

## **Appendix “B”**

### **TYPICAL ENVIRONMENTAL PROTECTION PLAN**

## ENVIRONMENTAL PROTECTION PLAN

### **2016 - 2017 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 PWGSC 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 PWGSC 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.
- 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.
- 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).
- The dredging/disposal sites will be kept clear of any food, debris or litter.

##### 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

##### *Invasive Species*

- All equipment will be mobilized by road and will be pressure washed before being placed in the water.

#### 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.
- 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 clean up will begin with the spill kit on hand.

- 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.

#### Effects of the Environment on the Project

- Only proven methodologies for dredging and/or DAS will be used.
- The project will be implemented during benign weather conditions to minimize potential for accidents (i.e., EC's local forecast {<http://weatheroffice.ec.gc.ca>} and storm surge advisory and warning bulletins will be consulted prior to project commencement).