



Procurement Hub – Fredericton  
301 Bishop Drive  
Fredericton, NB E3C 2M6

9 July 2024

30005854

**TITLE: ANALYTICAL SUPPORT FOR EVALUATING SKEENA AND NASS HARVEST MANAGEMENT STRATEGIES AND SIMULATION MODEL DOCUMENTATION**

**1. Advance Contract Award Notice (ACAN)**

An ACAN is a public notice indicating to the supplier community that a department or agency intends to award a contract for goods, services or construction to a pre-identified supplier, thereby allowing other suppliers to signal their interest in bidding, by submitting a statement of capabilities. If no supplier submits a statement of capabilities that meets the requirements set out in the ACAN, on or before the closing date stated in the ACAN, the contracting officer may then proceed with the award to the pre-identified supplier.

**2. Definition of the requirement**

The Department of Fisheries and Oceans Canada has a requirement to develop analytical tools, technical documentation and communication materials for evaluating alternative harvest strategies for domestic and international fisheries. The work will involve the following:

**2.1 Objective**

The goal of this project is to develop analytical tools, technical documentation and communication materials for evaluating alternative harvest strategies for domestic and international fisheries, which will allow decision makers to identify plausible options for updated catch sharing provisions for sockeye salmon harvested in Northern Boundary area fisheries.

This contract will support the Canadian Northern Panel to develop new options for international harvest sharing agreements concerning Canadian-origin Skeena and Nass sockeye, which are harvested in commercial fisheries targeting pink salmon in southern Southeast Alaska. While some of these fisheries are subject to provisions described in the 2019 revision of the Pacific Salmon Treaty, the vast majority of Canadian sockeye harvested in Alaskan fisheries are currently caught outside times and areas that are subject to these Treaty provisions.

The focus of technical work for 2024-2026 will be to identify, implement, and summarize revisions to a harvest model component of an existing simulation model, in order to use simulation analysis explore fisheries benefits and conservation risks associated with different fishing patterns and harvest rules under different run size and productivity scenarios.

**2.2 Scope of Work**

The Contractor will develop an updated harvest model to explore alternatives to the current provisions, including limits to the total Alaska harvest of Canadian origin sockeye using simulation evaluation.

A working group comprised of Northern Panel and Northern Boundary Technical Committee leads, and DFO scientists, will work with the Contractor to identify a suite of scenarios to evaluate using an updated harvest model.

The Contractor will perform the analytical work, including R programming, required to adapt and run the updated model with the scenarios selected by the working group. Simulation model outputs will be summarized and communicated to Northern Panel members in a series of handouts and presentations.

The Contractor will contribute to the development of a technical report describing the simulation model including the updated harvest model and initial settings and parameters. The model code will be shared with DFO scientists in a Git repository and training on model operation will be provided to North Coast DFO staff.

### 2.3 Tasks

The specific tasks to be conducted by the Contractor include:

- 2.3.1 Participate in working group to develop alternative management options to evaluate using the updated harvest model.
- 2.3.2 R Programming and analyses for model extensions and spawner-recruit model fits.
- 2.3.3 Summarize simulation outputs in a series of handouts and communicate results to Northern Panel and Northern Boundary Technical Committee.
- 2.3.4 Prepare technical documentation for the simulation model and harvest sub model, work with DFO staff to incorporate into a published report.
- 2.3.5 Provide training to North Coast - DFO staff on operation of updated simulation model.

### 2.4 Deliverables and Acceptance Criteria

No.	Deliverable	Acceptance Criteria
1	Participate in working group to develop alternative management options to evaluate using the updated harvest model.	Attendance at biweekly meetings with the Working Group.
2	R Programming and analyses for model extensions.	Final model code shared with Project Authority/DFO North Coast staff in a Git repository.
3	Summarize simulation outputs in a series of handouts and communicate results to Northern Panel and Northern Boundary Technical Committee.	Series of handouts describing summarized results of model runs for of chosen scenarios and PowerPoint presentations provided to the Northern Panel.
4	Prepare technical documentation for the simulation model and harvest sub model, work with DFO staff to incorporate into a published report.	Canadian Technical Report of fish and aquatic sciences coauthored with Project Authority
5	Provide training to North Coast DFO staff on operation of the model.	Instruction on model operation provided to Project Authority throughout development phase.

## **2.5 Timeframe and Delivery Dates**

The timeframe and delivery dates for all specific project components will be completed prior to the end of fiscal year 25/26

- 2.5.1** Deliverable 1: Participation in Working Group will occur on an ongoing basis for the duration of the project (Aug 2024 - Dec 2025)
- 2.5.2** Deliverable 2: R Programming and analyses for model extensions will take place during the first year of the project (Aug 2024-March 2025) with revision to be completed as needed during the second year (prior to January 2026).
- 2.5.3** Deliverable 3: Summarize simulation outputs in a series of handouts and communicate results to Northern Panel and Northern Boundary Technical Committee will be completed prior to the PSC Post-Season meeting in January 2025. If revisions are required, they will be presented to the Northern Panel prior to the PSC meeting in January 2026.
- 2.5.4** Deliverable 4: Prepare technical documentation for the simulation model and harvest sub model, work with DFO staff to incorporate into a published report. Draft completed prior to March 2025, publication by September 2025.
- 2.5.5** Deliverable 5: Provide training to North Coast - DFO staff on operation of updated simulation model. To be completed on an ongoing basis throughout the duration of the project.

## **2.6 Constraints**

Technical work to support preparation for Pacific Salmon Commission negotiations must be completed prior to the 2026 calendar year.

## **3. Criteria for assessment of the Statement of Capabilities (Minimum Essential Requirements)**

Any interested supplier must demonstrate by way of a statement of capabilities that it meets the following requirements:

The Contractor's resources must include personnel who:

- 3.1** Possess a graduate degree from a recognized university in Biology, Statistics, or Resource Management as determined by the Canadian Centre for International Credentials (<http://www.cicic.ca/en/index.aspx>)
- 3.2** Have a minimum of ten (10) cumulative years' experience in natural resources management analysis and modelling.
- 3.3** Have a minimum of ten (10) years cumulative experience using the R scripting language for building simulation models of biological systems.
- 3.4** Have experience applying Bayesian statistics to fisheries or natural resource management
- 3.5** Experience communicating technical information to First Nations, Commercial, and Recreational groups on fisheries or natural resources management, preference given to communication conducted in a consultative environment.

**4. Justification for the Pre-Identified Supplier**

The client advised they are not aware of any other candidates who have the appropriate background to be able to perform the services within the required timeline.

**5. Government Contracts Regulations Exception(s)**

The following exception(s) to the *Government Contracts Regulations* is (are) invoked for this procurement under subsection 6(d) - only one person is capable of performing the work.

**6. Period of the proposed contract or delivery date**

The proposed contract is from date of contract award to March 31, 2025, with the option to extend the term of the Contract by up to one (1) additional one (1) year period(s) under the same conditions.

**7. Cost estimate of the proposed contract**

The estimated value of the contract, including option(s), is \$100,000.00 (GST/HST extra).

Name and address of the pre-identified supplier  
SOLV Consulting Ltd  
Unit 60607 RPO Granville Park  
Victoria, BC V6H 4B9

**8. Suppliers' right to submit a statement of capabilities**

Suppliers who consider themselves fully qualified and available to provide the goods, services or construction services described in the ACAN may submit a statement of capabilities in writing to the contact person identified in this notice on or before the closing date of this notice. The statement of capabilities must clearly demonstrate how the supplier meets the advertised requirements.

**9. Closing date for a submission of a statement of capabilities**

The closing date and time for accepting statements of capabilities is **July 24<sup>th</sup>, 2024, at 2:00 p.m. ADT.**

**10. Inquiries and submission of statements of capabilities**

Jackie Longmire  
Contracting Officer  
Fisheries and Oceans Canada  
Material and Procurement Services  
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