

Request for Proposals

Enhancing Environmental Science in Alberta: Project opportunity to support collaborative research between the University of Calgary and Alberta Environment and Protected Areas

Context/Description

<u>Alberta's Environmental Science Program (AESP)</u> coordinates the reporting of scientifically credible data and information about the condition of Alberta's environment as required under section 15.1 (1) of the *Environmental Protection and Enhancement Act*.

Led by the Chief Scientist of Alberta Environment and Protected Areas (EPA), the AESP collaborates with other levels of government, academic institutions, industry, non-profit organizations, and Indigenous and local communities to enable monitoring and reporting on the condition of Alberta's environment.

In 2017 (renewed 2022), EPA entered a Memorandum of Understanding with the University of Calgary for collaboration in research and training. Common areas of cooperation and benefits to both organizations include:

- knowledge sharing of environmental data and information, including professional development opportunities for scientists, faculty and students;
- leveraging expertise developed at universities that addresses environmental issues of importance to Albertans;
- co-applications to other granting programs for leveraging funding;
- supporting student and highly qualified personnel development through supervision/cosupervision of graduate students and post-doctoral fellows and committee participation on research projects that focus on EPA priority areas; and
- increased sharing of intellectual and technical resources, including utilizing state-of-theart research infrastructure within EPA and the University of Calgary.

To advance the intention for expanded collaboration, the Enhancing Environmental Science in Alberta (EESA) grant has been established by EPA to support new projects and build greater linkages between the university's research programs and EPA's policy, science, monitoring, and natural resource management programs.

Opportunity

Project funds will be provided to help support highly qualified personnel, including graduate students and post-doctoral researchers, to participate in collaborative environmental monitoring and science research projects to fill knowledge gaps and advance knowledge focused on EPA priority areas.



This project funding opportunity has two main objectives:

- Leverage expertise from both organizations to build capacity for increased collaboration and knowledge mobilization.
- Over the next one to three years, address knowledge gaps in EPA priority areas specifically related to understanding current conditions and long-term spatial and temporal changes to Alberta's biodiversity, water, lands, air and climate.

Based on the Departmental mandate and direction, key priorities include (in no particular order):

1. The Premier's mandate letter to the department;

2. Fish, wildlife and habitat management:

- Population and species management,
- Status and recovery of species at risk,
- Health and disease (e.g., chronic wasting disease, whirling disease), and
- Stressors (e.g., effects of industrial development, including renewable energy developments; invasive species) and species responses.

3. Water quality, quantity, and wetlands:

- Water availability, drought, and drivers of resilience,
- Impacts of natural and anthropogenic stressors and cumulative effects on water quantity and quality, and
- Wetland status and trends.

4. Climate

- Carbon storage capacity of Alberta's ecosystems,
- · Forecasting impacts on water resources, identifying areas of vulnerability, and
- Wildfire drivers and impacts (e.g., air and water quality).

Project Application Requirements and Evaluation Process

Funding will be dispersed to support multiple projects. Projects that show the ability to begin within three months of funding becoming available and be completed by March 31, 2028, will be given priority. Please email your completed Grant Application (see template below) with the subject line "Enhancing Environmental Science in Alberta" to EPA.OCS@gov.ab.ca by 4 PM on March 7, 2025. Applications should not exceed eight pages in length.

Project applications will be reviewed by EPA and the University of Calgary for alignment with submission requirements. Decisions regarding which projects will be supported with funding through the EPA – University of Calgary grant will be communicated by the Office of the Chief Scientist via email to applicants by **March 28, 2025.**

Project proposals must: a) show how they address one or more of EPA's key priorities or mandates from the <u>Premier's letter to EPA</u>; and, b) identify an EPA collaborator. Proposals that meet this requirement will be further evaluated for merit based on the following assets:

- Scientific and management impact arising from the proposed research;
- An approach for outreach and knowledge transfer;
- Schedule for interim and final reporting to EPA;



- Ability to leverage additional resources;
- Demonstrated ability to meet project timelines including recruitment of personnel; and,
- Budget.

Successfully funded research projects will provide the following reporting to the Office of the Chief Scientist:

- Annual progress report(s) detailing project milestones achieved to date, expenses, and remaining tasks to be addressed,
- Draft synthesis report submitted for review by the completion date of the individual research project that follows the reporting template provided below, and
- Final synthesis report that follows the reporting template (see below), submitted within two months of the draft synthesis report, which addresses comments that the Office of the Chief Scientist provided during review of the draft synthesis report.

Information and important findings emanating from these projects may be presented through a variety of media including:

- presentations at scientific meetings and Office of the Chief Scientist-led Science Seminars, upon request,
- · scientific and popular publications, and
- various webpages (including Alberta's Environmental Science Program).

The mechanism by which information is disseminated may vary by project. Preference will be given to projects that endeavor to deliver open-access publications and open-source data. Information emanating from individual research projects and presented through various media will include an acknowledgment that financial support was provided by the "Office of the Chief Scientist, Alberta Environment and Protected Areas."

Please send any questions to the attention of the Chief Scientist at EPA.OCS@gov.ab.ca.



Project Application Template

1. Applicant information

Principal Investigator:	
Faculty/Department:	
Email address:	
Telephone number:	
Co-applicants, including EPA collaborator(s)*	

2. Project title

3. Background/rationale

(Must link to one or more items in the list of EPA's key priorities or the <u>Premier's mandate letter</u> to the <u>department</u>)

4. Project description

(Include how the project will address gaps in environmental science and monitoring)

- 5. Objectives
- 6. Methods

7. Proposed budget

(Insert additional rows as required.)

Category	Description	Grant Funding Requested (\$)*	Confirmed Partner Funding (\$)	In-Kind Support (\$/hours)	Total
Materials & Supplies **					
Equipment					
Salaries & Wages					
Travel					

^{*}To be considered, grant applications should identify active collaboration with EPA staff. If you don't have active collaborations with EPA staff, please contact the OCS and we will endeavor to identify potential department collaborators.

Protected Areas					
Capital Ass	sets **				
Publication	Costs				
Other					
Indirect Co	sts **				
Not /	Applicable (overhe	ead fees have bee	en applied to the ur	nderlying EESA g	rant)
TOTAL CO	STS				

Non-eligible use of grant funds includes

Environment and

- establishing or contributing to a reserve/contingency account;
- donations to other organizations;
- refundable Goods and Services Tax (GST) payments;
- Harmonized Sales Tax (HST) payments;
- individual capital asset purchases exceeding \$5,000; and
- capital infrastructure projects.

** Budget details

- Materials and supplies include consumables such as office and IT supplies, chemicals and laboratory supplies, vehicle fuels, sampling gear, and PPE, and generally cost less than \$5,000.
- Capital assets are tangible assets that have a useful economic life of more than one year, such as equipment, vehicles, software licenses, or infrastructure, and cost more than \$5,000.
- Indirect costs associated with University of Calgary overhead fees have already been accounted and should not be included in the budget. Please include any other relevant indirect costs, if applicable.

8. Proposed schedule

(List major milestones, activities, and associated timelines.)

9. Research objectives

(Include how results will be communicated to EPA, University of Calgary and other stakeholders. Please list anticipated publications, presentations, OCS Science Seminars, conference proceedings, as well as any other non-traditional science communication products such as videos and infographics)

10. Research team and roles

(Please be explicit in terms of roles of all team members, including EPA collaborators. EPA staff must be directly involved and should leverage expertise such that it builds capacity for increased collaboration and knowledge mobilization.)



11. Describe the significance of the anticipated work

12. Licenses/permits

(Please identify any permits or approvals that will be required to implement the project, if they have already been secured or when they are anticipated to be secured.)

13. Previous projects funded by the OCS

(Describe previous projects led by the research team that were funded by the OCS, including deliverables and achievements. This section will serve as a metric of past performance. Note: Successful applications are not contingent on receiving previous funding. If this section is not applicable to your application, please leave it blank.)



Project Reporting Template

(Provided for information purposes only, DO NOT COMPLETE AS PART OF YOUR PROPOSAL APPLICATION)

Final Report Submission Template

Office of the Chief Scientist Grant

Grants from the Office of the Chief Scientist (OCS) in Environment and Protected Areas (EPA) support research projects to advance knowledge focused on EPA priorities.

Your OCS-funded project is coming to an end, and we are excited to hear about all the hard work you have done, and the results of your research. This template will help you complete your final report. These reports are important because they:

- show how grant funds were used in accordance with your proposal,
- inform the public and different divisions within EPA of the work completed,
- describe how the work has been communicated to scientists and the public (e.g., publications, presentations, etc.),
- form the basis for knowledge exchange by the various OCS media platforms (e.g., Chief Scientist Bulletin, Science Seminar Series, Alberta's Environmental Science Program website, etc.); and,
- provide the OCS with information needed to secure funding for future research grants.

While completing your report please consider the following:

- Please use language appropriate for a broad audience, avoid or explain acronyms, abbreviations, and any jargon. The exception is for your methods where technical language may be necessary for sufficient detail.
- A picture tells a thousand words. Where possible, please include in the appropriate sections below high-quality figures of your results or high-resolution digital images (300 dpi) showing you or something related to the project.
- Your report forms the basis of communications to the public and EPA leadership including the Minister, Deputy Minister, Assistant Deputy Ministers and Executive Directors, among others.

If you have any questions regarding the completion of your final report, please contact the Grant Manager (Dr. Andrew J. Paul, andrew.paul@gov.ab.ca) or the OCS (EPA.OCS@gov.ab.ca). Once completed, please email your final report to the Grant Manager or the OCS (EPA.OCS@gov.ab.ca).



(Provided for information purposes only. DO NOT COMPLETE AS PART OF YOUR PROPOSAL APPLICATION)

1. Grantee information

Principal Investigator(s):	
Faculty/Department:	
Email address:	
Telephone number:	
Co-applicants, including EPA collaborator(s)	

2. Project title

- **3. Project summary** (Provide a maximum 300-word summary describing results achieved. When preparing the summary, consider that it may be used in public communications that highlight research funded by EPA.)
- **4. Key findings** (List the major findings you want people to know about your work. Your list of key findings will be used to brief EPA leadership and the public on the importance of your project to Albertans and Alberta's environment.)
- 5. Project objectives and status (Describe how you have met or are meeting project objectives as detailed in your original grant or project application. If an objective(s) was not met, please provide details as to why the objective was not met. Where appropriate, provide recommendations for additional work required to complete an objective. This section allows you to discuss unforeseen issues and additional research that may require future funding.)
- **6. Background** (*Please provide a brief description of the project's background. The description should include context if conditions changed since the proposal was written.*)
- **7. Methods** (*Please describe the project's methods. The description should include context if the methods changed since the proposal was written. Citations to published work that fully describe methods are appropriate.*)
- **8.** Results and discussion (Results and discussion should include supporting tables, figures or citations to support your conclusions and key findings.)
- **9. Team involvement** (*Please describe the contribution of each member of the research team.*)
- **10. Dissemination of results** (*Please list how your results have been shared to date. Include primary and other publications, conference presentations, seminars, media releases, public*



meetings, etc. When disseminating work supported through a grant from the OCS, we ask that acknowledgement be provided for the OCS and EPA using an appropriate statement such as, "This research was supported by a grant from the Office of the Chief Scientist, Alberta Environment and Protected Areas.")

- 11. Budget summary (Please provide a short, written description of how monies were spent for the project. The summary is not intended to replace a formal financial accounting statement that is required as part of the Grant Agreement (and often prepared by an institution's research office). Rather, the description should be a plain language overview of expenditures and whether they deviated from the project proposal.)
- **12.Photos** (*Please attach photos showing yourself or something related to the project and provide permission for their use in OCS communications that describe the project and overall grant program, including but not limited to presentations, science stories, and social media. <i>Please include the file name, a short caption and photographer credit for each photo.*)
- **13. Literature cited** (Provide complete reference information for all literature cited. Please include digital object identifier (DOI) information for relevant material.)