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Strait of Juan de Fuca 2022 voluntary lateral displacement

A collaborative effort to create quieter oceans for healthier whales

The Strait of Juan de Fuca is a known foraging area within the critical habitat of southern resident killer whales, which are listed as endangered in both Canada and the United States. Both countries' governments have identified underwater noise from ships as one of the key threats to killer whales, due to its interference with their ability to hunt, navigate and communicate via echolocation.

To reduce the effects of commercial shipping on at-risk whales in this key foraging area, the Vancouver Fraser Port Authority-led Enhancing Cetacean Habitat and Observation (ECHO) Program is coordinating a voluntary lateral displacement in the Strait of Juan de Fuca, in collaboration with government agencies, the marine transportation industry, environmental groups, and Indigenous communities. During the lateral displacement, all vessels transiting in the Canadian inshore area of the Strait of Juan de Fuca are asked to move south when safe and operationally feasible to do so in order to decrease underwater noise.

The Strait of Juan de Fuca lateral displacement is one of three underwater noise reduction initiatives coordinated by the ECHO Program in the Salish Sea. Since 2017, these initiatives have encouraged thousands of ship operators to slow down or stay distanced in southern resident killer whale critical habitat, reducing underwater sound intensity by up to 55% in slowdown areas and by up to 70% per tug transit.

Lateral displacement parameters for 2022

Date: June 1 – October 31

From June 1 to October 31, all tugboats transiting in the Canadian inshore area of the Strait of Juan de Fuca are requested to move south of the known killer whale feeding area, if and when it is navigationally safe do so.

Location: Strait of Juan de Fuca

There are **two areas** where tugboat operators may participate in the lateral displacement initiative:

- the outbound shipping lane;
- the inshore lateral displacement zone, which is 1,500 m wide and occurs in the area between 123° 52.3532' W 48° 18.6222' N and 124° 31.5563' W 48° 28.8886' N.

The inshore displacement zone is positioned 1,000 m north of the traffic separation scheme (TSS) in order to provide a safety buffer. An enhanced management area (EMA) has been identified by the Government of Canada along the northern side of the Strait of Juan de Fuca (shown in green in the map above).

How to participate

- Position tug to enter the inshore lateral displacement zone or outbound shipping lane, only when safe to do so
- If transiting in the inshore lateral displacement zone, maintain a 1,000 m buffer from the TSS and avoid entering the EMA.
- Maintain sufficient closest point of approach with any other vessel traffic

Tugboats are encouraged to participate whether or not they are towing a barge. Participation does not relieve operators of their obligations under collision regulations, or to take precautions given the circumstances of the case. Any directions from Vessel Traffic Service supersede those of the voluntary displacement.

Participation goal, monitoring, and reporting

The ECHO Program is again seeking high levels of participation in the Strait of Juan de Fuca lateral displacement, with a participation goal of **85%** of tugs spending most of their time in either the outbound shipping lane or the inshore lateral displacement zone.

Fisheries and Oceans Canada will monitor underwater noise levels before and during the lateral displacement using underwater listening devices called hydrophones, located in the Strait of Juan de Fuca. Southern resident killer whale presence will be monitored and recorded by hydrophones and trusted visual observers.

Participation rates will be monitored using Automatic Identification System data and will be reported throughout the slowdown period via the ECHO Program's bi-weekly newsletters. At the end of the lateral displacement, the ECHO Program team will conduct an analysis of the lateral displacement's results, with full details published at www.portvancouver.com/echo.

For more information

- Learn more about the ECHO Program's initiatives: www.portvancouver.com/echo/projects
- Learn more about the ECHO Program: www.portvancouver.com/echo
- Sign up for our newsletter here
- Questions? Contact us at echo@portvancouver.com or through the Vancouver Fraser Port Authority Operations Centre, which is available 24/7 at 604.665.9086