

# Juan de Fuca Voluntary Lateral Displacement Trial Backgrounder

**August 20 – October 31, 2018**

## Overview

The Enhancing Cetacean Habitat and Observation (ECHO) Program and Transport Canada, supported by U.S. Coast Guard, Fisheries and Oceans Canada (DFO), Canadian and U.S. marine transportation industry, Aboriginal individuals and environmental and conservation groups, are planning a voluntary trial to study how laterally displacing vessels away from known southern resident killer whale (SRKW) feeding areas affects the underwater noise levels in those foraging areas. This trial is part of the ECHO Program's objective to better understand and manage and mitigate potential impacts of shipping activities on at risk whales.

Southern resident killer whales are endangered, with a population of 75 individuals (June 2018) and they have shown little sign of recovery since the 1980s. The Strait of Juan de Fuca is located within critical habitat for the SRKW population, which is listed as endangered under both the *Species at Risk Act* in Canada and the *Endangered Species Act* in the U.S. Both governments have highlighted the need to develop and implement measures to reduce acoustic disturbance, including noise generated by vessels.

Research indicates that underwater vessel noise can interfere with whales' ability to hunt, navigate and communicate with each other. Research also indicates that underwater noise impacts can be reduced by moving the vessel noise source away from the whales.

DFO has identified SRKW feeding areas along the northern side of the Strait of Juan de Fuca. This is the broad geographic area over which the ECHO Program is seeking commercial vessel participation in this voluntary lateral displacement trial (see attached map). Historical data indicates that SRKW are most frequently detected in Salish Sea waters between June and October.

## About the lateral displacement trial

The purpose of the trial is to help reduce vessel noise impacts in key SRKW feeding areas. Data collection and analysis will help to measure both the level of noise reduction that can be achieved by moving vessels further away from SRKW feeding areas, as well as the level of voluntary vessel participation that can be achieved in these transboundary waters.

The trial is voluntary and temporary. It will start August 20, 2018 and be active until October 31, 2018.

If it is safe and operationally feasible to do so, all **deep-sea vessels** transiting outbound through the Strait of Juan de Fuca are requested to navigate as far south as possible within the outbound lane of the traffic separation scheme (without entering the separation zone), in the area between 124' west and 124' 40" west, over a distance of approximately 34 nm. Vessels entering the lane from the Victoria pilot station should do so utilizing the cut to remain on the north side of lane as they enter, then shift to the south when safe to do so.

Between these same longitudes, all vessels transiting the **inshore zone** are requested to navigate as far south from Vancouver Island as possible without entering the traffic separation scheme. At 124' 40" west the trial zone concludes and vessels will position normally for their subsequent passage plan route.

To maximize potential benefits of vessel noise reduction, the trial will only take place in the outbound lane of the traffic separation scheme and the inshore zone, which are located closer to the known SRKW feeding areas. Lateral displacement in this area is not expected to impact vessel transit time or fuel consumption rates.

### Trial communications and monitoring

During the trial, vessel participation rates will be monitored using AIS data and regular updates will be provided via an ECHO Program newsletter which can be subscribed to [here](#). Underwater noise will be measured before, during and after the trial using three DFO hydrophones located in key SRKW foraging areas the Strait of Juan de Fuca.

To increase awareness about the trial, it is anticipated that Canadian and U.S. marine transportation associations, ships agents, port authorities, pilots and coast guards will reach out to ship owners and vessel captains before and/or during the trial period. High vessel participation rates will help mitigate vessel noise impacts on the SRKW and will greatly enhance the strength of the acoustic information collected.

At the conclusion of the trial, with support from project partners, a full analysis will be conducted by the ECHO Program to evaluate results and provide feedback which can inform next steps.

### Questions or feedback

For more information and to review resources about the Strait of Juan de Fuca lateral displacement trial, please click [here](#). If you have specific questions, please email [echo@portvancouver.com](mailto:echo@portvancouver.com). For more information on the ECHO program please see [www.portvancouver.com/echo](http://www.portvancouver.com/echo)

