



November 15, 2016

Michael Shephard, Project Assessment Manager Lindsay Walton, Project Assessment Officer BC Environmental Assessment Office

Via Email: Michael.Shepard@gov.bc.ca and Lindsay.Walton@gov.bc.ca.

Dear Michael and Lindsay:

Re: Questions regarding Fraser River dredging received by EAO as part of the environmental assessment for the proposed George Massey Tunnel Replacement Project

Thank you for your request for information in order to respond to questions about dredging in the Fraser River received by EAO as part of the environmental assessment for the proposed George Massey Tunnel Replacement Project. We hope the following information will assist in answering some of the questions you have received.

Dredging to maintain the navigation channel in the lower Fraser River has been on-going since the late 1800s. In 1998, a service review by the Canadian Coast Guard resulted in the Federal Government of Canada absolving itself of the responsibility for channel dredging. Since that time, no other government agency has been assigned the responsibility or funding for channel dredging.

Providing safe and unimpeded vessel access to terminals often requires dredging. As such, the Vancouver Fraser Port Authority (the port authority) has chosen to undertake navigation channel dredging within its jurisdiction in support of marine commerce in a manner consistent with the Canada Marine Act.

Dredging of the Fraser River is an annual, on-going necessity to maintain the existing navigation channel. The amount of dredging required varies from year to year and is generally dependent on the volume of sand deposited in the navigation channel from river flow conditions during summer freshet. The duration and size of summer freshet is based on snowpack in the Fraser basin and how quickly it melts.

Through annual maintenance dredging, the port authority maintains a 36 km deep-sea navigation channel in the south arm of the Fraser River from the mouth of the river up to Fraser Surrey Docks.

The navigation channel is currently designed to accommodate two way traffic of vessels up to 270 metres in length, 32.3 metres in breadth and 11.5 metres in draft with tidal aid. As a one lane navigation channel, the existing channel design can accommodate vessels up to 70m in breadth as long as there is either sufficient depth, or, when considered together with the time of transit, the vessel's draft and length does not compromise the vessel's ability to safely navigate the river bends or turn around at its destination.

This one lane approach allows the port authority to consider and authorize requests for "larger than design" vessels (greater than 270 metres in length, 32.3 metres beam, 11.5 metres draft). Requests are considered by the port authority, the Fraser River Pilots and the Pacific Pilotage Authority based on vessel size, maneuverability, channel and turning basin condition, intended transit route, anticipated vessel traffic, and environmental conditions. Any authorization can be accompanied by imposed restrictions such as:

- giving transit priority to vessels that meet channel design;
- not meeting other deep sea traffic at sharp river bends or narrow sections of the river (e.g. Steveston Bend);
- use of tugs to assist the vessel (number and horse power); and,
- restriction on weather (e.g. not transiting in very strong winds or current).

Approximately 1,000 vessels call annually at deep-sea terminals within the Fraser River. Dredging is an essential part of maintaining navigational safety for those vessels.

The port authority currently has no plans to dredge the Fraser River to create a wider or deeper navigation channel. However, sometimes projects may be proposed on port authority managed lands or waters that call for new dredging to accommodate vessels that are larger than what an existing navigation channel or berth was designed to accommodate. Dredging associated with these proposed projects is referred to as capital dredging. Applications for projects proposing capital dredging are infrequent and are subject to stringent review under the port authority's Project and Environmental Review (PER) process.

Each application is carefully considered and rigorously reviewed on its merits and impacts. Consideration of project permit applications includes technical and environmental reviews and any required municipal, stakeholder and community engagement. In addition, all proposed projects, including those proposing capital dredging, are assessed to determine whether they have the potential to adversely impact asserted or established Aboriginal or Treaty rights. If the potential for impact exists, the port authority conducts Aboriginal consultation in order to determine whether or not the proposed project may adversely impact rights, and to determine how to avoid, mitigate, or otherwise accommodate those impacts.

Canada Port Authorities have been the permitting authority for federal port lands since the introduction of the *Canada Marine Act* (CMA) in 1998. As a Canada Port Authority under the CMA, the Vancouver Fraser Port Authority conducts environmental reviews as a federal authority under the Canadian Environmental Assessment Act, 2012 (CEAA 2012). Section 67 of CEAA 2012 requires the port authority to assure itself that the carrying out of a project is not likely to cause significant adverse environmental effects. In addition, under Section 5 (1) (c) of CEAA 2012, the port authority must also consider, with respect to Aboriginal peoples, whether the project will result in any change to the environment that may affect the health and socio-economic conditions, physical and cultural heritage, current use of lands and resources for traditional purposes, or any structure, site or thing of historical, archaeological paleontological of architectural significance.

The port authority considers these factors through the PER process, which applies to all proposed physical works and activities on lands and waters partially or wholly within the port authority's jurisdiction. The requirements under CEAA 2012 and through the PER process apply regardless of who the Applicant is.

All of the information provided in this response is available on the port authority's website at portvancouver.com. In addition, the Port Information Guide is always the most up-to-date

source of information with regard to port operations. And port authority staff are pleased to assist with any additional information.

We hope this helps to answer the questions you have been receiving.

Kind regards,

VANCOUVER FRASER PORT AUTHORITY

Chris Wellstood

Director, Marine Operations & Security, Harbour Master