



# Strait of Juan de Fuca 2021 voluntary lateral displacement

## Working to reduce underwater noise in endangered killer whale feeding areas by moving tugboats further away

Southern resident killer whales (SRKW) are listed as endangered under both the *Species at Risk Act* in Canada and the *Endangered Species Act* in the U.S. Both countries' governments recognize the need to take measures to reduce underwater noise generated by vessels, which has been shown to interfere with killer whales' ability to hunt, navigate and communicate via echolocation.

Since 2018, the Vancouver Fraser Port Authority-led Enhancing Cetacean Habitat and Observation (ECHO) Program has been working with the marine transportation industry, environmental groups, Indigenous advisors, and government to coordinate a voluntary lateral displacement in the Strait of Juan de Fuca asking vessels to move further away from this known SRKW feeding areas in order to decrease underwater noise.

Thanks to the high participation rates in last year's inshore lateral displacement in the Strait of Juan de Fuca, **underwater sound intensity was reduced by up to 70%** for each participating tug transit in this important area of southern resident killer whale critical habitat.

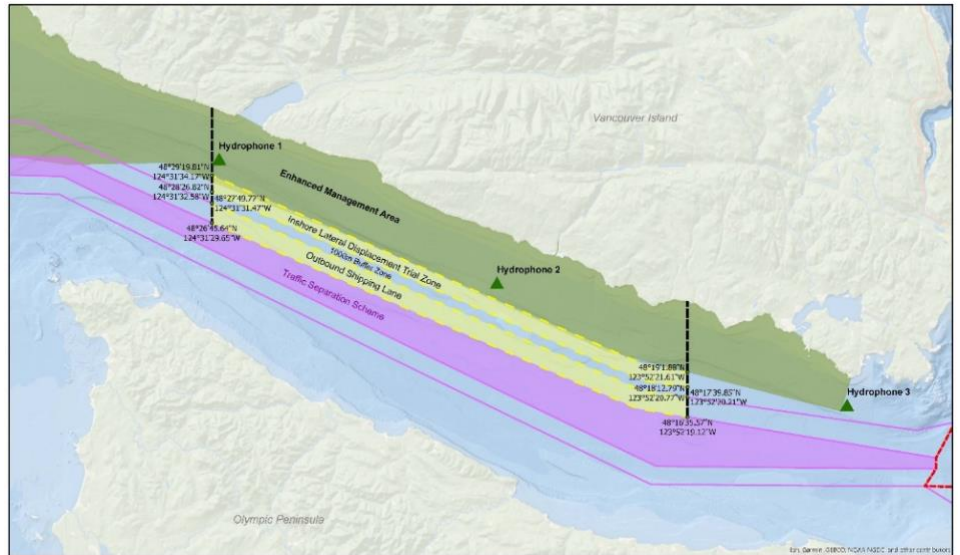
### Lateral displacement parameters for 2021

#### When: 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 safe and operationally feasible to do so.

Tugboats can navigate either through the outbound shipping lane or in the inshore lateral displacement zone, while maintaining a buffer distance of 1,000 metres from the traffic separation scheme (TSS).

#### Where: Inshore lateral displacement zones in the Juan de Fuca



To download a full sized map, [click here](#).

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 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) which is important for the SRKW.

## 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: Over 80%

In order to reduce underwater noise levels as much as possible in 2021, the ECHO Program is seeking high levels of support with a participation goal of 80% of tugs spending most of their time either the outbound shipping lane or the inshore lateral displacement zone.

## Monitoring and reporting

Underwater noise will be measured before and during the lateral displacement using underwater microphones, known as hydrophones, operated by Fisheries and Oceans Canada in the Strait of Juan de Fuca

Participation rates will be monitored using Automatic Information System data, and will be reported through the bi-weekly ECHO Program newsletter. At the end of the lateral displacement period, the ECHO Program team will conduct an analysis to evaluate its effectiveness and results will be published on our website.

## For more information

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