

## **Appendix “B”**

### **TYPICAL ENVIRONMENTAL PROTECTION PLAN**

## **ENVIRONMENTAL PROTECTION PLAN**

### **2019 - 2020 HARBOUR MAINTENANCE DREDGING AND DISPOSAL OF DREDGED SEDIMENTS IN PRINCE EDWARD ISLAND**

#### **Summary of Mitigation Commitments**

##### **Turbidity and Sedimentation**

- Visual monitoring will be conducted at the dredge and disposal sites by inspectors hired by PSPC Project Management. The purpose of this monitoring is to provide indications of significant changes in turbidity. If such changes occur, suggesting the dredging of fine-grained materials, the incident will be reported to PSPC and the dredging operations will be modified to ensure water quality returns to conditions typical to the dredging and disposal of materials that are predominantly sand.
- Visual monitoring for suspended solid must occur daily. If any changes occur in the turbidity of the water in the vicinity of the work area as a result of construction activities, the work must be immediately stopped to determine if further mitigation measures are required.
- All reasonable measures (in the opinion of the Minister) must be taken to minimize the siltation of the watercourse.
- Disposal activities will be monitored to ensure that volumes approved in DAS permits are not exceeded.

##### **Birds and Bird Habitat**

- All equipment mufflers will operate efficiently during dredging activities. Other sounds such as whistle blasts and horns will be limited or replaced with radio communication.
- Concentrations of seabirds, waterfowl or shorebirds will be avoided when anchoring equipment, accessing wharves or ferrying supplies.
- Staff, contractors and visitors should not approach concentrations of seabirds, sea ducks or shorebirds.
- Vessels will be restricted to main navigation channels, except when positioning pipelines from hydraulic dredges.
- Pipelines will be deployed and anchored at sea and will not be located on beaches or other important bird habitat. Beaching of pipelines will be avoided by ensuring moorings are secure and pipelines are moved to protected areas during periods of heavy seas.
- If an accident occurs and equipment is washed up on the beach (e.g., pipeline), it will be retrieved from the marine environment (i.e., from the vessel), rather than via the beach.
- With the exception of North Lake, dredge crews, their anchors, vehicles or equipment will not access beaches or other important bird habitat such as sandspits, dunes, intertidal flats/sandflats. Beaches will not be used as staging areas for equipment and measures will be taken to ensure that project staff and vehicles do not trample sensitive beach habitats.

- North Lake will use an existing access road to reach the dredging/disposal areas and will dispose dredged material in the lower half of the intertidal area. In addition, activities will be restricted to a small portion of the intertidal zone (situated between the breakwater and the adjacent access road). For intertidal disposal at North Lake, the dredged material will be placed and reworked to lie below the mid-tide line.
- The dredging/disposal sites will be kept clear of any food, debris or litter.
- Sightings of the following avian species at risk (as listed on Schedule 1 of SARA) are to be reported to the Departmental Representative: piping plover (*endangered*), red knot (*endangered*), and harlequin duck (*special concern*).

#### Species of Conservation Concern and Their Habitat

##### *Piping Plover*

- PWGSC will contact the Island Nature Trust annually to determine the presence or absence of plovers or their nests at SCH locations where spring or summer dredging is proposed within 300 m of draft critical habitat. The information will be kept on record and made available to contractors so that all parties are aware of plover presence in the event of a spill, however unlikely. If up-to-date data are not available for a particular SCH location, PWGSC may provide funds to Island Nature Trust to gather site-specific information at the time when it is needed.

##### *Measures for Covehead*

- DFO-SCH/PWGSC and Parks Canada Agency will continue to work collaboratively to monitor dredging activities, and any related effects on Piping Plovers and other birds, in order to adjust dredging activities, if required.

#### Fish and Fish Habitat

- Ensure that all in-water activities, or associated in-water structures, do not interfere with fish passage, constrict the channel width, or reduce flows.

##### *Invasive Species*

- All equipment will be mobilized by road and will be pressure washed before being placed in the water.
- Prior to mobilizing to the project site, the contractor will provide a work log to PSPC that shows the location of previous works. If the floating equipment has been in an area that is known to be infested with invasive species, the owner will verify that the equipment is free from invasive species by providing proof of cleaning or by diving and examining the floating equipment. Evidence of invasive species will result in a thorough cleaning which may involve complete removal of animals and plants and dry-docking the equipment.

#### Commercial Fisheries, Aquaculture/Transportation and Marine Navigation

- The proponent, DFO SCH will coordinate with local Harbour Authorities prior to commencement of the project activities such that the schedule with the least possible conflicts will be implemented.

- Floating equipment will be operated such that navigation in and out of harbours is maintained.

#### Health and Safety

- To avoid creating an attraction to swimmers, dredged material will be distributed in such a manner as to avoid the creation of an artificial sand bar.

#### Accidents and Malfunctions

##### *Hazardous Materials*

- The handling of hazardous materials will comply with all applicable provincial and federal legislation.

#### General Pollution Prevention and Emergency Response

- Basic petroleum spill clean-up equipment, including a 250 L oil spill clean-up kit, will be on site during the duration of the project. In order to ensure contaminant releases do not occur, machinery will be regularly inspected for leakage of lubricants or fuel. This will include ensuring that all hydraulic hoses, oil and fuel lines are in good condition with no leaks. Hoses and tanks are to be inspected on a regular basis to prevent fractures and breaks near the water.
- Ensure that machinery arrives on site in a clean condition and is maintained free of fluid leaks, invasive species and noxious weeds.
- In the event of an accidental spill, the Canadian Coast Guard will be notified at 1-800-565-1633 (24-hour reporting line). The source of the spill will be identified and stopped, with any released material contained immediately. Work will be halted and spill containment and cleanup will begin with the spill kit on hand.
- Fueling and servicing of equipment should not take place within 30 m of environmentally sensitive areas, including shorelines and wetlands.
- Should a small leak or drip be identified, they will be contained by using drip pans or other appropriate means until the equipment is properly repaired. Routine maintenance will be conducted offsite.

#### Additional Standard Mitigation

- All permit conditions in the NPA authorization will be followed.
- Dispose of dredge material at the approved Disposal at Sea (DAS) site in accordance with any/all conditions of the Canadian Environmental Protection Act (CEPA) Disposal at Sea Permit. A copy of the CEPA Disposal at Sea Permit must be kept on site at all times. Dredge disposal operations are to comply with the requirements of the Disposal at Sea Permit issued for the project.
- Dredge crews, dredging related vehicles or other dredging related equipment will not access beaches, sand spits, dunes, mud flats, or sand flats during any stage of the project.