposals.

Submitting proposals

The proposal should clearly present the project's merits and relevance to the North. Provide enough information to enable reviewers to assess the proposal according to the review criteria.

The proposal consists of two separate CAMS modules:

Project module — Information about the proposed project, how it meets the funding program's objectives and criteria

Finance module — Information about the budgetary details of the proposal

The forms in CAMS will indicate the maximum number of characters that can be included in each section and/or the page limits for uploaded attachments.

Project module

The project module consists of the following sections:

- Project information
- Plain language summary
- Team
- Collaborating institutions
- Financial resources for operation and maintenance
- Review criteria

Project information

The "Project information" section captures basic information about the project such as the title, <u>eligible</u> <u>applicant institution</u> and keywords.

Plain language summary

(1,500 characters)

Provide a short summary in plain language of the proposed research activities: what would be researched, how it would be done and why it would be important to the North and to First Nations, Métis or Inuit communities. Focus on the expected impacts and benefits to Northern communities and people.

This summary will not be used in the review process. If the project is funded, we may use this summary in our communications products and on our website.

Team

The team must include members of First Nations, Métis or Inuit communities, and researchers from the applicant institution. It may also include technical staff, academic collaborators from other institutions or other community members and partners. You can identify up to 10 team members (name and affiliation), including team leader(s). CVs are not required for these proposals.

When composing your team, consider the criterion standard and aspects to be addressed under "Team" in Part 3 – Criterion standards and instructions of this document.

Identify one or two team leaders. Identifying two team leaders is an opportunity to recognize another leader and to provide more diverse leadership for the team. Team leaders must be affiliated with institutions in the North or be residents of communities in the North.

The user who creates the proposal in CAMS must be associated with the administrative institution and will be an administrative team leader by default. This person will be responsible for tasks such as completing forms in CAMS and submitting the proposal to the institution.

Team leaders and team members must:

- Have an active CAMS account; and
- Accept to participate in the project before the proposal is submitted.

CAMS will allow team leaders to read, write and edit the proposal, while team members will have readonly access.

Collaborating institutions

If applicable, identify the CFI-eligible institutions collaborating on this project. A collaborating institution is one that receives part of the infrastructure. Collaborating institutions are not required to be located in the North. Before you can submit the proposal, collaborating institutions must confirm their participation in CAMS.

Financial resources for operation and maintenance

This section of the project module captures the annual costs and sources of committed support to ensure the effective operation and maintenance of the research infrastructure for the first five years after it is implemented. (See Operation and maintenance costs.)

If the useful life of some of the infrastructure items requested is longer or shorter than five years, provide information in the "Review criteria" section of the proposal regarding the operation and maintenance needs for these items over their useful life. (See "How is the useful life of research infrastructure defined?")

Do not include costs related to research and/or technology development in the "Funding sources" table.

The amount requested for operation and maintenance support should be listed in the "Other" category in the "Funding sources" table of the proposal.

Include the rationale for the amount requested for operation and maintenance support in the "Sustainability" section of the Review criteria document.

For more information on eligible and non-eligible costs for operation and maintenance, consult section <u>4.7 Eligible</u> costs for operation and maintenance of the infrastructure.

Review criteria

For instructions on how to address each of the review criteria, see Part 3 – Criterion standards and instructions.

Structure of attachment

Address the review criteria in a PDF document and upload it to CAMS. Include key information on how the proposal meets the criteria. Address each criterion in the order that they appear in Part 3 of this document. Clearly identify the beginning of a new criterion with a title.



How is the useful life of research infrastructure defined?

The useful life of the research infrastructure is the period over which it is expected to provide benefits and be usable for its intended purpose, factoring in normal repairs and maintenance.

Page limits

The CFI is able to accept proposals submitted in French or English. The page limit for your PDF document depends on which of these two languages you use to write your proposal.

The page limit to address the five review criteria is 15 pages (English) or 18 pages (French).

You have flexibility in how you address each criterion in the document you submit, including how many of the total pages you use for each criterion and whether or not you include figures or diagrams.

Format for attachments

CAMS will automatically paginate proposals when they are submitted. Do not paginate your document before uploading it to CAMS.

Since reviewers may assess proposals electronically, use a standard, single column on an 8.5" x 11" page layout. Avoid using a two-column or landscape format since it is harder to read on screen.

Use a legible, 12-point, black font and single line spacing (six lines per inch) with no condensed type or spacing.

Format your document as follows:

- **Header:** Indicate the applicant institution on the top left and the project number on the top right of each page.
- **Footer:** Do not include any information in the footer as this area will be used for automatic page numbering.
- Page margin: Insert a margin of no less than one inch around the page. The header may be within the margin.
- **File format and size:** Only upload PDF files. Documents in other formats should be converted to PDF before being uploaded and should not be encrypted or password protected. The file size must not exceed 20 megabytes.

If you do not adhere to these guidelines, we may return your proposal to be revised.

Finance module

The finance module consists of the following sections:

- · Cost of individual items
- Construction or renovation floor plans (if applicable)
- Contributions from eligible partners
- Overview of infrastructure project funding (generated automatically)

Cost of individual items

Bundle items into functional groupings when completing the "Cost of individual items" section. Provide details and justification for each item within a group when you address the "Infrastructure" criterion in the review criteria document.

Consult section <u>4.6 Eligible costs for infrastructure projects</u> of the <u>Policy and program guide</u> for more information on eligible costs for infrastructure projects.

List only the eligible infrastructure acquisition and development costs. List the full cost of each item. Retain documentation (price lists, quotes, etc.) so they can be provided to the CFI if requested.

The total eligible costs must include taxes (net of credits received), shipping and installation. However, do not calculate taxes on the in-kind portion.



Follow your existing institutional policies and procedures when preparing budget estimates.

We expect costs included in this budget to be close estimates of fair market value.

Consult section <u>4.9 Eligible in-kind contributions</u> of our <u>Policy and program guide</u> for information on how to assess in-kind contributions.

Construction or renovation floor plans (if applicable)

All proposals that include construction or renovation must provide the following information:

- A timeline identifying key dates for the various stages of the proposed construction or renovation
- Floor plans of the proposed new area(s), showing the location of the infrastructure and the scale of the plans (when construction or renovation involves multiple rooms). The floor plans must be legible when printed in black and white on standard letter-size paper (8.5" x 11")
- The overall cost of the construction or renovation project, categorized by cost component (i.e., direct costs, soft costs and contingency costs), when these costs are expected to be in excess of \$500,000.

The cost breakdown, timeline and floor plans should be uploaded as one consolidated PDF document. These pages do not count toward the page limit for the "Review criteria" section of the proposal. If any of the pages of the attachment provide information other than for the intended use, we will remove them from the proposal.

Contributions from eligible partners

List all contributions from eligible partners. Do not include the amount requested from the CFI. Provide the partner's name and type, as well as a breakdown of contributions (cash and in-kind) for each eligible partner. Bundle all expected in-kind contributions from vendors into a single line. If partner contributions are expected but have not yet been confirmed, outline the plans for securing these funds.

Overview of infrastructure project funding

CAMS automatically populates the tables in the "Overview of infrastructure project funding" section with information taken from the other sections of the finance module. The amount requested from the CFI is calculated based on the difference between the total contributions from eligible partners and the total eligible costs.

Expressions of support

Provide up to three expression(s) of support from one or more Northern communities. These should describe how the communities will engage in, or benefit from, the proposed research project.

Part 3 – Criterion standards and instructions

Provide information on how your proposal meets each of the review criteria. Please make sure you provide enough detail for the Review Committee to assess each criterion.

Objective 1

Support research led by Northern organizations and First Nations, Métis and Inuit communities

Review criteria under this objective are:

- · Research in the North for the North
- Team

Research in the North for the North

Criterion standard: The research activities are of high relevance to Northern communities, are feasible, and have been co-developed with First Nations, Métis or Inuit communities.

Address each of the following aspects:

- Describe the research activities that will make use of the requested infrastructure and explain how they address the priorities of Northern communities.
- Describe the research methodologies to be employed and discuss feasibility by identifying key challenges and how the team will overcome them.
- Describe how the project is co-created, co-developed or co-managed with members of First Nations. Métis or Inuit communities.

Team

Criterion standard: The team has the relevant knowledge and experience to conduct the research activities. First Nations, Métis and Inuit team members play meaningful roles in the research activities.

Address each of the following aspects:

- Describe the knowledge required to conduct the research activities.
- Highlight the experience, expertise and knowledge of each team member and the expected contribution they will make to conducting the research activities and/or using the requested research infrastructure.

Objective 2

Augment research capacity in the North for the North

Review criteria under this objective are:

- Infrastructure
- Sustainability

Infrastructure

Criterion standard: The research infrastructure is necessary and appropriate and will augment research capacity in the North.

Address each of the following aspects:

- Describe each requested item and explain why it is necessary for the proposed research activities. Indicate the item number (corresponding to the item number in the "Cost of individual items" table), quantity, location and costs correlated to the table. Provide a cost breakdown for any grouping of items.
- For construction or renovation projects, provide a description of the space including its location, size and nature (e.g., wet lab, greenhouse).

Sustainability

Criterion standard: The research infrastructure will be well managed and efficiently used.

Address each of the following aspects:

- Describe how the infrastructure will be operated, maintained and accessed over its useful life (e.g., technical support, project management or oversight, user access policy, etc.).
- Outline the operation and maintenance costs and revenue sources over the useful life of the
 infrastructure. Include the rationale for the amount of funding requested for operating and
 maintaining the infrastructure (which can be an amount equivalent to up to 100 percent of the
 CFI contribution to the cost of the research infrastructure). Refer to the "Financial resources for
 operation and maintenance" tables in the project module of the CFI Awards Management System.
- Describe how the ownership, control, access and possession of research data will be handled. Refer
 to the <u>First Nations Principles of OCAP</u> (ownership, control, access and possession) listed on the
 website of the <u>First Nations Information Governance Centre.</u>

Objective 3

Generate health, environmental, sociocultural or economic benefits to Canada's North including the training of highly qualified personnel

Review criteria under this objective are:

Benefits to Northern communities

Benefits to Northern Communities

Criterion standard: There are clear pathways to transfer research results to Northern communities and potential partners. The results are likely to lead to health, environmental, sociocultural or economic benefits to Canada's North including the training of highly qualified personnel.

Address each of the following aspects:

- Describe the anticipated benefits of the research activities for Northern communities.
 Health benefits could be new diagnostic tools, treatments or therapeutics; environmental
 benefits could be monitoring of climate change impacts on Northern or remote regions, land
 and water conservation, pollution reduction, carbon emission reduction, or informing policies for
 environmental protection; sociocultural benefits could be improved wellbeing through new policies
 or practices, or improved decision-making; economic benefits could be new jobs, products,
 services or sustainable industries.
- Provide information on the highly qualified personnel (HQP) that will be trained while using the
 infrastructure and conducting the research activities. Examples of highly qualified personnel are
 technicians, research associates, undergraduate students, graduate students and postdoctoral
 fellows. Indicate how many people will be trained and describe which skills they will acquire.
 Describe their potential career paths or further contributions to their communities.
- Describe the potential pathways to transfer research results to Northern communities and potential partners (e.g., partnerships with the public or private sector, as applicable).