

The Northern Gateway Project understands the long-term success of the project depends on our ability to construct the project in an environmentally responsible way. A team of over 200 environmental experts and scientists conducted a comprehensive analysis throughout the project area in aspects such as marine biology, wildlife, water resources, fish and others. The findings of this analysis have been incorporated into our planning to ensure that construction proceeds safely and responsibly and that our environmental impact is minimized throughout the operational life of the project.

Potential Effects on Marine Mammals

- Behavioral changes and associated effects because of underwater noise from vessels
- Physical injury from vessel strikes
- Reduction in sound production and audition which are important life functions (spatial orientation, migration, communication, predator/prey detection, courtship displays and mating, and locating members of the same species)

Specific Measures to Reduce Potential Effects for Marine Mammals

- Using specified vessel transit approaches, taking into account navigational safety, so that acoustical disturbances are constrained to similar and predictable areas during marine transportation
- Reducing vessel speed to 10 to 12 knots throughout the channels to the terminal.
- Reducing vessel speed to 8 to 10 knots, unless otherwise required for safe navigation, in the core humpback whale area during May to November.
- In the initial years of operation, introducing a whale-monitoring vessel during months of peak humpback whale abundance in the core humpback whale area.
- Investigating the use of remote detection techniques. This would be used to support the visual observation program from the whale-monitoring vessel.
- Using best commercially available technology at the time of design/construction of the tugs (primarily in engine vibration reduction and propeller design) so that escort and harbor tugs produce the least underwater noise possible.
- Develop and implement a marine mammal protection plan specific to the Project that would outline measures to limit the effects of underwater noise on humpback whales and other large marine mammals in the shipping channels.
- Operators of project-related vessels will report all sightings of whales in the shipping channels via a ship communication system, so other marine traffic is made aware of whale locations.
- Implementing cooperative planning and research to address important data gaps

Northern Gateway recognizes that it cannot dictate the adoption of mitigation measures by other proponents, nor can it direct the mandates of government or other organizations. Nonetheless, a cooperative approach to the adoption of mitigation measures would be in the interests of all concerned.