**SFA 22 SCALLOP SCIENTIFIC SURVEY – 2022-2023 (DRAFT/UPDATED)**

**ANNEX “A ” STATEMENT OF WORK CONTEXT:**

This request for a chartered fishing vessel is for the inshore sea scallop assessment survey in the Northumberland Strait, in the southern Gulf of St. Lawrence. The survey uses a scallop drag to sample up to 116 predetermined stations over a 14-day period. The purpose is to evaluate the abundance, size and age composition, condition and spatial distribution of scallops as well as data on the other species caught in the drag. Data obtained from the surveys are the source of fishery independent data for the scallop stock assessment and advice.

**REQUIRED SERVICES:** The contractor must provide the services required to conduct the work in accordance with the following requirements:

* The area of work is in the Northumberland Strait, in Scallop Fishing Areas (SFAs) 22 The vessel must be prepared to berth at various ports in the Northumberland Strait during the course of the project. Ports will depend on operational requirements.
* The work consists of the successful completion of one tow per predetermined station, up to 116 stations, over a period of 14 sea days in 2022 and 2023 using a scallop drag. Work at each station will be considered successful when a tow is successfully completed, in accordance with established protocols and all data recorded (success will be determined by the responsible DFO scientist on board).
* At a given station, if the first tow is unsuccessful, two more tows (called alternate tows) at predetermined positions could be made in order to complete a successful tow. If all three tows at the same station (the original tow and the two alternate tows) fail, that station will be considered abandoned.
* Sampling will be done using an 8 (eight) gang (bucket) scallop drag of 3.4 meters supplied by DFO.
* Activities at sea include the tow, biological measurements of scallop of all sizes and other incidental species (counting of number and total weight by species or group of species), measurements of length of all commercial fish species, rays, lobsters and crabs at each station. Oceanographic measurements using a "CTD" (e.g. temperature, salinity, acidity, sediment) at stations indicated by the DFO scientist. • The required data are as follows: • an electronic log of the tow track and distance; • start and end position (latitude and longitude) and time, depth, direction, tidal cycle and volume of the catch; • the shell height frequency of scallops caught in the lined and unlined drags; • a biological sample of scallops, if deemed appropriate by the DFO scientist on board Note: A typical working day may be from 8 to 16 hours a day (dredging must be done during civil twilight time).
* The vessel may be required to remain at sea for periods if required (not likely in SFA 22)
* The survey works under a scientific fishing license which prohibits the retention of animals intended for sale.
* DFO members should not be included in determining crew requirements.
* The vessel must be ready for the survey on or around April 10th, 2022 at the port of embarkation. The Contractor will be notified of the embarkation / disembarkation port of the start and end of this project by the DFO Scientific Authority at least two weeks prior to embarkation and disembarkation of DFO members.
* Ports of embarkation / disembarkation during the survey period should be located in the Northumberland Strait, in the southern Gulf of St. Lawrence.
* The DFO Scientific Authority on board may decide to harvest and retain scallops, as well as other marine species for subsequent biological studies.

**DELIVERABLES:**

**CAPTAIN AND CREW –**

**MINIMUM REQUIREMENTS The captain will work with DFO staff** to ensure the crew adheres to COVID safety protocols before work begins and throughout the term of the contract. The captain and the crew must:

* Ensure the safe and efficient use of the vessel.
* Coordinate the provisions for the vessel.
* Work closely with the responsible scientist to determine the work plan for each day. • Perform the determined number of tows, in accordance with established protocols. • Handle the scallop fishing gear safely and efficiently.
* Be able to repair the drag on board the vessel and at the dock (repair equipment will be provided by DFO).
* Assist with sampling procedures, identification and measurement of catches, as directed by the responsible scientist.

**VESSEL CONDITION -**

The Contractor must ensure that the vessel is seaworthy, that the main engine is in good working order, as well as the equipment and devices used to operate the fishing gear.

**VESSEL AND FISHING GEAR –**

**MINIMUM REQUIREMENTS**

* Vessel construction can be of fiberglass, steel or wood. The vessel must be at least 40 ’overall length.
* The vessel must have enough space for the intended work and be equipped with the safety equipment required by Transport Canada’s Small Vessel Regulations: https://tc.canada.ca/en/marine-transportation/marine-safety/chapter-5-be-ready-emergencies
* The ship's winch must be rigged with 5/8 '' or greater warp thickness of at least 100 fathoms (183 m) in length to be capable of towing at depths of 25 fathoms (46 m). The winch is to have valid certification for load limit and safe operation. The vessel must be capable of towing at a constant speed of 2 knots.
* The vessel must be equipped with sufficient lighting for safe and efficient work on the deck at night.

**SAMPLES AND CATCHES**

* All catches become the exclusive property of DFO for the purposes of the research project. Neither the Captain, nor the crew have the authority to retain all or part of the catch.
* copy of the scientific licence will be provided to the captain by the Scientific Authority and must remain on board for the entire duration of the project.

**OTHER REQUIREMENTS** •

* During the term of the contract, the vessel and crew must be ready for departure at a 12 (twelve) hours’ notice.
* The DFO scientist in charge will supply and deliver to the vessel an 8-gang (bucket) scallop drag, Vexar liners, shackles, rings, metal washers, rope and wire necessary for the survey.
* The contractor will organize, in coordination with the DFO scientist in charge, the transport of the survey fishing gear provided by DFO. The latter will remain in the custody and control of the contractor until the DFO scientist in charge gives them delivery instructions. During this period, the contractor must take reasonable and appropriate measures to protect the gear.

**OTHER DETAILS**

* For the purposes of this contract, a “sea day” represents one (1) twenty-four (24) hour calendar day consisting of ten (10) to thirty-five (35) tows. A sea day comprising less than 10 tows will be considered a partial sea day. The proportion of a sea day deemed completed will be determined by the responsible DFO scientist.
* Although the captain is in charge of the vessel at all times, he or she must follow the directions of the DFO Scientific Authority unless the safety of the vessel or crew members is compromised. •=
* The captain and crew members will ensure working conditions in a healthy, smoke-free (inside the vessel) and respectful environment. Physical, verbal or psychological harassment by the crew, the captain, the vessel owner and their representatives will not be tolerated.
* The captain of the vessel must keep a daily logbook of the operations and activities of his vessel, both at sea and in port, to which the DFO Scientific Authority will have access at all times.
* Any other commercial fishing activity is not permitted during the survey period. The captain does not have the authority to take advantage of survey activities to conduct a commercial fishery. DFO will not assume any costs associated with the vessel or crew.

**CHANGE MANAGEMENT PROCEDURES** Any changes to the scope of the project will be discussed by the DFO Project Authority and Contractor and actioned by means of a formal contract amendment issued by the Contracting Authority.