

# Notice of Determination

Fraser River, Lower Mainland BC – December 18, 2020 – The Department of Fisheries and Oceans, Small Craft Harbours Branch has determined that the proposed Fraser River Maintenance Dredging Project is not likely to cause significant adverse environmental effects.

This determination was based on a consideration of the following factors:

- impacts on rights of Indigenous peoples;
- Indigenous knowledge;
- community knowledge;
- comments received from the public;
- DFO Fish and Fish Habitat Protection Program (FFHPP) review of project; and
- technically and economically feasible mitigation measures.

Fisheries and Oceans Canada Fish and Fish Habitat Protection Program has reviewed the project and determined that an authorization under the *Fisheries Act* is not required, therefore no habitat compensation is required for the project.

Mitigation measures taken into account for this determination are:

## Avoidance Measures

- In-water works will be scheduled between December 1 and February 15 to protect fish including their eggs, juveniles, spawning adults, the organisms on which they feed, and the areas through which they migrate, as well as sensitivities associated with salmon and eulachon migrations, and sturgeon presence.

## Mitigation Measures for Use of Industrial Equipment

- Dredging will be completed as efficiently as possible during favourable flow conditions to limit the duration of dredging at each harbour.

- Frequent soundings will be conducted throughout dredging to prevent over dredging of areas.
- Dredging will occur only during ebb tide conditions, which are most efficient in carrying sediments off-shore.
- A spill kit containing absorbent pads (i.e. petroleum) and peat moss, absorbent booms for containment and absorption, drum liner bags or plastic pails (20 L) appropriate for the type and volume of product that could be spilled will be kept on the clamshell dredge barge at all times. The spill kit will be supplied by the Contractor and the appropriateness (type of materials and quantity) of the spill response supplies will be confirmed by the inspector/ monitor prior to the start of dredging.
- The Contractor will be instructed, in writing, to immediately clean up any spill that occurs and report it to SCH regardless of the volume spilled.
- All machinery shall be free of excess oil and grease and shall be in good mechanical order so that no leaks occur.
- Equipment will be inspected by the monitor/ inspector and the Contractor prior to the start of work and daily by the Contractor to ensure that it is leak free. Inspections will include looking for leaks, cracked hoses and fittings.
- Biodegradable hydraulic fluid shall be used in equipment (e.g., cranes or excavators) conducting dredging works.
- When using a clamshell dredge in tandem with propeller wash dredging for in-river disposal of dredged material, ensure that the dredged material is placed as close as possible to the riverbed. Dredged material is not to be released from above the water surface or within the upper portion of the water column.

### **Mitigation Measures for Fish**

- Implement ramp up procedures during dredging to allow for sturgeon and other fish that may be present in the area to vacate the area prior to full dredging operations.
- No grounding of barges will be allowed to occur on the riverbed, except for the use of vertical spuds or anchors employed to hold the spud barge in place.
- Tugs shall use perching structures or pull off a spud barge to remain in place whenever possible to minimize grounding on the foreshore. Unvegetated shoreline should only be used for

maintaining vessel positions where use of alternate sources is not feasible.

- If clamshell dredging is used to side cast the dredged material, the clamshell dredge must place the dredged material as close as possible to the river bed. Dredged material is not to be released from above the water surface or within the upper portion of the water column.
- If the contractor observes dead or distressed fish, they will contact the environmental monitor immediately and stop work to allow the monitor to investigate and determine the best course of action.
- There shall be no propeller wash dredging conducted in backwater channels, sloughs, or other important and sensitive fish habitat areas.
- Do not deposit any substances deleterious to fish or fish habitat directly or indirectly into the Fraser River or any adjacent watercourses. In the event of a spill into a watercourse, ensure the spill response plan is implemented immediately to mitigate potential effects to fish and fish habitat.

### **Mitigation Measures for Aquatic Mammals**

- If harbour seals or other aquatic mammals are observed within the Project footprint during dredging works, the equipment operator will suspend operations and wait until the animal has moved outside the Project footprint.
- If the contractor observes dead or distressed aquatic mammals, they will contact the environmental monitor immediately and stop work to allow the monitor to investigate and determine the best course of action.

### **Mitigation Measures for Vegetation**

- Dredging will only be conducted when river levels are below the lower limit of vegetation, even at high tide.
- To prevent physical damage to vegetation along the shoreline, vessels shall not ground on vegetated foreshore. Note that it may be necessary for “perching” structures to be installed.

- Propeller wash must be directed away from shore to direct sediments away from foreshore areas, particularly vegetated areas.
- To prevent physical damage to vegetation, vessels shall not ground on vegetated foreshore. Works are not to result in undercutting, or undermining of the shoreline.

### **Additional Mitigation Measures**

- Maintenance dredging will be conducted under the direction of a full-time Qualified Environmental Professional (QEP) acting in the role of the Environmental Monitor to ensure conformance with avoidance and mitigation measures.
- Monitor for potential signs of nearshore sedimentation during all phases of the project. Take appropriate corrective actions as required to prevent death of fish and/or the harmful alteration, disruption or destruction of fish habitat.
- Dredging operations will be ceased if there is a risk of physical harm to fish or any marine mammal from direct contact and/or if fish or marine mammals appear to be distressed as a result of the work. Dredging may only resume once these risks have been mitigated.

The Department of Fisheries and Oceans, Small Craft Harbours Branch is satisfied that the carrying out of the project is not likely to cause significant adverse environmental effects.

Therefore, the Department of Fisheries and Oceans, Small Craft Harbours Branch may carry out the project, exercise any power, perform any duty or function, or provide financial assistance to enable the project to be carried out in whole or in part.