

2020 voluntary vessel slowdown

Haro Strait and Boundary Pass

Working together to reduce underwater noise effects on whales

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. As of December 31, 2019, the population has declined to 73 individuals. Both countries' governments continue to emphasize the need to develop and implement measures to reduce underwater noise generated by vessels, which research indicates can interfere with killer whales' ability to hunt, navigate and communicate.

Over the past three years, the Vancouver Fraser Port Authority-led Enhancing Cetacean Habitat and Observation (ECHO) Program coordinated voluntary vessel slowdown initiatives in key feeding areas within SRKW critical habitat. Research findings show that reducing vessel speeds is an effective way of reducing both the underwater noise generated at the vessel source and total underwater noise in nearby habitats, which is predicted to benefit the behaviour and feeding success of SRKW.

The marine transportation industry has been an instrumental partner in the ECHO Program's voluntary vessel slowdowns since they were first introduced in 2017, and we thank you for your ongoing contributions.

For 2020, the ECHO Program has again worked with its many advisors and partners to plan for this season's slowdown, building on the learnings and successes of the past three years. The overall purpose of the voluntary initiative is to support the recovery of the SRKW by reducing underwater noise from large commercial vessels in known killer whale feeding areas.

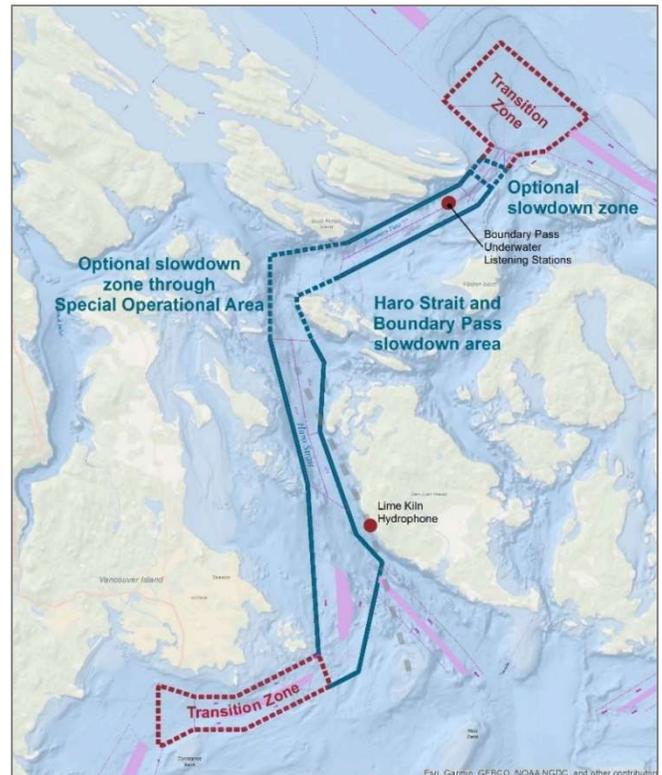
Slowdown parameters for 2020

Where: Haro Strait and Boundary Pass

As in 2019, the slowdown will take place in Haro Strait and Boundary Pass. Fisheries and Oceans Canada has identified both Haro Strait and Boundary Pass as key foraging areas for SRKW.

There are two optional slowdown zones where those operating the vessel should only participate if it is navigationally safe to do so. There are also transition zones where those operating the vessel are encouraged to slow down to the appropriate speed prior to entering the slowdown zone.

The total distance of the slowdown area is 29.6 nautical miles.



When: Approximately June 1 – October 31, 2020

Southern resident killer whales are historically known to return to Haro Strait and Boundary Pass in greater numbers from June onwards.

- **SRKW monitoring period: starting June 1, 2020**
Trusted observers and hydrophones will be used to monitor SRKW presence in the slowdown area
- **Slowdown start date: once SRKWs are confirmed in the area**
The slowdown will begin once hydrophone data and/or trusted observers confirm SRKW presence
- **Earliest possible slowdown end date: October 1, 2020**
Once activated, the slowdown period will continue to October 1, with two-week extensions to no later than October 31 if the whales are still confirmed present in the area
- **Latest possible slowdown end date: October 31, 2020**
The slowdown period will not continue past October 31

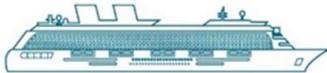
The official slowdown start and end dates will be communicated to vessel operators and mariners through a Navigational Warning issued by the Canadian Coast Guard Marine Communications and Traffic Services as well as through the Pacific Pilotage Authority, BC Coast Pilots, shipping associations and agents, and the ECHO Program website and newsletter.

Speed: 14.5 kn or 11.5 kn or less speed through the water, dependent on vessel type

'Speed through water' targets for different vessel types remain the same as in 2019. When it is safe and operationally feasible, vessels are encouraged to transit the slowdown area at or below the following speeds through the water:

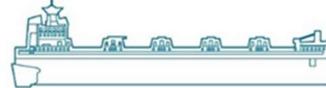
14.5 knots

speed through the water **or less**
for vehicle carriers, cruise and container vessels



11.5 knots

speed through the water **or less**
for bulkers, tankers, ferries and government vessels



Transiting Haro Strait and Boundary Pass at these reduced speeds could add between 16 and 28 minutes to the total transit time, depending on the vessel type. To download a full size map of the slowdown area, visit www.portvancouver.com/echo/slowdowns.

Participation goal: Over 85%

In 2019, 82% of large commercial vessels participated in the slowdown. In order to reduce underwater noise levels as much as possible in 2020, the ECHO Program is again seeking high levels of support with a participation goal of 85%. We recognize that the worldwide economic pressures being faced by the marine industry in 2020 due to COVID-19 may make it challenging to maintain high participation levels at all times. Participation rates by sector will be reported regularly throughout the slowdown period in the ECHO Program newsletter.

Monitoring and reporting: Underwater noise, whale presence, participation

The ECHO Program will monitor underwater noise levels before, during and after the slowdown period using underwater listening devices located at Lime Kiln and Boundary Pass. SRKW presence will be monitored and recorded by hydrophone and human observers. Participation rates will be reported by the Pacific Pilotage Authority and evaluated using Automatic Information System data. At the end of the slowdown period, the ECHO Program team will conduct an analysis to evaluate its effectiveness.

For more information

For more information on the slowdown, visit www.portvancouver.com/echo/slowdowns. For questions, please contact us at echo@portvancouver.com or through the Vancouver Fraser Port Authority Operations Centre, which is available 24/7 at 604.665.9086. For more information on the ECHO Program, please visit www.portvancouver.com/echo.