



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

June 19, 2019

F5211-190191

ADVANCED CONTRACT AWARD NOTICE

TITLE: Atlantic Whitefish Captive-Rearing

INTRODUCTION:

The purpose of this Advance Contract Award Notice (ACAN) is to signal the government's intention to award a contract for these services to Dalhousie University Aquatron Laboratory, Dalhousie University, 1355 Oxford Street, Halifax, NS B3H 4R2. 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.

BACKGROUND:

Atlantic Whitefish is listed as Endangered under the federal *Species at Risk Act*. Its global distribution is reduced to three small, interconnected lakes in the upper Petite Rivière watershed in southwest Nova Scotia (the Petite Lakes). The species is at critically low abundance and its continued survival is significantly threatened by the introduction of two highly predatory invasive fish species, Smallmouth Bass and Chain Pickerel.

A Recovery Strategy and Action Plan have been published. These documents outline the overall recovery goal for Atlantic Whitefish and the actions needed to achieve this goal. Range expansion is identified as the most viable option to prevent the species' extinction and facilitate its recovery. Range expansion involves establishing additional self-sustaining Atlantic Whitefish populations outside of the Petite Lakes, which requires life-stages of fish in numbers that can establish viable populations.

To further this goal DFO collected wild juvenile Atlantic Whitefish in the spring of 2018. These fish were transferred from a DFO facility to the Dalhousie University Aquatron Laboratory in December, 2018. This contract is for the day-to-day care and raising of these fish and any additional fish collected in 2019. These fish will form the fundamental genetic broodstock for any future range expansion recovery efforts and are the only captive Atlantic Whitefish in the world.

The housing, rearing and future breeding of Atlantic Whitefish must be done in a suitable facility and must be undertaken by those with the necessary expertise. Dalhousie's Aquatron is the largest university aquatic research facility in Canada. It has tanks in a variety of sizes, research spaces, and equipment perfect for accommodating a growing captive stock of Atlantic Whitefish. This facility is also backed by a mechanical system, which can provide high quality, temperature controlled seawater and freshwater year round, as well as a professional team of both biologists and mechanical operators who are available to run the systems and help meet research objectives. Additionally, Dalhousie University has aquatic veterinary expertise on campus that are involved in Aquatron operations. About the Aquatron:

<https://www.dal.ca/dept/aquatron/about.html>. Dalhousie University also has previous experience with Atlantic Whitefish, as they were bred and raised in the Aquatron for use in graduate research projects (Cook et al. 2010/055; Cook 2012).



Those involved in this work at Dalhousie also have the necessary expertise. Dr. Paul Bentzen is an expert in population and evolutionary genetics and conservation biology. Dr. Bentzen has 35 years of experience with population and conservation genetics of fish, including many at-risk species, has more than 170 publications in the scientific literature, and has served as a member of the Committee on the Status of Endangered Species in Canada (COSEWIC) and co-chair of the Marine Fishes Specialist Subcommittee of COSEWIC. He has conducted research on Atlantic Whitefish in the past, and is currently developing new microsatellite and mitochondrial DNA genetic markers to monitor Atlantic Whitefish genetic diversity and manage broodstock and captive breeding.

About Dr. Bentzen: <https://www.dal.ca/faculty/science/biology/faculty-staff/our-faculty/paul-bentzen/paul-bentzen.html>

The care and raising of the Atlantic Whitefish and associated laboratory work will be under the oversight of John Batt, the Aquatron Manager. John has 25 years of direct experience with mechanical operations of aquatic systems and broad ranging experience in numerous areas of aquatic research. He also has previous experience in aquaculture working in both fin fish and shellfish at both hatchery and grow out levels. His role as Aquatron Manager involves the management and direction of work at the Aquatron Laboratory which includes supervision of facility research, scientific research, contract research, and mechanical operation and maintenance.

About Mr. Batt: <https://www.linkedin.com/in/john-batt-b8a05619/?originalSubdomain=ca>

REQUIREMENTS - TASKS AND ACTIVITIES

General Tasks and Activities

- Provision of facilities and care for the current Atlantic Whitefish on site at Dalhousie University's Aquatron Laboratory and any additional Atlantic Whitefish collected in 2019.

Methods:

- Full time Aquatron staff will provide general oversight and day-to-day care for the Atlantic Whitefish, including monitoring their feeding and growth performance, and any biological sampling.

Deliverables

- Written protocols for the handling of mortalities, including specific standard operating procedures for taking both genetic and fish health samples from any mortalities, and for their preservation.
- Quarterly written updates (i.e., emails) to Project Authority as described in the reporting requirements and sharing of data file created to track the performance of individual fish (e.g., growth and condition).
- A draft written report that outlines the work that has been completed. See report details under reporting requirements.
- A final written report at the end of the contract that outlines the work that has been completed and incorporates any revisions requested by the Project Authority resulting from review of the draft report. See report details under reporting requirements.

Deadlines

- Written protocols for the handling of mortalities by July 15th, 2019
- Quarterly email updates on the first day of the month on the following months: July 1st, September 1st, December 1st, and March 1st
- Draft report by February 28, 2020
- Final report by March 13, 2020

Specifications and Standards

Electronic copies of the following should be provided in English language by email:

- Written protocols for the handling of mortalities (in Microsoft Word)
- Quarterly written updates
- Draft and final report (in Microsoft Word)



- Data files (in Microsoft Excel)

Technical, Operational and Organizational Environment

- Environmental conditions must be monitored continuously.
- Any mortalities or disease outbreaks must be reported to DFO immediately as per the conditions of the SARA permit (i.e., to Species at Risk Program email: SpeciesatRisk.xmar@dfo-mpo.gc.ca or 1-866-891-0771). A post-mortem must be undertaken to determine the cause and protocols amended as necessary to prevent further mortalities
- All report writing and data file inputs and management will be undertaken at Dalhousie University, Life Science Centre.

METHOD AND SOURCE OF ACCEPTANCE

Written protocols for the handling of mortalities, as described in section 2.7 of this contract, will be provided to the Project Authority by June 30th. Receipt of these protocols and an assessment of their content will be undertaken by the Project Authority to evaluate whether this deliverable has been met.

Quarterly email updates, as described in section 2.7 of this contract, will be provided to the Project Authority. Receipt of these updates and an assessment of their content will be undertaken by the Project Authority to evaluate whether this deliverable has been met.

The draft report, as described in section 2.7 of this contract, will be provided to the Project Authority for review 2 weeks ahead of submission of the final report. Receipt of this draft report and an assessment of the details on the raising of the Atlantic Whitefish and the report's content will be undertaken by the Project Authority to evaluate whether this deliverable has been met.

MILESTONES

If a deliverable is provided on or before the respective deadline and is deemed acceptable by DFO, and upon submission of an invoice by the Contractor, the following milestone payments will apply:

Upon signature of the contract, payment will be provided for 50% of the contract value.

Upon submission of the final report accepted by DFO on the housing and raising of the Atlantic Whitefish, a final invoice can be submitted to DFO for the remaining 50% of the contract value.

REPORTING REQUIREMENTS

- Quarterly updates will be provided by email to the Project Authority. These updates will include summary information on the successful housing and raising of the Atlantic Whitefish in the Aquatron Laboratory at interim stages including:
 - A quarterly summary of any mortalities (numbers and cause of the mortality) or instances of disease outbreak,
 - Any adjustments to the care of Atlantic Whitefish required in response to mortalities or disease, or to ensure their successful performance.
- Written protocols for the handling of mortalities, including specific standard operating procedures for taking both genetic and fish health samples from any mortalities, and for their preservation,
- Draft and final Report will be provided in Microsoft Word to the Project Authority. This report will include, but may not be limited to
 - number of fish housed (current and new individuals) and their designated tanks,
 - growth performance information (feeding, growth rate, etc.),
 - records of biological sampling (genetic, lengths, weight, sex, etc.),
 - complete summary of annual mortalities (numbers and cause of mortality, method of preservation, and storage location),
 - complete summary of all instances of disease outbreak during the year (cause, number of individuals affected, treatment and outcome),
 - Completed data files and presentation of summary statistics.
- Data files will be provided in Microsoft Excel



PROJECT MANAGEMENT CONTROL AND CHANGE MANAGEMENT PROCEDURES

If the Contractor has any questions during the contract period the Contractor will contact the Project Authority in writing or by phone, who will respond within two (2) business days. The Project Authority will have the final decision making authority.

The Project Authority will receive quarterly email progress reports as well as a written summary report In Word Format on all activities as per the details provided in sections 2.1 and 2.7 of this contract.

Any contractor requested changes in the scope of work will be submitted, in writing, to the Project Authority. The Contracting Authority is responsible for the management of the Contract and any changes to the Contract must be authorized in writing by the Contract Authority. The Contractor must not perform the work in excess of or outside the scope of the Contract based on verbal or written requests or instructions from anybody other than the Project Authority.

OWNERSHIP OF INTELLECTUAL PROPERTY

The Contractor will own any intellectual property generated as a result of any contract(s) awarded. However, the Crown retains the right of use of all work product or intellectual property so generated for use in the administration of programs, mandate, and other related work.

DFO OBLIGATIONS

All questions or concerns during the period of the contract will be sent by e-mail to either the Project Authority or the Contracting Authority, as is appropriate. DFO will respond within two (2) business days.

The contractor will not have access to DFO facilities or networks.

LOCATION OF WORK, WORK SITE AND DELIVERY POINT

Due to location of the captive Atlantic Whitefish (i.e., at the Dalhousie University Aquatron Laboratory) and nature of the work (i.e., housing and raising of the endangered SARA-listed Atlantic Whitefish), all personnel assigned to work resulting from this contract must be ready to work at the Dalhousie University Aquatron Laboratory, in close contact with the Contractor and have the technical expertise to handle an aquatic species at risk.

LANGUAGE OF WORK

English shall be the working language of all deliverables under this Contract.

SECURITY REQUIREMENTS

There is no requirement for security clearance because all work will occur offsite at a non-DFO facility and there is no classified or protected information arising from this work.

SPECIAL REQUIREMENTS

A 3-year (valid from December 13, 2018 until December 31, 2021) SARA s.73 permit (DFO_MAR-2018-16) has already been issued to Dalhousie University for the long-term holding and rearing of Atlantic Whitefish at Dalhousie University's Aquatron Laboratory. This permit authorizes the possession of individuals and the harassment or incidental harm or mortality of individuals. Terms and Conditions of the permit are included.

Additionally, an Introduction and Transfer permit (License Number 350969) is in place for 2019 to cover moving Atlantic Whitefish from wild to the Aquatron Laboratory.

No further special licenses or permits are required for the undertaking of this contract.

TRAVEL AND LIVING

No travel or living expenses will be paid as a result of any contract awarded.



REQUIRED RESOURCES OR TYPES OF ROLES TO BE PERFORMED

Roles

- Feeding and day-to-day care of the housed Atlantic Whitefish
- Monitoring of their growth performance (feeding, growth rate, etc.)
- Biological sampling (genetic, length, weight, sex, etc.)
- Recording and handling of any mortalities or instances of disease outbreak, including the development of Standard Operating Procedures for the sampling (e.g., genetics and fish health)
- Development of a data file for tracking the performance of individual fish.
- Quarterly updates (emails) to DFO Project Authority
- Draft and written reports outlining all relevant details as described in section 2.7 of this contract

APPLICABLE DOCUMENTS

Atlantic Whitefish Culture Handbook (DFO 2015)

<http://publications.gc.ca/site/eng/9.801242/publication.html>

Relevant Terms, Acronyms and Glossaries

Provide an explanation of any relevant terms, acronyms or wording used in the body of the SOW.

DFO – Fisheries and Oceans Canada

SARA – Species at Risk Act

MINIMUM MANDATORY REQUIREMENTS

- The contractor must have a s.73 SARA permit which allows the possession and handling of Atlantic Whitefish (see section 3.9 of this contract)
- The contractor must have extensive experience in the care of endangered aquatic species
- Fail-safe systems for the maintenance of aquatic facilities must be in place

TRADE AGREEMENTS APPLICABILITY OR OTHER OBLIGATIONS:

Trade agreements applicable for this requirement include Canadian Free Trade Agreement (CFTA) and North American Free Trade Agreement (NAFTA)

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. Dalhousie's Aquatron is the only known facility to accommodate this requirement in Nova Scotia.

CONTRACT PERIOD:

The contract period is estimated to be from Contract Award through to March 31, 2020 with the option to extend for 2 additional 1 year periods.

ESTIMATED VALUE:

The total estimated value of this contract is \$32,438.00 for the initial year, \$32,438.00 for the 1st option year, and \$32,438.00 for the 2nd option year for a total potential value of \$97,284.00 excluding all applicable taxes.



INSURANCE

The Contractor must have appropriate insurance and coverage as per Occupational Health and Safety Regulations, including current liability insurance and/or appropriate Workers Compensation coverage in place in the Maritime Provinces throughout the duration of the contract. Copies of this documentation must be provided to the DFO Project Authority in advance of commencement of the Contract.

The Contractor is responsible for deciding if insurance coverage is necessary to fulfill its obligation under the Contract and to ensure compliance with any applicable law. Any insurance acquired or maintained by the Contractor is at its own expense and for its own benefit and protection. It does not release the Contractor from or reduce its liability under the Contract.

SUPPLIER'S RIGHT TO SUBMIT A STATEMENT OF CAPABILITIES:

Suppliers who consider themselves fully qualified and available to provide the services described herein, may 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:

Thursday, July 4, 2019 at 2:00 p.m. (Atlantic Time)

Inquiries and statements of capabilities are to be directed to:

Kimberly Walker

Senior Contracting Officer

Procurement Hub – Fredericton

Telephone: (506) 238-3511

Facsimile: (506) 452-3676

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