

Grants and Contributions to Support the Advancement of Northern Science and Technology

1. Introduction

Context

The federal government recognizes the need to foster Northern scientific knowledge and enhance Canada's ability to effectively address sustainable development in the North.

The advancement of Arctic science and technology (S&T) at the Canadian High Arctic Research Station (CHARS) includes a comprehensive suite of program elements to support S&T research, education, training and capacity building, and knowledge mobilization.

The S&T activities that will be undertaken by CHARS fall under four Government of Canada mandated themes: Resource Development; Exercising Sovereignty; Environmental Stewardship and Climate Change; and, Strong and Healthy Communities. Under each theme, the mandate specifies the long-term outcomes that CHARS will work towards over the coming decades.

Scope

CHARS, located in Cambridge Bay, Nunavut, provides a suite of facilities and services for S&T in Canada's North including a technology development centre, knowledge sharing centre, advanced laboratories and logistics support for researchers in the field. The geographic scope of CHARS' Act defines Canada's Arctic as the lands and waters that lie north of the discontinuous permafrost line.

CHARS will take an integrated approach to its science and technology activities. These activities may include: monitoring and surveillance; research, modeling, and prediction; technology development and transfer; knowledge mobilization; and training, education, and outreach; data management; as well as the logistics needed to ensure effective delivery. The science and technology undertaken by CHARS will be interdisciplinary and include natural and physical sciences, economic and social sciences, health and life sciences, the humanities, and engineering and technology development. The knowledge produced through CHARS will be mobilized to support the responsible development of Canada's Arctic.

Funding approaches for transfer payments under the program components are summarized as follows:

	Grant Payments	Contribution Payments			
		Set	Fixed	Flexible	Block
			Indigenous recipients only		
S&T Program		✓	✓	✓	
Training and Capacity Building	✓	✓	✓	✓	
Scholarships and Fellowships	✓				
Awards	✓				

2. Legal and Policy Authority

Canadian High Arctic Research Station Act, 2014

3. Purpose, Program Objectives and Expected Results

The purpose of these terms and conditions is to provide an integrated suite of grants and contributions that support Canadian Arctic S&T for CHARS. The contribution programs will support calls for proposal to solicit projects that will help address specific aspects of the CHARS mandate, while the grant programs will support student researchers, recognize significant achievement and coordinate northern scientific university-related activities. The provision of support to the advancement of Northern S&T is essential to deliver on CHARS' mandated themes and the objective of Article 23 of the *Nunavut Land Claims Agreement* "to increase Inuit participation in government employment in the Nunavut Settlement Area to a representative level. It is recognized that the achievement of this objective will require initiatives by Inuit and by Government". To achieve this, these Terms and Conditions include four categories of grants and contribution funding:

- i. S&T Program – which provides funding to Indigenous groups, academia, all levels of government and industry;
- ii. Training and Capacity Building – which provides funding to organizations and individuals that provide S&T related skills and development training to Northerners and Indigenous groups; and provides Northern Scientific Training Program funding to Canadian universities and institutes for northern scientific research training (includes funding to the Association of Canadian Universities for Northern Studies for a portion of its administrative expenses);
- iii. Scholarship and Fellowships – which provides funding to eligible students and new researchers to work in the North; and
- iv. Awards – Northern Science Award for outstanding contributions in the fields of northern science; and Knowledge Mobilization for the promotion, in Canada and around the world, of Northern S&T knowledge that has resulted in action.

	Purpose / Objectives	Expected Results	Performance Indicators
S&T Program (Contribution)	To fund science and technology activities in line with CHARS' priority areas.	<p>Relevant S&T generated which impacts and contributes to CHARS' 5-year State of the Canadian Arctic Reports.</p> <p>Demonstrated excellence in CHARS S&T through international renown.</p> <p>Northern and Aboriginal leadership fostered and engagement in S&T</p>	<p>Number of citations within the State of the Canadian Arctic Report</p> <p>Number of international partners engaged in CHARS' projects.</p> <p>Scientific impact of peer reviewed publications will be measured through citation indices¹.</p> <p>Percentage of northerners and Aboriginals engaged in CHARS' research projects.</p>
Training and Capacity Building (Contribution and Grant)	<p>To fund youth and/or adult programs to develop new skills, enhance career experiences and/or to participate in S&T activities. Funds will be administered in two streams:</p> <p>a) <u>Contributions</u>:</p> <p>To support the development and delivery of programs.</p> <p>b) <u>Grants</u>:</p> <p>i. To provide funding to individuals or organizations in the form of scholarships or bursaries for programs.</p> <p>ii. To provide funding to Canadian universities and institutes for northern scientific research training.</p>	<p>The next generation is inspired to pursue S&T career opportunities; and, in particular, enhance Northern engagement in, and leadership of, S&T activities.</p> <p>The commitment of individuals or groups to northern studies through national recognition of their work is strengthened.</p>	<p>Number of programs supported.</p> <p>Number of individuals supported through scholarships and bursaries.</p> <p>Number of universities and northern colleges receiving grants that flow to student recipients.</p> <p>Enrolment numbers of students studying / participating in northern scientific activities.</p> <p>Number of Northerners participating in S&T projects.</p> <p>Number of Northerners leading S&T projects.</p>

¹ A statistical analysis of the number of times a publication is cited weighted by the quality of the journals it was cited in.

Scholarships and Fellowships (Grant)	<p>Scholarships will support Northern S&T students currently enrolled at academic institutions and gaining professional experience in the North, encouraging a commitment to Northern studies.</p> <p>Fellowships will provide emerging scientists and engineers that have recently graduated, or senior visiting scientists who wish to continue to develop their northern expertise, with funds to work in the North at CHARS or other Northern-based research institutions to gain valuable on-the-job training and advance their research under one of the CHARS' priority areas.</p>	Highly qualified S&T personnel is developed in the North and across Canada.	<p>Number of applications received for scholarships.</p> <p>Number of successfully completed fellowships.</p>
CHARS' Awards (Grant)	<p>Northern Science Award – To award a team or individual for outstanding contributions in the fields of northern science.</p> <p>Knowledge Mobilization – To award a team or individual for outstanding contributions in transforming Northern S&T research into relevant and tangible solutions for northern issues.</p>	<p>The mobilization of Canadian Arctic S&T knowledge into action is promoted within Canada and the countries around the world.</p> <p>The capacity of Canadian institutions involved in northern research is increased.</p>	<p>Number of applicants.</p> <p>Percentage of applicants that meet the eligibility criteria for each award.</p>

The activities funded through these grants and contributions contribute to the Strategic Outcome: *Canada has world-class Arctic science and technology to support the development and stewardship of Canada's North and is recognized as a leader on circumpolar research issues*, and fall under the *Science and Technology for the North's* Sub-Programs *Science and Monitoring and Technology Development and Transfer*, and *Polar Knowledge Application's* Sub-Program *Knowledge Management*. These Programs seek to create the conditions for Canada to acquire the wide range of information needed for effective policy and research program development in the North, and to maintain Canada's position as a leading Arctic nation. The depth of knowledge gained

through scientific and technological research and training supports greater sustainable use of the North's land and natural resources.

4. Eligibility

Applicants will apply for CHARS grants and contributions funding through an application process outlined in Section 10. The President, supported by a multi-stakeholder Review Committee as appropriate, will make recommendations to the Board of Directors who will make the final decisions on recipients and level of funding.

4.1 S&T Program Funds

Contribution funding for science and technology activities will be administered to deliver on CHARS priority areas as outlined in CHARS S&T Plan.

To be considered for CHARS S&T funds, recipients must be employed by or be part of the organizational structure of a Canadian organization that:

- is a recognized legal entity in Canada;
- has acceptable accounting systems and financial controls in place to administer the funds as demonstrated by the annual conduction of financial audits; and
- supports their funding proposal as indicated by a signature from an authorized officer.

Eligible organizations include:

- educational and academic institutions;
- provincial, territorial, regional, municipal, Indigenous governments and organizations;
- businesses and industries and their professional associations;
- community groups (Indigenous communities or organizations, voluntary groups, community organizations, associations and institutions); and
- individuals.

4.2 Training and Capacity Building

Contributions

Eligible recipients are organizations and institutions that develop and deliver special programs targeted to Indigenous and Northern-based students and develop skills and experience in support of the CHARS mandate and also related CHARS operations. Funding may be used to expand existing programs or develop new programming aligned with CHARS' human resource requirements.

Grant

Eligible recipients are post-secondary education institutions, not-for-profit organizations that operate a northern studies committee and students, including northern students and *Nunavut Land Claims Agreement* Beneficiaries who are enrolled in post-secondary education programs and skills training aligned with CHARS human resource requirements.

4.3 CHARS Scholarships and Fellowships

Eligible recipients for CHARS Scholarships must meet the following:

- Students must be enrolled in a graduate degree program and at a Canadian university or a Canadian student enrolled in a graduate degree program offered by a recognized academic institution outside of Canada;
- Students must be working towards a graduate degree in one of the CHARS priority areas; and
- Students supported by training funds must be Canadian citizens or permanent residents.

Funds are available in support of graduate students. However, senior undergraduate students entering their final year and intending to undertake an honours thesis based on northern fieldwork or research which will be continued in subsequent graduate studies are also eligible.

Additional eligibility criteria:

- Summer and winter projects are eligible.
- Post-doctoral studies are not supported.

Eligible recipients for CHARS' Fellowships:

- Post-Doctoral Candidates
 - Eligible recipients must have graduated from a program in one of the CHARS priority areas from a recognized university within the past five years. Applications will be accepted if applicants are currently enrolled in a post-secondary program at a recognized university; however, applicants must complete all degree requirements (including thesis defence) within six months of submitting an application.
 - Recipients are not allowed to take an award until completion of the degree requirements is confirmed and received. Recipients may hold only one Fellowship.
 - There are no restrictions on the nationality of applicants, but awards are subject to a citizenship quota: two-thirds of the awards must be made to Canadian citizens or permanent residents. Successful candidates who are not Canadians or permanent residents of Canada must satisfy Canadian immigration requirements.
- Visiting Scientists
 - Eligible recipients must be currently conducting S&T research in one of the CHARS priority areas at a recognized university.
 - Recipients may hold only one Fellowship.
 - There are no restrictions on the nationality of applicants. Successful candidates who are not Canadians or permanent residents of Canada must satisfy Canadian immigration requirements.

4.4 CHARS' Awards

Eligible recipients for grants include not-for-profit organizations, Indigenous organizations, northern communities, territorial governments, universities, colleges and individuals who are contributing to the furtherance of the state of knowledge in one or more of the CHARS priority areas. Eligible recipients must be Canadian citizens or permanent residents. In cases of project teams and organizations, the principal investigator or team lead must belong to a Canadian organization.

5. Type of Eligible Expenditures

Expenditures	S&T Program	Training and Capacity Building		Scholarships and Fellowships	CHARS' Awards
	<i>(Contributions)</i>	<i>(Contributions)</i>	<i>(Grant)</i>	<i>(Grant)</i>	<i>(Grant)</i>
Administration Fee (maximum 15%)	✓	✓	✓	✓	✓
Materials, Equipment and Supplies Purchases	✓	✓	✓	✓	✓
Rentals (e.g. conference and meeting rooms, office space, equipment, storage, aircraft and helicopter rentals)	✓	✓	✓	✓	✓
Professional Fees and Services (contracts)	✓	✓			
Salaries, benefits and wages for employees and casual workers and honoraria	✓	✓	✓	✓	✓
Travel including meals and accommodations	✓	✓	✓	✓	✓
Tuition (includes other compulsory student fees)	✓	✓	✓	✓	✓
Postage & Shipping	✓	✓	✓	✓	✓

6. Total Canadian Government Funding and Stacking Limits

The maximum level of total Canadian government funding (including the funding from the CHARS) shall not exceed 100% for eligible programs and projects. Proposals for funding from each recipient shall address the requirement for the recipient to declare any and all prospective sources of funding for the program or project, inclusive of all federal, provincial, territorial or municipal governments (total government assistance) and other sources that are expected to be received.

7. Method for Determining the Amount of Funding

Component	Method for Determine the Amount of Funding
(i) S&T Program	The amount to be paid through contributions and be based on a proposal and budget submitted by the applicant.

(ii) Training and Capacity Building	<p>Drawing on their experience and specialized knowledge, reviewers will assess the proposals and budgets and recommend the amount of funding based on whether expenditures are well justified and reasonable for the scope of proposed activities.</p> <p>For the Northern Scientific Training Program, applications are submitted by universities and northern colleges on behalf of their student applicants in December of each year and are considered extensively by a Management Committee (currently the Northern Scientific Training Program Management Committee), which makes decisions about funding to recipients based on criteria outlined in program guidelines (see Section 10).</p>
(iii) Scholarships and Fellowships	<p>The amount to be paid through grants will be predetermined by the CHARS multi-stakeholder advisory committee(s).</p>
(iv) CHARS Awards	<p>Applications received from eligible recipients will be assessed by a multi-stakeholder Review Committee against the assessment criteria.</p>

8. Maximum Amounts Payable

S&T Program	Training and Capacity Building	Scholarships and Fellowships	CHARS' Awards
<i>(Contributions)</i>	<i>(Contributions)</i>	<i>(Grant)</i>	<i>(Grant)</i>
The maximum amount payable to any recipient annually will not exceed \$4 million per project.	The maximum amount payable to any recipient will not exceed \$1 million per project.	The maximum amount payable to any recipient will not exceed \$200,000 per year, per recipient.	The maximum annual amount payable will not exceed is \$120,000 per year, per recipient.

9. Basis on Which Payments will be Made

Contributions

Contributions are normally paid on the basis of achievement of performance objectives or as reimbursement of expenditures incurred. Advance payments may also be made based on a cash flow forecast from the recipient in accordance with the Cash Management section of Treasury Board's *Directive on Transfer Payments*. Where advance payments are necessary they are limited to the immediate cash requirements of the recipient and based on a combination of the following:

- The achievement of pre-determined performance expectations or milestones – a description of the performance expectations or milestones is to be provided; and/or

- The reimbursement of eligible expenditures.

Monthly, quarterly or annual progress payments may be made based on expenditure claims, proof of the achievement of predetermined performance expectations or milestones, and a final payment of any sums due following receipt of the final report or deliverable or activities report and, if considered necessary by CHARS, following completion of a financial audit.

Funding is provided on an annual basis; however, proposals may be multi-year to a maximum of 3 years. Successful program recipients for multi-year funding must revise their proposals as required and resubmit them annually.

For Indigenous recipients, the transfer payments may be provided through fixed or flexible funding approaches.

Grants

Grants are a one-time payment per year.

10. Application Requirements and Assessment Criteria

Contributions

For recipients to receive contribution funding for (i) S&T Program and (ii) Training and Capacity Building, they must complete a proposal in the manner prescribed by CHARS, and must submit the proposal to the appropriate CHARS office. At a minimum, proposals must include:

- A description of the project;
- The objective(s) and expected outcome(s) of the project with linkages to CHARS' program objectives and priorities;
- Outputs that will be generated;
- Expected milestones along with criteria for measurement of success;
- Expected outcomes along with criteria for measurements of success; and
- A budget for the project indicating anticipated overall revenues by source (other grant and contribution programs within CHARS; other federal departments and organizations; other levels of government; the private sector; the applicant; and other sources).

The proposal will be reviewed for northern S&T relevance, excellence and northern and Indigenous engagement.

Where applicable, in order for projects to receive continued funding, the eligible recipient will provide CHARS with program specific annual reports and financial statements which include the necessary information, as specified by CHARS in the duly signed agreement, sufficient to verify adherence to the terms and conditions and demonstrate results for the most recently completed fiscal year. The purpose of the reports is twofold:

- To aid in determining the applicant's ability to successfully complete the project; and

- To review, where applicable, the degree to which, past funding by the recipient was spent in achieving its project objectives.

Grants

For recipients to receive grant funding for (ii) Training and Capacity Building, (iii) Scholarships and Fellowships, and (iv) CHARS' Awards, applications must be completed in the manner prescribed by CHARS, and forms must be submitted to the appropriate CHARS office. Nominations are accepted on behalf of potential recipients.

A multi-stakeholder Review Committee will consider the applications in terms of relevance to the CHARS Program, the total number of eligible requests received for funding, and available funds for such activities. Candidates for awards will be considered on the following combination of achievements: (a) wide recognition of the quality of the work; (b) productivity in field(s) of activity; (c) significant contribution to advancement of northern knowledge or knowledge mobilization; (d) relevance to northern societies or communities; and (e) training or participation of northerners in the work.

University/institute applicants for Northern Scientific Training Program grants are required to submit an application to CHARS on behalf of their student applicants in December of each year. These applications are considered extensively by a Management Committee (e.g. the Northern Scientific Training Program Management Committee), which makes decisions about funding to recipients based on:

- compliance with program guidelines;
- evaluation of past student performance in the program;
- evaluation of past university or college performance and the future research priorities of the sponsoring university, college or non-profit institute; and
- training component of the proposed project and the expected contribution to the development of northern specialists of the university level.

University/institute recipients of the grants described above are required to provide the following information in order to be eligible for a grant:

- establish they are eligible recipients;
- establish they maintain sound financial management controls and practices;
- provide a description of the project objective(s), activities and expected outcome(s) which demonstrate support for the objectives of the program together with a budget proposal outlining the planned activities and costs; and
- agreement to provisions for appropriate program compliance review and program evaluation, and audit.

Institutions, such as the Association of Canadian Universities for Northern Studies, are required to submit a detailed proposal and budget to CHARS annually for funding to offset a portion of the administrative expenses. The proposal and budget are reviewed by CHARS.

11. Due Diligence and Reporting

CHARS has internal control procedures, systems and human resources to ensure due diligence is properly exercised when verifying eligibility, approving transfer payments, and where applicable, assessing the recipient's capacity to manage, develop and deliver funding programs and services, verifying financial management capability, authorizing spending authority and approving payment requisitions, and for managing and administering a grant program.

A Performance Measurement Strategy has been developed, consistent with the requirements of the Section 6 in the Policy on Evaluation.

12. Official Languages

Where a program supports activities that may be delivered to members of either official language community, access to services from the recipient will be provided in both official languages and Part IV of the *Official Languages Act* is applicable. In addition, the department will ensure that the design of programs respect the obligations of the Government of Canada as set out in Part VII of the *Official Languages Act*.

13. Intellectual Property

Where a grant or contribution is provided for the development of material in which copyright subsists, conditions for shared rights will be set out in the funding agreement.

The CHARS Act includes the following provision, "In carrying out its purpose, CHARS may license, assign, sell or otherwise make available, and receive fees royalties and payment for, any patent, copyright, industrial design, trademark, trade secret or other similar property right held, controlled or administered by CHARS"

14. Repayable Contributions

Provisions for repayable contributions do not apply as contributions are made with the primary aim of furthering basic research and do not apply. Any contributions made to private firms under these programs, initiatives and projects are not intended to generate profits to increase the value of a business.

15. Redistribution of Contributions

Where a recipient delegates authority or further distributes funding to agency third party (such as an authority, board, committee, or other entity authorized to act on behalf of the recipient), the recipient shall remain liable to CHARS for the performance of its obligations under the funding agreement. Neither the objectives of the programs and services nor the expectations of transparent, fair and equitable services shall be compromised by any delegation or redistribution of contribution funding.

Recipients have full independence in the selection of such third parties and will not be acting as an agent of the government in making distributions.