CANADIAN HIGH ARCTIC RESEARCH STATION

www.science.gc.ca/CHARS

Science and Technology Program

2015-2016

Call for Proposals

Canada

Canadian High Arctic Research Station

CALL FOR PROPOSALS – 2015 – 2016

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1 - INTRODUCTION

The Canadian High Arctic Research Station's (CHARS) mission is *"To be a world class research station in Canada's Arctic that is on the cutting edge of Arctic issues. The Station will anchor a strong research presence in Canada's Arctic that serves Canada and the world. It will advance Canada's knowledge of the Arctic in order to improve economic opportunities, environmental stewardship, and the quality of life of Northerners and all Canadians"*.

The Station is currently being built in Cambridge Bay, Nunavut. Once completed, it will include office, meeting, conference, dining, logistics and accommodation facilities, as well over 19 laboratories and workshops. The Station will open in 2017 and be at full operating capacity in 2018/19.

Up to 50 staff at CHARS will be required to run the facility, conduct in-house research and also deliver a pan-northern Arctic S&T Program. The goals of the CHARS S&T Program are to:

- help with the collection and advancement of Canada's knowledge of the Arctic in order to improve economic opportunities and environmental stewardship for the benefit of Northerners and all Canadians;
- build on the vast body of traditional and scientific knowledge and integrate with existing networks of knowledge holders; and
- provide a world-class hub for science and technology (S&T) in Canada's North that complements and anchors the smaller regional facilities across the North.

Broad consultations were held with Northerners and the Arctic S&T community to identify where CHARS could make the most effective S&T contributions. These consultations led to the first CHARS Science and Technology Plan for 2014 to 2019. The plan outlines five priority areas on which the CHARS science and technology program will initially focus, www.science.gc.ca/chars. The priorities will be phased in gradually as CHARS builds towards the opening of the facility in Cambridge Bay.

1.1 CHARS Priorities

A key objective for CHARS is to span the gap between Canadian decision makers in communities, government and industry who need to understand, predict and mitigate how changes due to resource development and climate will affect them. This call will focus on new monitoring and research efforts for the following three of five CHARS S&T research priorities identified in the S&T Plan, which are:

1.1.1 Baseline information preparedness for development

To support accelerating the rate of development and achieving the North's full potential, CHARS will lead an effort to strengthen the information base for assessment, regulatory approvals, and management for resource development. This will increase certainty for industry investment, support tracking the net benefits of a stronger economy, and provide management tools for decision-makers in the private and public sectors. This priority will be piloted in areas of high resource potential with a view to its application to other resource-rich regions in the North.

1.1.2 Predicting the impacts of changing ice, permafrost, and snow on shipping, communities and infrastructure.

CHARS will lead a research program to understand how and why changes are happening in ice, snow, and permafrost across the Arctic and the impact of these changes on shipping, infrastructure (e.g. ice roads, buildings, and runways) and local ecosystems, as well as global processes. CHARS will focus its efforts to support decision making in two areas – safe shipping and the mitigation of impacts from shipping, and supporting industry and communities in adapting to environmental changes. Improved predictive capacity will provide increased certainty for resource development initiatives that plan projects with 10- to 30-year timelines and for northern communities developing infrastructure.

1.1.3 Infrastructure for development

CHARS will undertake research and technology development that targets infrastructure, such as water and waste-water treatment, roads, and housing, and related economic instruments, such as financing and incentives that contribute to economic and social development.

As the above listed priorities are very broad, CHARS will focus on specific knowledge gaps in this call for proposals that will serve as a foundation for future calls.

1.2 CHARS Call for Proposals: Two Areas

The first CHARS funding call will initiate elements of the S&T Program by requesting proposals under two areas:

1.2.1 Strengthening Monitoring in Northern Canada:

To better integrate environmental and socio-economic monitoring in northern Canada by addressing specific thematic gaps, and utilizing common protocols.

1.2.2 Research in Northern regions of Significant Resource Development:

To fill geographic gaps in the current environmental and socio-economic knowledge in specific regions of the Canadian Arctic undergoing significant change due to resource development and a changing climate.

Applicants should consult Sections 3 and 4 for a description of the Call for Proposals areas when preparing their proposals.

1.3 Timelines for the CHARS Call for Proposals

CHARS' is now accepting funding proposals for 2015-2016. Please note that the deadline to submit a letter of intent is **January 19, 2015,** at *11:59 (noon) Eastern Standard Time* and the deadline to submit a proposal is **February 23rd, 2015,** at *11:59 (noon) Eastern Standard Time*.

Table 1.1 Timelines for the CHARS 2015-2016 Call for Proposals

MILESTONES / TASKS	DATE
Call for Proposals issued	December 5, 2014
Proposal consultation process with partners and stakeholders	December 8, 2014 to February 20, 2015
Deadline to submit letter of intent letters received after the deadline will not be accepted	**January 19, 2015** 11:59 (noon) Eastern Standard Time.
CHARS Secretariat response to proponents on their paragraph of intent	January 26, 2015
Deadline for submission of proposals proposals received after the deadline will not be accepted	**February 23, 2015** 11:59 (noon) Eastern Standard Time.
Applicants apply for research licenses and ethics review, as applicable.	March to April 2015
Proposal Review Period	March 2015
CHARS Management Committee meets to make final funding recommendations	March 2015
Written notification sent to applicants on the status of their proposal(s)	April to May 2015
Funding Agreements prepared and signed	June 2015 and ongoing

1.4 Available Funding

A total of $2,000,000 in new funding is available in 2015-16 for proposals that fall under the two CHARS' Call for Proposals areas. Proposals can be for single or multi-year projects until 2017-2018. All proposals will be evaluated on a yearly basis and therefore future year funding under multi-year proposals is not guaranteed.

Table 1.2: CHARS Funding for the 2015-2016 Call for Proposals
(Figures in Thousands $000)

CHARS Call for Proposal Areas	2015-2016		2016-2017		2017-2018		Total over 3 years	
	Total Funds available	Max. per project	Total Funds available	Max. per project	Total Funds available	Max. per project	Total Funds available	Max. per project
Strengthening Northern Monitoring	**$500**	100	**$750**	100	**$750**	100	**$2,000**	$300
Northern Regions of Significant Resource Development	**$1,500**	300	**$1,750**	300	**$1,750**	300	**$5,000**	$900
Total	**$2,000**		**$2,500**		**$2,500**		**$7,000**	

Note these funding levels are approximate and may be subject to change.

1.5 Geographic Focus

For the purposes of CHARS, Canada's Arctic is defined as the lands and waters that lie north of the discontinuous permafrost line. This is the same definition used by the Northern Contaminants Program, and was used for the Government of Canada's International Polar Year Program. To focus this first Call for Proposals , preference will be given to projects that focus on Arctic (Taiga and Tundra) rather than Boreal regions.

1.6 Eligible Recipients:

Who is eligible to apply?

Canadian individuals and organizations, including:

- regional and community groups (Aboriginal communities or organizations, community associations and institutions);
- academic organizations and northern colleges;
- government departments and agencies (federal, provincial, territorial, regional, municipal, Aboriginal);
- private sector; and

- not-for-profit, non-governmental organizations.

1.7 Links with other Arctic Science and Technology Programs

CHARS builds on the experience of the Northern Contaminants Program (NCP), which is internationally renowned and widely recognized for working in partnership with northern and Aboriginal organizations. The CHARS Call for Proposals is intended to be complementary to the current NCP Call for Proposals, and therefore has adopted a similar format and many similar requirements and timelines. The NCP Call for Proposals was released on November 14th and has a deadline for proposal submission of January 13, 2015.

Co-funding is encouraged between CHARS and the NCP as well as other related Arctic science programs such as ArcticNet, Nasivvik, Nunavut General Monitoring Plan, and the Cumulative Impacts Monitoring Program where applicable. If there are any questions or concerns e.g., monitoring being conducted under various programs, please contact CHARS staff directly.

An example of potential international collaboration is the National Aeronautics and Space Administration (NASA) Arctic Boreal Vulnerability Experiment (ABoVE) program will be initiating a remote sensing campaign in 2015 which will involve mapping various ecosystem components and processes in the Boreal regions of Alaska and Canada's Western Arctic. Researchers are encouraged to contact the ABoVE project at www.above.nasa.gov to investigate potential international collaboration to leverage resources.

CHARS encourages partnerships and leveraged funding with other Arctic Science and Technology Programs, however it is understood that not all northern led projects are able to provide matching or in-kind funds.

2 – STRENGTHENING MONITORING IN NORTHERN CANADA

CHARS has been mandated to lead the development of a systematic approach to monitoring and assessing cumulative impacts in resource-rich regions of the Canadian North. This will improve the availability of baseline information in support of initial investment decisions, streamline and leverage ongoing project monitoring to strengthen the capacity of communities, governments and industry to track, attribute, and, therefore, manage future impacts effectively.

A number of recent reports have highlighted the significant amount of monitoring activity happening in the Canadian North and the opportunity to better integrate and coordinate these efforts to fill key gaps in our monitoring efforts.

- Canadian Polar Commission draft report: State of Environmental Monitoring in Northern Canada (http://www.polarcom.gc.ca/sites/drupal_wet/files/documents/CPC_Monitoring_analysis_report_DRAFT_for_web.pdf)
- Circumpolar Biodiversity Monitoring Program: Terrestrial Biodiversity Monitoring Plan (www.caff.is/publications/view_document/256-arctic-terrestrial-biodiversity-monitoring-plan)

CHARS is currently engaging with industry and the many federal, territorial, and Aboriginal organizations involved in monitoring wildlife, the environment, and the health and socio-economic conditions of northern residents to develop a coordinated, pan-northern strategy to improve the overall efficiency and effectiveness of monitoring in the North while respecting individual mandates and responsibilities.

As the CHARS Monitoring strategy is being developed, proposals are being sought to fund monitoring of specific terrestrial and human health gaps. These proposals will be used to pilot the implementation of a systematic monitoring approach that is cost effective, rigorous, and sustainable in the long term.

2.1 Thematic Monitoring Gaps

The thematic monitoring gaps this area of the call will focus on are:

A. Terrestrial:
- Cryosphere: permafrost (e.g. active layer depth, temperature), snow, lake and river ice
- Freshwater: fish, plankton, carbon and methane fluxes
- Vegetation: shrubs, carbon and methane fluxes
- Wildlife: muskoxen and caribou health, and small mammal populations

Proponents are recommended to view the Circumpolar Biodiversity Monitoring Program website for protocols on terrestrial and freshwater biodiversity monitoring (www.caff.is).

Please note, marine monitoring gaps are not being considered in the Strengthening Monitoring theme, but will be addressed in future calls.

B. Social Determinants of Health:

For recent reports on parameters for social determinants of human health, proponents are directed to the following reference material for guidance including:

- Public Health Agency of Canada – What Determines Health (http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php#determinants)
- Social Determinants of Inuit Health in Canada https://www.itk.ca/publication/comprehensive-report-social-determinants-inuit-health-national-inuit-organization
- First Nations Regional Health Survey's (RHS) 2008/10
  - The Dene Nation: First Nations Regions Health Survey 2008-2010 http://www.denenation.com/pdf/Dene%20Health%20Report%20PR.pdf
  - Reclaiming our Wellbeing: Yukon First Nations Regional Health Survey Report 2008-2009. Please contact Lori Duncan for a copy of the report by e-mail lori.duncan@cyfn.net or phone 867-393-9230.

2.2 Objectives

The objectives for this specific area of the call are to develop proposals that can:

- fill thematic monitoring gaps listed above in Section 2.1;
- build on current monitoring networks, approaches and initiatives;
- initiate monitoring that will contribute to the delivery of the CHARS priorities listed in Section 1.1
- develop and implement consistent protocols that produce scalable, baseline information for evaluating and tracking of impacts (both positive and negative) of resource development and climate change on human and ecological systems in the North.
- develop partners and clients that will utilize this information to ensure long-term sustainability.

The resulting information will be input into cumulative effects models that incorporate ecological and socio-economic monitoring (see Section 3.2) to serve as decision support tools. Proponents may wish to combine related monitoring measurements to show linkages within ecosystems and communities.

CHARS will coordinate amongst the successful projects to ensure they are complementary, and will work with other monitoring initiatives and clients to ensure a coordinated approach to their implementation.

The deadline to submit requests for 2015 field logistics support through Natural Resources Canada, Polar Continent Shelf Program (PCSP) has passed. Therefore proposals that will require new field work as part of this research are requested to plan these activities for subsequent years in 2016 and 2017.

PCSP will not pay or subsidize logistics costs required for CHARS funded field work. Please include estimated field logistics costs for 2016 and 2017 in your budget request.

2.3 Criteria for Review:

Proposals will be reviewed and ranked according to the following criteria.

Table 1.3 Strengthening Monitoring in Northern Canada- Review Criteria

Weighting	Criteria
10	Does the research proposal address some or all of the CHARS priorities outlined in Section 1.1?
10	Does the research proposal address the thematic monitoring gaps outlined in Section 2.1 and the objectives outlined in Section 2.2?
10	For the successful delivery of the project does the: • project lead have the experience and knowledge? • proposal involve appropriate northern and southern partners, organizations, agencies and communities required?
30	Does the proposal clearly outline how it will review, assess and implement: • the latest scientific knowledge for the monitoring parameters? • approaches that adopt and/or build upon existing and historical networks, datasets and monitoring platforms? • approaches for 'scaling up' where appropriate by integrating: - ground-based methods with remote-sensing tools, or - community-based data? • are several co-located monitoring measurements being captured to show linkages within ecosystems and/or communities? • how these parameters will feed into cumulative effect models? • the criteria (thresholds, triggers) for assessing and reporting the 'state of' the monitoring parameters? • the sustainability of the monitoring parameters over the long term?
20	Northern communities have a wealth of knowledge that can enrich the content of research and monitoring. They have important knowledge and expertise working on the land that can significantly contribute to the long-term sustainability of monitoring. Does the research proposal: • include opportunities to expand and integrate existing community-based monitoring programs that meet the needs of the community, facilitates the delivery of the monitoring, while linking into a coordinated approach for monitoring across Canada's North? • does the proposal include local and/or traditional knowledge monitoring techniques that demonstrate an integrated approach to northern monitoring?
10	Does the budget seem appropriate (e.g. reasonable charges for sample analysis, etc.) and is other funding/in-kind support identified?
10	Can the results be delivered within the 3-year time frame?

3 – RESEARCH IN NORTHERN REGIONS OF SIGNIFICANT RESOURCE DEVELOPMENT

Canada's north is undergoing significant change due to resource development and changes in climate. Northern resources need to be developed in ways that ensure the health and sustainability of adjacent communities and ecosystems. A gap identified by communities, territorial governments and industry is the baseline information and knowledge in resource-rich regions to assess potential cumulative social, economic, health, and environmental impacts of existing, planned, and future development projects. A further gap is the availability of tools that facilitate the translation of this data into information to support management decisions. This requirement for baseline data and decision support is situated in the context of the already significant impacts of climate change in the North and projections for continued change.

Recent federal investments in monitoring in the North, such as the Cumulative Impact Monitoring Program in the Northwest Territories and the Nunavut General Monitoring Program, are establishing the parameters and values that need to be tracked and are initiating baseline monitoring programs. The ability to distinguish project-specific environmental, social, economic, and health impacts from those that result from broader-scale changes such as global warming or from the cumulative effects of multiple projects in a region, is as critical area for science and technological development.

A key role for CHARS will be spanning the gap between Canadian decision makers in industry, governments, and communities who need to understand how resource development and climate change will affect them.

3.1 Geographic Knowledge Gaps

As the CHARS S&T Program phases in, CHARS will initially focus its research efforts on the following three regions undergoing significant changes due to resource development, including communities potentially affected by resource development in the area(see figure 3.1:

A. The Slave Geological Province:

This is an area of geological significance between the eastern Northwest Territories and western Nunavut that has existing mines and new mines under development. As these developments mature, ecosystems may be impacted due to increased transportation activities Along with the ecosystems in question, there are a number of communities that may be directly or indirectly affected by these activities.

B. North Baffin Island

The Mary River project being led by Baffinland Iron Mines Corporation, is a new iron ore mine in northern Baffin Island that recently started production in October 2014. During phase 1 production, 3 million tones of ore will be shipped out during the summer open water season through the Milne Inlet port at Eclipse Sound, with ships passing near the community of Pond Inlet. If global demand for iron ore increases, phase 2 may see up to 20 million tones of iron-ore in production per year. Phase 2 would include construction of a railroad and year-round shipping from a port to be developed at Steensby Inlet to the south of Mary River into the Foxe Basin region and out through Hudson Strait. There are a number of communities in the area that will be affected by this resource development.

C. Hudson Strait

Canada's only existing deep water port is situated in Churchill, Manitoba. As the port of Churchill expands its operations to increase shipping to European and other markets, more ships will transit through Hudson Strait. In addition, phase 2 production of iron ore from the Baffinland Mary River Mine in Nunavut may ultimately be shipped through Hudson Strait as well. This area of interest stretches from Coats and Mansel Islands in the west to to Resolution Island in the east, and includes a number of coastal communities along the route.

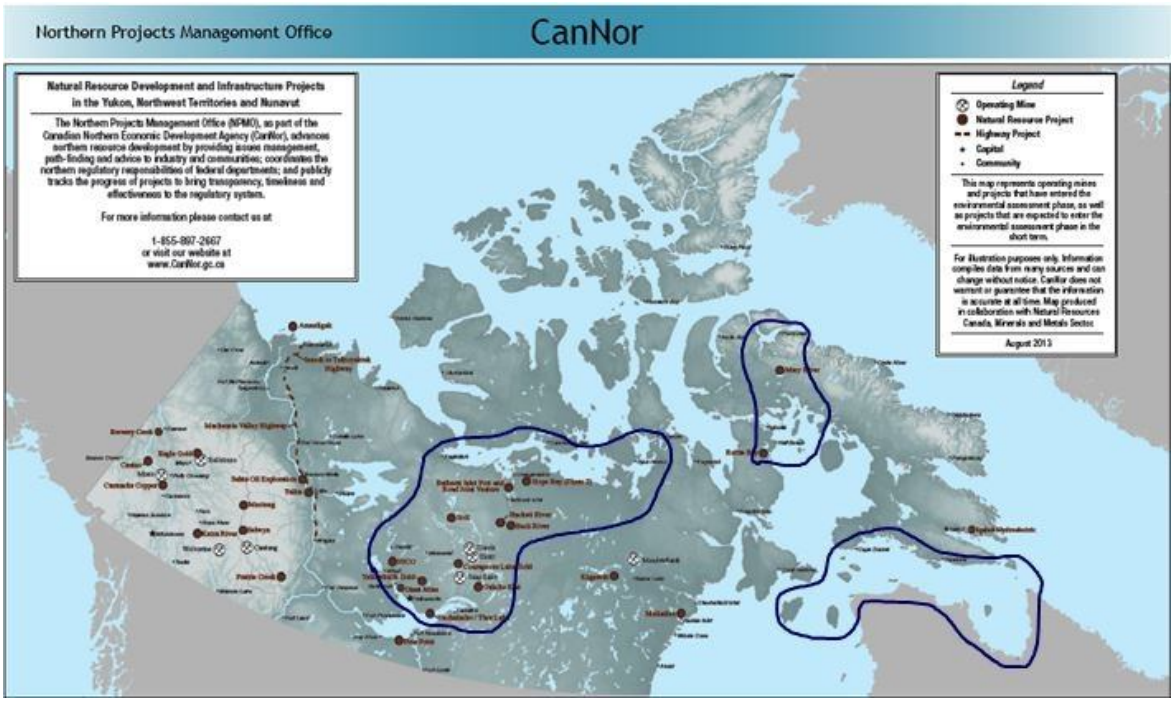

Figure 3.1 Regions of High Resource Potential.
Basemap Source: Canadian Northern Economic Development Agency, Northern Projects Management Office

Successful projects focusing on these areas will produce products that can be applied to other regions of the Arctic to guide responsible resource development. As CHARS evolves over time, new areas of intense resource development interest may become the focus of CHARS.

3.2 Objectives

The objectives for this specific area of the call are to develop proposals that can:

- initiate research that will contribute to the delivery of the CHARS priorities listed in Section 1.1
- work with territorial and federal governments, communities, industry and other funding programs (such as the Cumulative Impact Monitoring Program in the Northwest Territories and the Nunavut General Monitoring Program) to build on and fill gaps in current research networks, approaches and initiatives for the geographic regions listed in Section 3.1.

Types of research projects may include:

- marine and terrestrial studies and inventories to map historic and current cryospheric conditions for vegetation, permafrost and ice.
- model development at a range of scales to better predict changes in climate, vegetation, wildlife populations, permafrost, snow and ice in and around Arctic communities and outline ways to mitigate and adapt to these changes
- research to develop the methodology, conduct inventories, identify, map and monitor high value ecosystem components. For the purpose of this call, high value ecosystem components are defined as elements of ecological, historical, socio-economic and/or cultural significance that would be adversely impacted by resource development. Areas that are considered high value would need to be determined in partnership with the communities and regions being affected by resource development, as what is considered high value could vary by region.
- evaluations of current and development of new cumulative effects assessment models to recommend an approach that incorporates socio-economic, human-health and biophysical information to guide industrial development while minimizing negative impacts on high value ecosystem components.

CHARS will coordinate amongst the successful projects to ensure they are complementary, and will work with other monitoring initiatives and clients to ensure a coordinated approach to their implementation.

The deadline to submit requests for 2015 field logistics support through Natural Resources Canada, Polar Continent Shelf Program (PCSP) has passed. Therefore proposals that will require new field work as part of this research are requested to plan for these activities in the subsequent years of 2016 and 2017.

PCSP will not pay or subsidize logistics costs required for CHARS funded field work. Please include estimated field logistics costs for 2016 and 2017 in your budget request.

3.3 Criteria for Review:

Proposals will be reviewed and ranked according to the following criteria.

Table 1.4 Northern Regions of Significant Resource Development: Review Criteria

Weighting	Criteria
10	Does the research proposal address some or all of the CHARS priorities outlined in Section 1.1?
10	Does the research proposal address the geographic areas outlined in Section 3.1 and the objectives outlines in Section 3.2?
10	For the successful delivery of the project • does the project lead have the experience and knowledge? • does the project involve appropriate northern and southern partners, organizations, agencies and decisions makers (community, regulator, industry, etc.) required for the successful delivery of the project, i.e.?
30	Does the proposal clearly outline: • the scientifically rigorous methodologies used to implement and deliver the research? • approaches to adopt, build, collaborate with existing networks, programs and datasets? • how this work will fill necessary research gaps needed by decision makers in regions of high resource potential?
20	Northern communities have a wealth of knowledge that can enrich the content of research. They have important knowledge and expertise working on the land that can significantly contribute to the long-term success of the research. Does the research proposal: • include opportunities to expand and integrate existing community-based research programs that meet the needs of the community, facilitate the delivery of the research, while linking into a coordinated approach for determining the impacts of climate change and resource development? • does the proposal include local and/or traditional knowledge research techniques that demonstrate an integrated approach to northern research?
10	Does the budget seem appropriate (e.g. reasonable charges for sample analysis, etc.) and is other funding/in-kind support identified?
10	Can the results be delivered within the time frame indicated?

4 – INSTRUCTIONS

4.1 Proposal Review Process

An interim proposal review process is being set up which will combine a technical peer and social cultural review process. The steps involved in the Canadian High Arctic Research Station (CHARS) proposal review process are described further in the following sub-sections.

4.1.1 Letter of Intent Review

Interested proponents are required to submit, by **January 19, 2015** at 11:59 (noon) Eastern Standard Time, a one-page summary of their proposal, see Section 4.3.1 for details. Letters received after the deadline will not be considered.

The CHARS Secretariat will review and assess these one-page summaries to ensure the proponents meet the eligibility and focus of the CHARS 2015-2016 Call for Proposals. This letter of intent stage will also be used by the CHARS Secretariat to anticipate the number of full proposals to be submitted and the technical and social/cultural expertise required for review.

The CHARS Secretariat will respond to the proponents by **January 26, 2015**, to indicate if they should continue to draft a proposal. Proponents should continue to work on their proposals while waiting for the January 26, 2015 response from the CHARS Secretariat.

Proponents who successfully pass this initial review stage will be invited to submit a full proposal by **February 23rd, 2015** at 11:59 (noon) Eastern Standard Time.

4.1.2 Proposal Review

A CHARS Management Committee has been established to provide advice and strategic direction for the CHARS S&T program. The Committee is made up of 30 experts across various sectors of the northern and southern Arctic S&T community.

Until the CHARS S&T program is more fully established, a sub-committee of the CHARS Management Committee will review proposals. Outside expertise will also be sought as required. The CHARS sub-committee review team's role is to assess the merit of the project and its relevance to the CHARS funding call objectives. They do so by reviewing how the proposal addresses the geographic and thematic priority areas identified. Their review also covers the expertise of the project team, the clarity and scope of objectives, the adequacy of methodology, suitability of project design, and appropriateness of time frame and budget as outlined in Sections 2.3 and 3.3. Proposals are rated and ranked and operational and funding recommendations are made to the CHARS Management Committee.

The CHARS Management Committee will meet in March to review and consider all the recommendations from the subcommittee. The CHARS Management Committee makes the final funding recommendations for the year.

4.2 Formatting the Templates

When you prepare your application, supporting materials and attachments, please use the following guidelines:

- Page set up on letter paper, 8 1/2 x 11 inches (21.5 x 28cm), portrait format, with a single column
- Set margins at 0.75 inches (1.9 cm) or more all around
- Text must be in black 12 pts or larger. The preferred font is Arial
- Text must be single-spaced, with six lines per inch or less
- Condensed font, and applications completed strictly in italics, are not acceptable
- Enter your names at the top of every page, within the set margins
- For multi-page attachments, number your pages sequentially
- Please prepare your proposal in Word, and your budget Excel templates provided
- The size of the electronic document must not exceed 10MB

4.3 Templates and Tables

In order to be considered for funding, all proposals submitted to the Canadian High Arctic Research Station (CHARS) must include a short letter of intent, followed by a full proposal and budget following the templates and formats outlined.

4.3.1 Letter of Intent Template

This one-page summary should include the following information.

1. Project Title:

2. Program Category:

Indicate which of the following themes in the Call for Proposals the project falls under (only one is allowed):

Strengthening Monitoring in Northern Canada

A. Terrestrial
B. Health

Research in Northern Regions of Significant Resource Development

A. The Slave Geological Province:
B. Baffin Island
C. Hudson Strait

3. Project Leader, Affiliation and Contact Information:

Include mailing address, telephone, fax and e-mail.

4. Proposed Project Team Members and their Affiliations:

The initial list of proposed project team members and their affiliations.

5. Summary of the Proposed Research:

Provide a plain language description of the proposed project (narrative or bullet-form) and how it will address some or all of the CHARS priorities outlined in Section 1.1.

6. Estimated amount of funding to be requested :

Please indicate the estimated amount of funding to be request in:

- 2015-2016
- 2016-2017
- 2017-2018
- Total for 3 years

4.3.2 Proposal Template

1. Project Title:

2. Program Category:

Indicate which of the following calls for proposals are the project falls under (only one is allowed):

Strengthening Monitoring in Northern Canada

A. Terrestrial
B. Health

Research in Northern Regions of Significant Resource Development

A. The Slave Geological Province:
B. Baffin Island
C. Hudson Strait

3. Program Priority:

Indicate the CHARS priorities (Section 1.1) and objectives (Section 2.3 or 3.3) that the project will be focusing on.

4. Project Leader, Affiliation and Contact Information:

Include mailing address, telephone, fax and e-mail.

5. Project Team Members and their Affiliations:

List names of the entire project team members and their affiliations. All team members listed must be actively involved in the research. By listing members of the project team, the applicant (or Project Leader) is confirming that these individuals have agreed to be included as members of the project team in 2015-2016 and have been granted an opportunity to review and/or provide input on this project proposal.

6. Plain Language Summary:

Provide both project relevance and a description of the proposed project that would be understood by a non-scientific audience in a maximum of 100–200 words (narrative or bullet-form). This will be used in the review process, during their social/cultural review of proposals as well as by the CHARS Management Committee. These plain language summaries will also be used on the CHARS website to provide a brief description of CHARS-funded projects.

The summary should answer the following questions:

- What is the proposed work?
- What questions does the project attempt to answer and why?
- Where and when will the work be done?
- How will the project involve/help Aboriginal peoples and other Northerners?
- What are the expected results and the results to date?

7. Project Description

a) Objectives:

Provide well-defined short-term and long-term objectives for the overall project in relation to the CHARS 2015-2016 Call for Proposals.

b) Rationale:

Describe the rationale for the project in relation to the CHARS 2015-2016 Call for Proposals. This should be a detailed Section that clearly lays out the scientific basis for the proposed work. It is this Section that will convince reviewers that the proposed work addresses the needs described in the Call for Proposals in a way that is scientifically defensible.

c) Progress to Date:

Describe the results of any work completed to date so that the project can be properly and fully evaluated. This should include any work carried out in non-CHARS funded projects whose results are specifically relevant to the proposed work. This Section should also include information on any progress in the areas of capacity building, and/or the use of traditional knowledge.

d) Proposed Work:

Provide a brief description of activities, including project design and methodology, where and when the work will be carried out over the lifetime of the project. Include a more detailed description of planned activities in the year for which funds are being requested.

e) Deliverables:

Specify the deliverables to be submitted to the CHARS Secretariat over the lifetime of the project, as well as for the year for which funding is requested. Include data reports, open literature publications, reports, workshops and items for communications initiatives; please refer to Table 1.5 for reporting requirements.

8. Clients/Partners:

List the departments, agencies, Aboriginal organizations, communities and other countries, along with the corresponding contact persons, involved in the project and/or who could make use of the results (**for the current funding year only**). List any other projects that are related to the proposed work and indicate any shared costs and/or sample archival possibilities.

a) Northern Capacity Building and Training:

Capacity building for the purposes of CHARS can be defined as activities which can improve an organization, community or a person's ability to engage in research and monitoring. Describe the capacity building efforts planned for the year for which funding is requested. Some examples of capacity building include (but are not limited to):

- Formal training programs (one-on-one or small group training with the researcher)
- Community or target-group workshops
- Presentations to, and engagement of, science classes (promoting student involvement)
- Hiring and engagement of local individuals in research projects

b) Traditional Knowledge:

Explain how the proposed project will utilize local and/or traditional knowledge, unless not applicable. Local and traditional knowledge may be required when considering overall trends. One example is the use of traditional knowledge in collecting wildlife samples (to assess the timing of sample collection, changes in migration patterns, changes in populations, and/or changes in habitat).

9. Communications:

Describe in detail (**for the current funding year only**) any communications activities planned as part of the proposed project, including the names of people and organizations that have been or will be contacted. Examples of communications activities include (but are not limited to):

- Production of fact sheets or other materials
- Presentations to school groups and other community organizations
- Progress reports sent to Hunters and Trappers Organizations
- Poster presentations.

10. Consultation:

This Section must be completed for all projects, including ongoing multi-year projects for which any part of the project in any year of the study was conducted in the North or made use of samples from the North. For projects that have no northern component at any stage, a brief statement explaining why there has been no northern consultation is sufficient.

Describe the specific details of the consultation that has occurred thus far, including efforts and successes from the previous year's project (if applicable) and specific plans for future consultation (e.g., what was discussed, with whom and when).

a) Ethics review:

Proposals for human health research must include information about the relevant ethics review, which ethical review board has or will review the study and the status of the review. A copy of the relevant consent form should also be included. It should be noted that CHARS access to project data needs to be recognized in this documentation

11. Laboratory Analysis:

Provide the name of the laboratories that will be used to conduct analyses, the cost of analysis per sample, the quality assurance/quality control (QA/QC) methods and procedures to be used.

12. Data Management Plan:

Describe your data management plan, where and when the data will be captured and when the metadata records will be created in the Polar Data Catalogue. Project leaders will be requested to complete and sign the CHARS *Sample and Data Accessibility Form* upon approval of funding. This form is not yet available but will be available at the time of funding approval.

13. Relevant Publications/ Presentations:

This should include publications and presentations by project team members relevant to the proposed project (2 pages maximum). This Section should also include a list of the references cited in the text of the proposal.

14. Supportive Information on Expertise:

Attach résumés etc. to demonstrate the scientific excellence, experience and/or expertise of the project leader(s) (maximum two pages per individual).

4.3.3 Budget Tables

Proposals submitted to CHARS for funding must include budget tables prepared using templates available from CHARS. Use Budget Table 1 to identify the budget request for 2015-2016, 2016-2017 and 2017-2018; Budget Table 2 summarizes these requests by category; Budget Table 3 identifies any other sources of funds that are available for the project from other sources and includes in-kind support as well as cash contributions. For any questions or issues pertaining to the Budget Tables template, please contact the CHARS Secretariat.

Budget Table 1: Detailed budget information for NCP support

For CHARS funds being requested please follow the instructions outlined within the budget template. Please note that some columns are auto-calculated and thus are locked for editing (i.e you will not be able to delete or enter information directly into these columns).

Budget Table 2: Budget summary information

The Table 2 is auto-filled from the inputs in Budget Table 1 and Budget Table 3

Budget Table 3: Other sources of funds

Please indicate other funding sources in Budget Table 3. Other funding sources include in-kind contributions such as staff salaries, services, facilities, and operating funds as well as the estimated value, status, and source of other known or potential contributions to the project (e.g., Natural Sciences and Engineering Research Council of Canada (NSERC), ArcticNet, other government departments (OGDs), Canada Foundation for Innovation, etc.).

The following provides further detail on the Classes of Expenditures that are to be used in the budget tables.

1. Professional Fees and Services:

Legitimate entries under this category are the wages of people hired specifically for the project (i.e., non-federal employees including students, Aboriginal and/or local employees). Caution should also be exercised to ensure that double counting of contracted employees does not occur.

- Indicate the total estimated value of each contract to be let under the project, the contractor name (if known) and purpose of the contract.
- Contractors must provide justification of their fees.
- If funding is requested for student stipends, it must be used for tasks directly related to the project.
- In the case of contracted laboratory services, indicate the cost of analysis per sample, as well as the type of analysis and number of samples. If a student is to conduct any of the analyses or sample preparation, the analysis costs should be reduced as appropriate.
- This category should not include the salaries of full-time continuous or term federal employees participating in the proposed project. The latter salaries are government A-base and are covered by the particular department whether the personnel are participating in an NCP project or in other work. Such salaries should be reported in Budget Table 3 “Other sources of funds”.

2. Equipment and Facilities:

- Specify the type of equipment, equipment costs (purchase, lease or maintenance) and the extent to which the equipment will be used in CHARS projects.
- Only equipment that is specifically purchased leased or developed for the particular project should be reported in this category.
- The maintenance cost of equipment already owned by the federal government and used as part of the project should be reported in Budget Table 3 “Other sources of funds”.
- Indicate the cost of any laboratory analysis per sample, the type of analysis and the number of samples to be analyzed.
- Only the cost of the sample analysis and/or the development of specific analytical techniques for a CHARS project are appropriate.
- The costs of shipping equipment.

3. Travel & Logistics:

- Include all travel, accommodation and meals.
- Logistics costs for establishing and operating field camps, aircraft rental and shipping (i.e., freight) should also be included in this category.
- Ship time should be reported under this category only when the use of the ship will be charged directly to the project or when smaller vessels are rented for the express purpose of conducting the project.
- If ship time is considered government A-base (i.e., the project manager is not charged for time on board) then such costs should be reported in Budget Table 3 “Other sources of funds”.
- Travel to workshops, northern consultation sessions, and meetings.

4. Other Costs:

- Other costs include miscellaneous costs such as office supplies and operating expenses (e.g., office space, rental, phone, printing, computer time, fax, photocopying and postage).
- Costs that do not fit in any of the above categories should be included here.

5. Administration Fee:

All administrative expenses associated with the project activity may be included in this category. This may include, for example, payroll or accounting services. Administrative expenses shall not exceed 15% of the total project budget.

Letters of support:

Letters of support from team members, supporting communities or organizations and/or collaborators/partners must be attached and describe:

- The organization's support of and agreement with the proposal submitted
- The potential to benefit Canada, especially Northern Canada

5. RESPONSIBILITIES OF APPLICANTS

All CHARS-funded projects must conform to the guidelines outlined below

5.1 Partnerships

CHARS' requires that all funded projects be carried out in partnership with Northerners. Scientists are encouraged to work with community leaders, Elders, hunters and other knowledgeable individuals to incorporate traditional knowledge into the design and conduct of the study. Community input to the research is important, as are sensitive and sound researcher–community relations; all must be clearly demonstrated in project proposals.

CHARS supports interdisciplinary studies that advance general knowledge, including projects that address the interactions between climate change and resource development. Applicants are encouraged to seek opportunities to combine CHARS' activities with those funded by other programs such as the Northern Contaminants Program, Nasivvik, and ArcticNet, to explore interdisciplinary questions.

Project leaders are also encouraged to seek funding from other programs that support community-based research and monitoring in the Arctic. Two such programs that operate in the Northwest Territories and Nunavut, respectively, are the Cumulative Impacts Monitoring Program (CIMP) and the Nunavut General Monitoring Plan. For more information, please contact CIMP by e-mail at nwtcimp@gov.nt.ca and for NGMP, please e-mail NGMP-PSGN@aandc-aadnc.gc.ca or call 1-855-897-6988.

5.1.1 Training the next generation of Arctic scientists

CHARS recognizes the importance of training the next generation of Arctic scientists as well as training scientists in the North. Research funded by CHARS is often well suited for graduate level research projects. The involvement of students in CHARS research and monitoring projects is strongly encouraged. Project leaders are also encouraged to develop links with the Arctic Colleges and other educational institutions to enhance the training and education of Northern students by including them in the project work.

5.1.2 Licensing, ethics review and health and safety

All research taking place in Canada's North requires a scientific research licence. Please consult the websites of the licensing authorities in the following regions, and/or contact the Inuit Research Advisors for guidance, see Contacts (Appendix B):

- Yukon, Northwest Territories, Nunavut
- Nunavik
- Nunatsiavut

Every research project involving the collection of personal information and/or samples from people will be required to provide proof of approval from all relevant ethics review boards/committees to the CHARS Secretariat before the research project is given final approval.

The health and safety of CHARS research teams, including Northern community members who assist/participate in the research in any way, is of paramount importance. CHARS Project Leaders should be aware of their responsibilities with respect to ensuring the health and safety of their teams, particularly when carrying out research activities in remote northern locations.

CHARS researchers are encouraged to consider the following information on health, safety, insurance, training, licensing and other aspects of working in the North, which was developed for researchers during International Polar Year, and disseminate this information to applicable members of the project team and incorporate these measures into project plans: http://www.api-ipy.gc.ca/pg_IPYAPI_061-eng.html

5.1.3 Data management

The integrity and long-term stability of sample archive and data management is very important for meeting the long-term science and policy objectives of the CHARS. Therefore, CHARS has adopted the use of the Canadian Polar Data Network - Polar Data Catalogue to ensure long-term access and availability of data, as well as to promote collaboration among researchers.

- All CHARS project leaders must use the Polar Data Catalogue to create a full set of metadata that completely document and describe the data collected as part of their CHARS projects.
- Applicants must describe their data management plans in their proposals.
- Upon approval of funding each project leader will be required to complete and sign the CHARS *Sample and Data Accessibility Form*.
- Where possible, Global Positioning System (GPS) coordinates should be captured when samples are collected.

The CHARS Secretariat will review entries in the Polar Data Catalogue to ensure that CHARS projects are reporting their metadata. Since metadata can be created before analysis is complete, the deadline for completion is March 31, 2016. Any holdback or further installment of funds including funding for the subsequent year will be contingent upon the creation of a new metadata record or update to an existing record.

CHARS is currently developing a Data Policy which will guide the preservation, use and discovery of data and metadata generated through CHARS funded projects. The draft Data Policy is currently under review and will be available prior to final funding approvals. Successful proposals will be required, as part of the agreement established, to submit a data management plan consistent with the CHARS Data Policy.

5.1.4 Sample archiving

It is important that all tissue samples collected during the course of CHARS studies be properly archived for future use. The collection and archiving of tissues from important traditional/country foods is of particular importance.

5.1.5 Reporting

Funding recipients are responsible for submitting the following project reports to the CHARS Secretariat, in accordance with the deadlines outlined in Table 1.3

Table 1.5 CHARS Reporting Requirements 2015-2016

Type of Reporting Requirement	Federal Government funding recipients	All other funding recipients	Date
Mid-year report	Yes		September 16, 2015
Final financial report	Yes	No	March 14, 2016
Project metadata input in the Polar Data Catalogue	Yes		March 31, 2016
End of year research report	Yes		April 29, 2016
Final financial statement	No	Yes	July 29, 2016

Surplus funds - if at any point in the year it becomes apparent that project funds cannot be fully used, project leaders are asked to notify the CHARS Secretariat of expected surplus funds as soon as possible so that funds may be re-directed without penalty.

If reporting requirements are not met, the terms and conditions of the funding agreement will not be met. This can affect:

- The release of any holdback funds from 2015-16 and potential funding for 2016-2017 and in future years.
- AANDC sets up funding agreements, one per institution. Therefore a failure to submit this report can also result in holding up AANDC funding for other groups within your own institution.

The end of year research report allows CHARS to make research results and other project information available to the public, including northerners and the scientific community, in a timely manner.

5.1.6 Publications

Project leaders are expected to publish their results in peer-reviewed literature in a timely manner.

Project leaders and all team members are expected to acknowledge funding from the CHARS in any publications, presentations, print and electronic communications related to and/or resulting from work carried out with the support of the CHARS. For guidance and/or instructions on the proper acknowledgment of the CHARS funding, please contact the CHARS Secretariat at SCREA-CHARS@aandc-aadnc.gc.ca.

6 - PROPOSAL SUBMISSION CHECKLISTS

6.1 Submitting the Letter of Intent

- ☐ Timeline for the CHARS Call for Proposals and Review Process (Section 1.3)
- ☐ Available Funding (Section 1.4)
- ☐ The eligibility requirements (Section 1.5)
- ☐ The objectives of the Call for Proposal Areas (Sections 2 or 3)
- ☐ Letter of Intent must be submitted by email (maximum size: 1 page) to the CHARS Secretariat at CHARS-SCREA@aadnc-aandc.gc.ca using the following text as the Subject: CHARS Letter of Intent 2015-2016 – [*insert name of Project Leader*]. Please note, compressed files cannot be submitted.

The deadline for submission of the letter of intent is **January 19, 2015, 11:59 (noon) Eastern Standard Time. Letters received after the deadline will not be considered.**

6.2 Before Submitting the Proposal

Completion of this checklist ensures that the applicant has read and understood the CHARS proposal requirements.

- ☐ Timeline for the CHARS Call for Proposals and Review Process (Section 1.3)
- ☐ Available Funding (Section 1.4)
- ☐ The eligibility requirements (Section 1.5)
- ☐ The objectives of the Call for Proposal Areas (Sections 2 or 3)
- ☐ Proposal and Budget Formats (Section 4)
- ☐ Responsibilities of Applicants (Section 5)

6.3 Submitting the Proposal

- ☐ Complete proposal packages must be submitted by email (maximum size: 10 MB) to the CHARS Secretariat at CHARS-SCREA@aadnc-aandc.gc.ca using the following text as the Subject: CHARS Proposal 2015-2016 – [*insert name of Project Leader*]. The proposal is consistent with the current proposal format as an MS-Word file, while Budget Tables are prepared and submitted using the Excel-based templates. Please note, compressed files cannot be submitted.

- ☐ All project team members identified in the proposal are to be copied on the email submission.

- ☐ The budget information is appropriate, realistic, complete and correct.

The deadline for proposal submission is **February 23rd, 2015, 11:59 (noon) Eastern Standard Time. Proposals received after the deadline will not be considered.**

6.4 CHARS Contact Information

If there are any questions, please contact the following at the CHARS Secretariat

General Enquiries

Martin Tremblay
Environmental Policy Analyst
Canadian High Arctic Research Station
Tel: 819-934-1152
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Strengthening Monitoring in Northern Canada

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