



EXPRESSIONS OF INTEREST

Request for Proposals – *Indigenous Community Water Research Funding* Global Water Futures: Solutions to Water Threats in an Era of Global Change April 23, 2018

Summary

The Strategic Management Committee (SMC) for the Global Water Futures (GWF) program, funded by the Canada First Research Excellence Fund (CFREF), invites Expressions of Interest (EOI) to develop research projects under the **Indigenous Community Water Research Funding** stream. Over the last year, the GWF program has reached out to numerous researchers and Indigenous community partners for advice on what water research GWF and Indigenous communities can conduct together to help address the water issues experienced by Indigenous communities in Canada. We wish to promote further discussion and action on these research ideas through development of Indigenous community – university researcher partnership projects and will support these projects with operating funds and provision of our core data from climate and water models, remote sensing and surface observations. The SMC has committed up to \$2 million to provide operating support for these projects. Eligible GWF university investigators who participated in the GWF workshop on **Co-Developing a Strategy for Indigenous Community Water Research** can submit an EOI. The research team in these projects is encouraged to include Co-Principal Investigators from both university and Indigenous communities. University investigators must be full-time faculty members of one of the 4 GWF partner universities or faculty members who were personally invited to be a participant in the GWF proposal.

Both fledgling and established Indigenous Community – university partnerships are encouraged to co-design research proposals with the Indigenous Communities involved. GWF is seeking proposals that are in alignment with the GWF vision, and are of high quality. The GWF vision includes:

- Providing Canada with the information and tools needed to prepare for and manage water futures in the face of unprecedented environmental and societal change ensuring health and wellbeing
- Providing world-leading water science for Cold Regions and to be a global partner of choice for developing user-focussed solutions to water security

It is expected that the EOIs will address the critical local and regional water and climate research needs identified by their participating Indigenous community. During the GWF workshop on **Co-developing a Strategy for Indigenous Community Water Research**, the following themes were identified by the indigenous community partners:

- Citizen science (capacity building; monitoring; data acquisition)



- Decision support and visualization (web of knowledge; data sharing; computer apps)
- Impacts of floods, droughts, climate change, forestry and water management on water flow
- Environmental flows (quantity; quality; habitat; sediment)
- Western and traditional science (overlap; differences; standing)
- Cultural strengthening as an outcome of research
- Water and health (linking environmental and human health and livelihoods)
- GIS and remote sensing tools (permafrost mapping; drones; autonomous sensors)
- Governance and policy (legislation; knowledge)

The above themes are not exhaustive and are examples of some of the existing concerns raised by the indigenous community representatives during the workshop.

Background

At least half the world's population is dependent upon water from 'cold regions' where snow, ice and frozen soils drive water availability and quality. Cold regions are severely affected by climate change and human activity, resulting in dramatic rates of warming, changing water availability and unsustainable water use. Canada and much of the world are ill prepared for this unprecedented shift, which has already resulted in intensified floods and droughts, reduced water availability and degraded water quality, costing billions in economic loss and impacting the health of populations. Addressing how to protect communities against these extreme water threats and consequent health risks in the face of climate uncertainty and human-induced global changes is one of the world's grand challenges.

Our response, through GWF, will transform the way communities, government, and industry prepare for and manage water-related risks in an era of unprecedented change.

GWF's overarching goal is to deliver risk management solutions—informed by leading-edge water science and supported by innovative decision-making tools—to manage water futures in Canada and other cold regions where global warming is changing landscapes, ecosystems, and the water environment.

Budget

A budget of up to \$2 million over 3 years is available for this call. Depending on the size of the team and project scope: smaller projects (e.g. including only one community partner) are expected to request less than \$200,000 and larger projects (regional consortia with multiple community partners) can request less than \$400,000. The available funding is mostly for hiring highly qualified personnel, supporting Indigenous community involvement and operating

expenses with the expectation that major equipment purchases will be met from elsewhere. Please note that no overhead (indirect cost of research; e.g. salaries of administrative/support staff; cost of facilities and utilities) funding is allowed in the budget allocation.

Proposal Process

The following process will be followed by GWF to evaluate and approve project applications (**dates determined by consensus at the Workshop**):

- Step 1: Release a request for proposal (RFP) document (**23 April, 2018**)
- Step 2: Receive university-Indigenous community co-developed EOIs including any request for community funding to develop a full proposal (**23 May, 2018**)
- Step 3: SMC and three academic Indigenous advisors to review EOIs and budget (**15 June, 2018**)
- Step 4: Inform successful EOIs, provide feedback including budget limits, and invite full proposals (**22 June, 2018**)
- Step 5: Full proposals due (**21 Sept., 2018**)
- Step 6: Full proposals with evidence of community support will be discussed and reviewed by the joint SMC and Indigenous Advisory Panel (up to 7 members of Indigenous Communities including Elders/Chiefs) (**15 Oct., 2018**)
- Step 7: SMC to make final decisions (**16 Oct., 2018**)
- Step 8: Funded projects will be informed shortly after the final decision. Funding will start when all approvals are in place.

Project Management

Each successful project must provide yearly progress report. Project progress against proposed deliverables will be reviewed by the SMC. Projects should also report annually to their Indigenous community.

GWF Core Support

GWF will be providing core support teams for the projects as follows (please refer to additional attached files):

- Computer Science Team – Human Computer Interface and Re-engineering Codes
- Observatories and Data Management Team
- Modelling Core Team
- Knowledge Mobilisation Team

If support is needed from the core teams then this should be indicated in the EOI. The full strategy documents for these teams is on the GWF website and should be consulted.

Expressions of Interest Outline

The EOI should not exceed 2 pages (excluding, Co-PI, Co-I and Indigenous Community Partners contact information and CVs)

- Project Title
- Name of Academic Co-Principal Investigator and contact information
- Name of Indigenous community Co-Principal Investigator and contact information.
- Names of Co-Investigators (university and Indigenous community) and their affiliations
- Names of Indigenous Community collaborators or other Partners and their affiliations
- Rationale for the Project (0.25 page)
- Outcomes, Legacies (including data) and Timelines (0.5 page)
- Objectives and Methodology (0.25 page)
- Knowledge Mobilization, Community Engagement and Capacity Building (0.5 page)
- Budget (no justification required; include any leveraging opportunity and need for core support) (0.25 page)
- HQP and Indigenous Community Training (0.25 pages)
- 2-Page CVs of each of the academic investigators.
- Request from the Indigenous community Co-PI for any funding to engage the community to develop a full proposal

Evaluation Criteria

The evaluation criteria were determined by discussion at the GWF workshop on Co-developing a Strategy for Indigenous Community Water Research on April 17-18, 2018 at Wanuskewin, Saskatchewan.

Rationale - Alignment of the project rationale to Indigenous community needs and GWF vision. Does the proposed project result in advancement in achieving the goals of UNDRIP, UNSDG, IUCN, TRC, GEWEX, Future Earth or UNESCO? 25%

Project outcomes and legacies – How project delivers water science and knowledge co-creation, builds on Indigenous and western sciences, develops new or deepens existing relationships, and provides potential for a transformative advance in understanding or developing community capacity. This includes a data management plan for traditional knowledge showing how traditional knowledge will be identified, collected, and handled to respect cultural practices and sensitivities of use/sharing. 20%

Objectives and Methodology - Clear goals, objectives and methodologies (or clear pathways to co-creating new methodologies that reflect western and Indigenous sciences, support Indigenous community needs, capacity building, knowledge dissemination and GWF objectives, and are achievable with the timelines and budget requested. 15%

Knowledge mobilization, community engagement and community capacity building. Is this a new or existing relationship? – if existing how does the relationship work; if new, is there an invitation from the community (or some other clear indication of community support/relationship)? Provide evidence of continuing engagement, reciprocal benefit, sharing information, using appropriate languages, partnerships with other groups, linking and connecting regional communities. Explain the potential for community capacity building and education development potential, how the community was involved in the design and how local knowledge holders were engaged. 20%

Budget Justification and timeline. A justification and annual outline of the budget (including HQP training and Indigenous community engagement) and any external support (cash and/or in-kind): 10%

Team capacity and potential. The capacity of the team to effectively conduct co-created research together, as evidenced by research, leadership, policy impact, community engagement, and other knowledge mobilisation success (for individuals or as a team). This may include knowledge of community way of life and/or ceremony, non-traditional research outputs, ongoing productive relationships and activities between researchers and communities, recent key publications, awards, tri-council research funding success and outreach activity. 10%

Submission Process

Please email your application package as one pdf file to Phani Adapa, Director of Operations, Global Water Futures at phani.adapa@usask.ca

Contact

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