2020 SENTINEL GROUNDFISH SURVEY PROTOCOL AND REQUIREMENTS

As per DFO Contract

2. REQUIREMENTS

2.1. TASKS, ACTIVITIES, DELIVERABLES AND MILESTONES

- A maximum of five (5) longline gear vessels will be used along the Prince Edward Island Coast In previous years, paired fishing locations (2 per vessel) were identified and these sites MUST be fished again in 2020 for comparative purposes.
- Each vessel will fish at two sites, which will remain constant over the fishing season. Each vessel will fish its gear a maximum of 8 times with a maximum frequency of twice per period of 7 days over the term of the contract. This means that the gear may be fished only once during some weeks.
- Fishing must begin in July, twice per month (July, August, September and October); this is in order to obtain data throughout the season.
- After hauling the gear at each fishing site, the fishing vessel crew and the observer will record all information pertaining to the catch. The crew of the fishing vessel MUST assist the observer in conducting the sampling. Fishing operations may have to be slowed down for that purpose. For each site and each time the gear is fished, information on the set location and the complete catch will be recorded. Length frequency measurements (250 fish or the entire catch if less than 250 fish are caught) will be taken for cod, white hake (sexed length frequencies are required for white hake but not for cod). Otoliths will be collected for cod and white hake only (1 per cm) according to the scientific protocols. All data will be recorded on standard observer program data sheets; all fields must be completed.
- All Atlantic Halibut must be returned to the water immediately, and where it is alive, in a manner that causes it the least harm
- On occasion, special sampling will be required. Examples of special sampling include, but are not limited to: individual weight and length records for cod, sampling for DNA studies of specific species, collection and preservation of fish samples for laboratory analyses. Detailed protocols will be supplied for these collections.
- Water temperature will be monitored using probes supplied by DFO. The probes will be initialized by DFO and one will be assigned to each vessel.

2.2. SPECIFICATIONS AND STANDARDS

The following specifications and standards must be met and maintained throughout the contract period:

- A minimum of 1,250 hooks (size 12 circle 1 fathom apart) and a maximum of 2,500 hooks will be used (divided equally between the two sites). These can be bottom longlines or "floated" longlines (1-3 feet off bottom).
- Prior to the awarding of the contract, the successful Contractor (fishing association or organization) will notify DFO of the vessels involved in the project including the name of the vessel, CFV and the name of the captain.
- The same vessels MUST be used for the entire project. NO substitution of vessels will be allowed unless the contractor receives written approval from the Scientific Authority for the project or representative.
- Observers MUST be on the vessels whenever the gear is fished (fish are on-board the vessels). Observers will NOT be required during the setting of the gear providing that NO fish are being

brought aboard.

- Participating fishermen MUST be holders of a valid groundfish license and MUST have experience in the groundfish fishery.
- A special fishing license will be issued in the name of each fishing Captain hired through the Contractor for the specified vessel. 2 Each vessel may be required to activate a VMS and to install a DFO-provided on-board camera for monitoring purpose.
- In accordance with section 2.1 Tasks, Activities, Deliverables and Milestones the contractor
- MUST ensure that after the haul back at each site, the fishing vessel crew and the observers record all information pertaining to the catch.
- Ensure the crew of the fishing vessel assist the observers in sorting the fish and invertebrate species and in conducting the sampling.
- Ensure that water temperature is monitored using probes supplied by the DFO and attached to the trawl during fishing operation.

2.3. SPECIFIC REQUIREMENTS FOR NORTH ATLANTIC RIGHT WHALES (NARW)

Due to the unprecedented high number of incidents with the NARW in the sGSL in 2017, DFO has decided to implement new measures aimed to protect the NARW, including a static closure and temporary management area closures.

It is important to ensure that the Sentinel Survey program activities are consistent with the management measures. Therefore, a risk averse approach is necessary for the 2019 Sentinel surveys, and the following measures will be in effect:

1) Contracts will now include provisions for applying the dynamic management protocol for closures in the areas subjected to the temporary closures to the entire southern Gulf of St. Lawrence (e.g. potential forage areas). Each participant will receive a high resolution map with its survey stations and the identification number of each grid subject to the temporary closure protocol. When at least one NARW is observed, DFO will close a total of nine grids to create a buffer area around the sighting location to account for whale movements, therefore if this impacts one of the fixedgear Sentinel Survey sites that location will be closed. Reopening of closed sites will be decided according to the same protocol used for commercial fisheries. Closures and reopening will be communicated by the biologist responsible for the Sentinel Survey program to the industry association impacted, and the captain of the vessel.

2) Any fishing activity (trip) will have to be pre-approved by the Project Authority to ensure that this activity does not conflict with the temporary closure protocol.

3) Any fishing activities canceled due to temporary closures will not be postponed and will not be payable under this contract.

4) The soak time of longlines shall be a minimum of 4 hours and shall not exceed 8 hours.