

AUGUST 2025

QUIET SOUND

A Program of Maritime Blue

**Results of 2024-2025 Voluntary Commercial
Vessel Slowdown in Washington Waters
for the Protection of
Southern Resident Killer Whales**

Photo Credit: Marla Smith via Orca Network



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Acknowledgements

Quiet Sound extends our gratitude to the many individuals and organizations who provided expertise and guidance in the planning and implementation of the 2024-2025 Voluntary Vessel Slowdown. The program offers special thanks to the tribes who reviewed slowdown plans and data, and advised the program; to marine transportation organization who participated in this initiative; to the Puget Sound Pilots for their leadership in communicating the slowdown to ship operators and sharing participation data; to the Marine Exchange of Puget Sound for providing Automatic Information System (AIS) data; to Orca Network for providing whale presence data; to SMRU Consulting for results analyses; to the United States Coast Guard for monitoring safety and communicating with mariners; to Quiet Sound's Leadership Committee and ORCAS Advisory Group for their valuable input, advice and support; and to the ECHO Program of the Vancouver Fraser Port Authority for their mentorship in voluntary slowdowns in the Salish Sea.

Leadership Committee

- Makah Tribe
- National Oceanic and Atmospheric Administration
- Natural Resources Defense Council
- Northwest Indian Fisheries Commission
- Northwest Seaport Alliance
- Pacific Merchant Shipping Association
- Port of Seattle
- Port of Tacoma
- Puget Sound Partnership
- Seattle Aquarium
- Washington Maritime Blue
- Washington State Ferries
- Advisor: United States Coast Guard

Quiet Sound Funders

The 2024-25 Slowdown would not be possible without the support of Quiet Sound funders: AltaGas | ALA Energy, members of Maritime Blue, National Fish and Wildlife Foundation (NFWF), National Oceanic and Atmospheric Administration (NOAA), Northwest Seaport Alliance, Puget Sound Partnership, Port of Seattle, Port of Tacoma, and the U.S. Coast Guard.

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EXECUTIVE SUMMARY

About Quiet Sound

Quiet Sound, a program of the nonprofit Maritime Blue, aims to understand and mitigate the acoustic and physical impacts of large commercial vessels on endangered Southern Resident killer whales (SRKW) in their critical habitat in Washington waters. Noise pollution from large commercial vessels is one of the major threats to SRKW. This third season of the Admiralty Inlet Slowdown continues to show that large vessels can reduce their underwater radiated noise by reducing their speed with no impacts to maritime safety and minimal impacts to maritime trade.

2024-25 Slowdown Results

Whales use this habitat at this season: This season ran from October 6, 2024 to January 12, 2025. SRKW were present for at least 57 days of the 98-day slowdown including 240 daylight hours, the most of any Quiet Sound slowdown to date.

Most vessel transits participated in the slowdown: Of the 860 transits through the slowdown zone during the 98-day period, 66% reduced their speed and 56% met the suggested speed targets. Container vessels exhibited the largest speed reduction of -2.3 knots Speed Through Water (STW), while general cargo showed the smallest speed reduction of -0.4 knots STW. 85% of tug transits, irrespective of operational status, were below the 10-knot trial speed target.

Vessel underwater radiated noise was reduced: In partnership with SMRU Consulting, Quiet Sound collected acoustic data for ten weeks of the slowdown and four weeks of a baseline period. Broadband median ambient sound levels were reduced by 0.5 dB during the slowdown period, resulting in a 12% less noisy soundscape. Sound levels were reduced by 1.3 dB (35%) in the frequency band used by killer whales for communication (500-15,000 Hz) and by 0.2 dB (5%) in the frequency band used for echolocation. During the acoustic monitoring period (November 2, 2024 through January 12, 2025), the 14.5 knot group (vehicle carriers, containers, and cruise ships) demonstrated a reduction of -2.6 dB in median broadband noise, and the 10 knot group (tugs running lite) saw a decrease of -0.2 dB, while the 11 knot group (general cargo, tankers, and bulkers) saw an increase in noise of 0.6 dB.

Vessel Speeds in Central Puget Sound: Transit speeds were also analyzed for vessels transiting the area south of the Admiralty Inlet slowdown zone (Central Puget Sound) to better understand vessel behavior. 72% of transits through Central Puget Sound travelled at speeds at or below the suggested speed targets of the Admiralty Inlet Slowdown. Speeds in this area did not differ greatly between slowdown and baseline periods, suggesting that vessel speed in this area is not affected by the slowdown to the north because it is already fairly slow.

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