Fisheries and Oceans Canada	Pêches et Océans Canada
Ecosystems and Oceans Science	Sciences des écosystèmes et des océans

Competitive Science Research Fund (CSRF)

Full Proposal Application 2024-25

This form is to be used to submit an application to the CSRF for Year 4 of the program (funding in fiscal year 2024-25).
<u>ALL sections must be completed</u>, except where noted "if applicable".

1. Research Priority:	Paste from the **2024-25 CSRF Subset of Research Priorities**
2. Specific Question:	Paste from the **2024-25 CSRF Subset of Research Priorities**

3. Priority Identification Number:	Paste from the **2024-25 CSRF Subset of Research Priorities**

4. Project Identification

4.1 Project Title:	Click to enter project title

4.2 Keywords: List 3-5 keywords that describe your project	Click to enter keywords

4.3 Amount of Funding Requested: Enter total amount requested from CSRF (section 12.5)	$
4.4 Project Duration: Select 1, 2, or 3 years. All deliverables must be completed within this timeframe.	Select duration
4.5 Scope of Project: Identify the scope of the project (regional, zonal, national, or international). See definitions in the CSRF Application Guide.	Select scope of project

5. Research Team: Identify each member of the research team, beginning with the Lead PI and Co-Lead PI (if applicable). List all key collaborators/partners. Use the blank space at the end of the application form if you require more space.

Name (list all key collaborators)	Project Contribution (estimated % FTE time, and key expertise)	Region (if external, add Affiliation)	Affiliation (Identify the type and name of organization)
Lead Principal Investigator (PI): Enter name	Enter title Enter email (__@dfo-mpo.gc.ca) Role: Estimated time: Key expertise:	Select a region	DFO
Co-PI: (if applicable) Enter name	Enter title Enter email (__@dfo-mpo.gc.ca) Role: Estimated time: Key expertise:	Select a region	DFO
Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:

Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:
Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:
Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:
Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:
Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:
Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:
Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:
Enter name	Role: Estimated time: Key expertise:	Select a region	Select external affiliation Enter organization title:

5.1 Additional Partnership/Collaboration Information: Enter any additional information about the partnerships and collaborations relevant to the project (for example, whether an MOU is required). **(100 words max)**

Click to enter text

6. Indigenous Collaboration: If your project includes Indigenous collaboration, provide the requested details below. If your project does not include Indigenous collaboration, you may skip this section. Please refer to the CSRF Application Guide for more information on completing this section.

6.1 Indigenous Collaborators: Please (i) identify which Indigenous nations, organizations, and/or communities are collaborating on this project, (ii) describe how each collaborator will be involved in the project, and (iii) indicate whether you have received a letter of support from the collaborator. Be as specific as possible in your response. **(150 words max)**

Organization	Description of Collaboration	Letter of Support
Click to enter text	Click to enter text	Select Y/N
Click to enter text	Click to enter text	Select Y/N
Click to enter text	Click to enter text	Select Y/N
Click to enter text	Click to enter text	Select Y/N

6.2 Indigenous Engagement: Describe how the Indigenous collaborators have been and will be engaged before, during and after the project is completed. **(200 words max)**

Click to enter text

6.3 Indigenous Knowledge: If applicable, describe how Indigenous knowledge (IK) will be incorporated meaningfully into the project and how you will integrate knowledge keepers such as elders and community members into the process. **(200 words max)**

Click to enter text

6.4 Project Benefits: Please detail the tangible benefits that the project will provide to the Indigenous collaborators and/or communities involved. **(150 words max)**

Click to enter text

6.5 Indigenous Data Sovereignty: Clearly describe how your data management plan will align with First Nations OCAP® principles and outline how any data or information collected or generated through the project will be stored, protected and managed throughout the entire project lifecycle, including who will be responsible for the data and who will have access. **(150 words max)**

Click to enter text

7. Project Description: To exclude your citations from your word count, please use the Literature Cited section (7.6) below to document all citations.

7.1 Project Research Question: Clearly detail the question around which you are centering your research proposal. Ensure the question is focused and concise. **(60 words max)**

Click to enter text

7.2 Project Summary: Summarize your project proposal. If the application is successful, this description will be posted to the DFO internal CSRF Funded Projects webpage. **(250 words max)**

Click to enter text

7.3 Addressing Knowledge Gaps: Explain how this project would address the critical knowledge gap identified by the *Specific Question* in section 2. Clearly indicate how the research would advance scientific understanding beyond what is already available in the scientific literature, and how it would benefit the Department. **(300 words max)**

Click to enter text

7.4 Objectives: State the objective(s) of the project. Point form is acceptable. **(200 words max)**

Click to enter text

7.5 Methodology: Outline the methods you will use to achieve the objective(s) of the project. Ensure that concepts and terminology are clearly defined. Reviewers will not consult external resources. **(600 words max)**

Click to enter text

7.5.1 Methodology – Figures: If applicable, embed up to two images to better illustrate to reviewers the methods and processes of your project. Do not include figure captions. Refer to the CSRF Application Guide for more information.

Click to embed images

Click to embed images

7.6 Literature Cited: Document the complete reference list for all in-text citations used in the application. Any established format is acceptable. If you require more space, you may add additional citations in the blank section provided at the end of the application.

Click to enter text

Click to enter text

Click to enter text

Click to enter text

Click to enter text

Click to enter text

Click to enter text

Click to enter text

8. Work Plan

8.1 Work Plan Outline: Use bullets to outline the main project activities for each applicable fiscal year.

Year 1:	Click to enter text
Year 2:	Click to enter text
Year 3:	Click to enter text

8.2 Planned Activities: Indicate whether the project will include any of the following activities. Ensure that any costs associated with these activities are fully captured in your budget estimates in Section 12 below.

Staffing or Other Major Human Resources Requests	☐ Yes	☐ No
High Performance Computing (if your project requires HPC, you must complete section 14)	☐ Yes	☐ No
Field Work	☐ Yes	☐ No
CCG Ship Time	☐ Yes	☐ No
Other Vessel Use (DFO or Charter)	☐ Yes	☐ No

9. Data Management Plan

9.1 Data Steward: Identify the person(s) on the research team responsible for stewarding the data throughout the project lifecycle, and their data stewardship role (e.g., collecting, analysing, storing, etc.). **(50 words max)**

Click to enter text

9.2 Regional Data Manager: Identify your Regional Data Manager (Science Data Manager Sub-Committee [SDM-SC] representative) and describe how they will support this project. Information should be based on discussions with your SDM-SC. **(50 words max)**

Click to enter text

9.3 Data Acquisition: Provide details on how data will be acquired, including timeframes and geographic locations, resource requirements (instruments and equipment), and any partnerships required (e.g., data sharing agreements, MOUs, etc.). Point form is acceptable. **(100 words max)**

Click to enter text

9.4 Processing and Analyzing: Provide details on how raw instrument data will be processed and analyzed, including hardware/software needs, whether IM/TS support will be required, and in what formats the processed data will be made available (e.g., Excel, csv, R code). Point form is acceptable. **(150 words max)**

Click to enter text

9.5 Data Preservation and Protection: Provide details on data storage, including how physical samples will be stored and tracked, the final destination for data (e.g., hard drive, enterprise database), and the data maintenance cycle (e.g., backup frequency). If data is not stored on DFO infrastructure, describe how it will be brought back into the department. Point form is acceptable. **(150 words max)**

Click to enter text

9.6 Data Publication: Describe your plan for making data available, including details on where data will be openly published and how proprietary/sensitive data will be classified/handled. Point form is acceptable. **(150 words max)**

Click to enter text

10. Project Outputs

10.1 Deliverables: Summarize the (i) expected deliverables, (ii) year in which they will be completed, and (iii) relevance/usefulness of each deliverable to the Department.

Year	Description	Relevance
Enter the year	1. Plain Language Report (mandatory)	Click to enter text
Enter the year	2. Final Project Report (mandatory)	Click to enter text
Enter the year	3. Describe the output	Click to enter text
Enter the year	4. Describe the output	Click to enter text
Enter the year	5. Describe the output	Click to enter text
Enter the year	6. Describe the output	Click to enter text
Enter the year	7. Describe the output	Click to enter text
Enter the year	8. Describe the output	Click to enter text
Enter the year	9. Describe the output	Click to enter text
Enter the year	10. Describe the output	Click to enter text

11. Project Risk Management

11.1 Project Risks: Clearly identify and assess <u>any</u> reasonable risks that could potentially impact the completion of the project within the planned timeframe. **(250 words max)**

Click to enter text

11.2 Risk Mitigation: Clearly describe the plan for mitigating <u>each</u> of the risks identified in section 11.1 above. This should include preventative and adaptive measures. **(300 words max)**

Click to enter text

12. Budget: Detail the funding required from the CSRF to complete the project. Please refer to the CSRF Application Guide for important information on completing this section. The Budget Spreadsheet Template can be used to provide guidance and assist in preparing these calculations. Provide amounts in CAD. Round to the nearest dollar.

12.1 Salary requirements: Review the relevant Departmental employment policies to determine whether any potential employees would be eligible for the Employee Benefits Plan (EBP). Include EBP amounts in your estimates only where appropriate.

	Year 1	Year 2	Year 3	Total
Casual Employees	$	$	$	$
Post-doc Hires	$	$	$	$
FTE salary	$	$	$	$
Student	$	$	$	$
Other (explain below)	$	$	$	$
Salary Subtotals	$	$	$	$

12.2 Detail of Salary Costs: Provide a clear breakdown of salary requirements in the space below (include employee classifications and level, employment period, EBP calculations, etc.). Provide a rationale for hiring, if needed.

Click to enter text

12.3 O&M requirements	Year 1	Year 2	Year 3	Total
Service Contracts	$	$	$	$
Materials & Supplies	$	$	$	$
Equipment (purchase or rental)	$	$	$	$
Equipment (operation/maintenance)	$	$	$	$
IT Costs - Hardware and software (including HPC)	$	$	$	$
IT Costs - Data storage	$	$	$	$
Vessel costs	$	$	$	$
Publication/printing fees, open access fees	$	$	$	$
Translation expenses	$	$	$	$
Travel	$	$	$	$
Other	$	$	$	$
O&M Subtotal	$	$	$	$
Overhead/Regional Tax (Auto-calculated in Spreadsheet)	$	$	$	$

12.4 Detail of O&M Costs: Provide a description for each type of O&M expense. Refer to the CSRF Application Guide for details.

Service Contracts	
Materials & Supplies	
Equipment	
IT costs	
Vessel costs	
Publication/printing	
Translation expenses	
Travel	
Other	

12.5 Total Funding Requested from CSRF: (Salary + O&M + Overhead)	Year 1	Year 2	Year 3	Total
	$	$	$	$

13. Other Contributions: Provide details for any non-CSRF support you expect to receive for this project. Refer to the CSRF Application Guide for definitions. Amounts entered in this section will not impact the budget outlined in section 12 above.

13.1 Source of Funding/Support: Identify other possible sources of project support (program or institution), the type of support (cash or in-kind) and the approximate monetary value (if applicable).

Funding Source		Year 1	Year 2	Year 3	Total
Enter name of Funding Source	Select Type	$	$	$	$
Enter name of Funding Source	Select Type	$	$	$	$
Enter name of Funding Source	Select Type	$	$	$	$
Enter name of Funding Source	Select Type	$	$	$	$
Enter name of Funding Source	Select Type	$	$	$	$

13.2 Description of Expected Use: Describe how each additional contribution will be used to support the project.

14. High Performance Computing (HPC) Requirements Information: Please complete this page if your project requires HPC. If you do not have HPC requirements, you may skip this section.

14.1 HPC Consultations: Detail whether you have consulted with HPC Coordinators in order to receive assistance in determining the appropriate sizing for your project requirements and/or to assess whether sufficient HPC capacity is available to run your software within the appropriate project group? **(200 words max)**

14.2 HPC Group: Identify the HPC group that will be running your software, for example: Centre for Ocean Model Development and Application, Aquaculture, Marine Environmental Quality, etc. **(50 words max)**

14.3 Computing Requirements and Timing: Provide details on the software's core utilization and estimated duration of a single run. Provide an estimate on how often and how many runs will be made in a month. Please refer to the CSRF Application Guide for important information on completing this section. **(100 words max)**

14.4 Contingency Plan: If there is very limited HPC access, how will you complete the necessary work? **(200 words max)**

14.5 Storage Needs (i): How much storage do you require (in terabytes)? **(50 words max)**

14.6 Storage Needs (ii): GPSC storage cannot be used long term (i.e., not for longer than a few months). Describe your plan for long term storage. **(100 words max)**

14.7 Storage Needs (iii): What is your plan for archiving your data (i.e., how often will you move and delete your runs, and will it be done automatically)? **(200 words max)**

14.8 Software Requirements: Do you need access to proprietary software (e.g., Matlab)? **(100 words max)**

Additional Collaborators or Citations: Use this space to enter additional collaborator information or citations. Information provided in this section **will not be evaluated**.