



Fisheries and Oceans
Canada

Pêches et Océans
Canada

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

October 7, 2021

30000804

ADVANCED CONTRACT AWARD NOTICE

TITLE: Stable Isotope Analyses of Arctic Coast 2021/2022 Samples

ACAN

The purpose of this Advance Contract Award Notice (ACAN) is to signal the government's intention to award a contract for these services to the University of Waterloo, 200 University Ave W, Waterloo ON N2L 3G1.

Before awarding a contract, however, the government would like to provide other suppliers with the opportunity to demonstrate that they are capable of satisfying the requirements set out in this Notice, by submitting a statement of capabilities during the ACAN posting period.

If other potential suppliers submit a statement of capabilities during this ACAN posting period that meets the requirements set out in the ACAN, the government will proceed to a full tendering process on either GETS or through traditional means, in order to award the contract.

If no other supplier submits, on or before the closing date, a statement of capabilities meeting the requirements set out in the ACAN, a contract will be awarded to the pre-selected supplier.

INTRODUCTION AND BACKGROUND

Fisheries and Oceans Canada (DFO) has been conducting an ecosystem baseline sampling survey among communities of Hudson Bay, and the Beaufort Sea. Fishes will be collected, sampled and muscle and liver will be removed in order to identify prey items of coastal fishes. Tissues will provide a synthesis of fish diet over the course of a 50 day period, which will then be used for the progress of a master's thesis and for subsequent monitoring in the Hudson Strait area. Additionally, invertebrates and sediment collected in the same region will be collected and will be analysed for stable isotopes ($\delta^{13}\text{C}$, $\delta^{15}\text{N}$, $\delta^{34}\text{S}$) in order to compliment the information gathered among coastal fishes.

OBJECTIVES

The contractor will analyze the muscle tissue from species collected during 2021/2022 coastal surveys.

SCOPE OF WORK AND DELIVERABLES

The contractor is expected to freeze dry, homogenize, weigh and run samples through a mass spectrometer in order to produce stable isotope data for dietary analyses. Samples will be processed with the appropriate number of duplicates to ensure quality control and analyzed against appropriate standards for fish and invertebrate isotopes $\delta^{13}\text{C}$, $\delta^{15}\text{N}$ and $\delta^{34}\text{S}$ stable isotopes.

With respect to $\delta^{34}\text{S}$ stable isotopes, the samples must be measured through a combustion conversion of sample material to gas using a 4010 Elemental Analyzer coupled to a Isochrom continuous flow

isotope ratio mass spectrometer. Analysis of d13C and d15N will be determined using the same elemental analyzer (4010) coupled to a Delta Plus XL continuous flow isotope ratio mass spectrometer. Remainder of the sample will be stored in 20 mL scint vials, labelled, and stored as reserves at the contractors location.

Deliverables:

The contractor will provide stable isotope ratio data, percent mass, and Carbon:Nitrogen ratio on an excel sheet upon completion of the contract. Freeze dried samples will be stored at the Contractor's location with DFO reserve samples.

RESOURCES AND LEVEL OF EFFORT

It is anticipated that the analysis of approximately 1400 samples per year will be completed by the end of March 2022, 2023, 2024, 2025.

MANDATORY CRITERIA

- The contractor must have previously compared and done quality checks on stable isotope ratio data against the Freshwater Institute Lab. Specifically, samples of fish tissue (min 30) need to have been run at both labs (the Contractor's and Freshwater Institute Lab) and compared using statistical tests for difference to ensure that laboratory variation is negligible.
- The contractor must have a minimum of five years of experience analyzing fish muscle tissue and has the capacity to extract, or use non-extraction methods to correct for the intramuscular lipid content in fish muscle tissue when analyzing stable isotopes.
- The contractor must have the appropriate standards for analyzing $\delta^{13}\text{C}$ (Vienna Pee Dee Belemnite), $\delta^{15}\text{N}$ (Atmospheric N_2) and $\delta^{34}\text{S}$ stable isotopes (Vienna Canyon Diablo Troilite meteorite). Standards are to be stored at room temperature in desiccator.

ESTIMATED VALUE

The value of the contract is estimated at **\$59,500.00 CAD per year** before applicable taxes for the period of the contract. The period of the contract will be from Contract Award to March 31, 2022 with 3 option years.

TRADE AGREEMENTS APPLICABILITY OR OTHER OBLIGATIONS:

No Trade Agreements apply. Exemption Fishery Studies.

GOVERNMENT CONTRACTS REGULATIONS EXCEPTION AND LIMITED TENDERING REASONS:

The following policy requirements are applicable to this ACAN process:

Applicable Exceptions to Soliciting Bids under the Government Contracting Regulations (GCRs) (Section 6):

Section 10.2.1 Section 6 (d) only one person or firm is capable of performing the work applies to this ACAN for the following reasons:

-There are no known alternative sources of supply. It is feasible and affordable to compete the requirement.

INTELLECTUAL PROPERTY:

Any Intellectual property arising from this project will be owned by the Department of Fisheries and Oceans.

CONTRACT PERIOD:

The period of the contract is from Contract Award to March 31, 2022 with 3 option years.

SUPPLIER'S RIGHT TO SUBMIT A STATEMENT OF CAPABILITIES:

Suppliers who consider themselves fully qualified and available to provide the services described herein, must submit a Statement of Capabilities in writing to the Contracting Officer identified in this Notice on or before closing date. The Statement of Capabilities must clearly demonstrate how the supplier meets the advertised requirements.

CLOSING DATE FOR SUBMITTING STATEMENT OF CAPABILITIES:

October 22, 2021 at 2:00 p.m. (ADT)

Inquiries and statements of capabilities are to be directed to:

Michael Peters

Contracting Officer

Procurement Hub – Fredericton

Telephone: (506) 429-2359

Email: DFOtenders-soumissionsMPO@dfo-mpo.gc.ca