OCEAN NOISE TOOLKIT 2024

A RESOURCE TO HELP GUIDE FEEDBACK FOR THE PUBLIC CONSULTATION PERIOD OF CANADA'S OCEAN NOISE STRATEGY



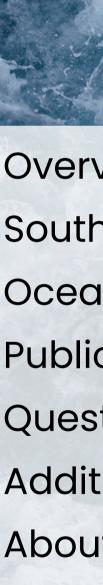


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WHAT IS OCEAN NOISE & ITS IMPACTS

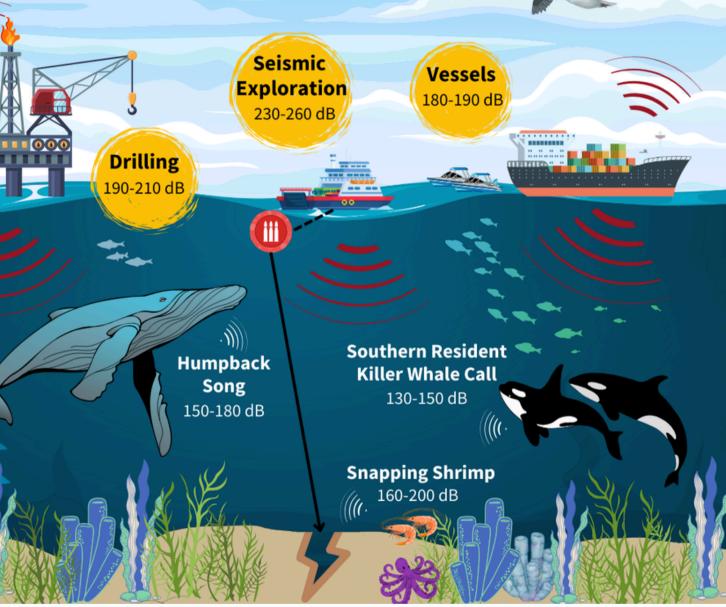
Ocean noise includes sounds produced by natural sources (shrimp snaps, earthquakes) and human activities (shipping, construction, drilling) also known as **anthropogenic noise**.

- Impact of anthropogenic noise: Disrupts marine life, decreases biodiversity, and alters ecosystem dynamics, threatening long-term marine health.
- Anthropogenic noise sources in BC: Increased ship traffic, infrastructure development, fishing activities, and oil & gas exploration.
- Effect on cetaceans: Noise is particularly harmful to orcas and humpback whales, impairing their communication, navigation, and foraging abilities.

UNDERWATER NOISE

dB = decibel





Click on image to enlarge!

TO LEARN MORE CLICK HERE

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DEFEND THE SOUTHERN RESIDENTS

Southern resident killer whales (SRKWs) are quite chatty and have dialects unique to each pod! But with increased vessel traffic and prolonged exposure to noise, SRKWs are experiencing many challenges:

- Communication within and between pods is **severely impaired** with overlapping frequencies emitted by vessels.
- Experiencing chronic stress and disruption in fundamental processes like mating, feeding, and foraging.
- Rapid diving behaviour changes can lead to **decompression** sickness (i.e. bubbles in their blood, joints and vital organs).
- Displaying avoidance behaviors and losing access to key foraging habitat, resulting in increased energy expenditures. One <u>study</u> showed that SRKWs potentially lose 20% to 23% of each day, or up to 5.5 hours of foraging time due to increased vessel traffic.







SOUTHERN RESIDENTS

Projects like Roberts Bank Terminal 2 and the Transmountain Expansion Pipeline (TMX) are exacerbating the threats manifold. The TMX has been said to increase vessel traffic by 900% within the critical habitat of the Southern Residents - their primary foraging grounds.

IT'S GETTING NOISIER, BUT YOUR **VOICE COUNTS.**



<u>Tell your MP that the SRKWs need better</u> and more protection measures here

Southern Resident Killer Whales 'see' with sound



A study published in 2009 concluded that with an increase in one decibel noise, the Southern Residents also increased their call amplitude by one decibel to avoid auditory masking (one sound obscuring another sound). This would be like raising your voice as you try to explain a story to a friend in a busy café with loud music - which can be exhausting after a prolonged time!

YouTube video credit: Marine Education & Research Society.



Theme 1: Science, knowledge gathering and innovation

Theme 2: Assessment and management

Theme 3: Communication, coordination and engagement

OCEAN NOISE STRATEGY

WHAT IS THE OCEAN NOISE STRATEGY?

the left) through which the Strategy intends to:

- Identify gaps and opportunities in issues surrounding ocean noise to minimize impacts to marine life.
- Explores the ability of the Government to work with multiple stakeholders and Indigenous Nations for innovative solutions.

closer to extinction.

The Government of Canada released their Ocean Noise Strategy draft on August 23, 2024. The Strategy has three themes (listed on

However, the Strategy lacks clear and actionable plans, timelines, and measurable outcomes, leaving noise mitigation uncertain and pushing marine animals, like the Southern Resident killer whales,







PUBLIC CONSULTATION PERIOD

Fisheries and Oceans Canada have a public consultation that began August 23 and will close on **Oct 22, 2024**.

• This is an opportunity for **everyone**, particularly Indigenous Peoples, marine industry stakeholders, non-government and environmental organizations, academics, and the general public to ask questions, provide feedback, recommendations, and suggestions on inclusions or exclusions from the document.





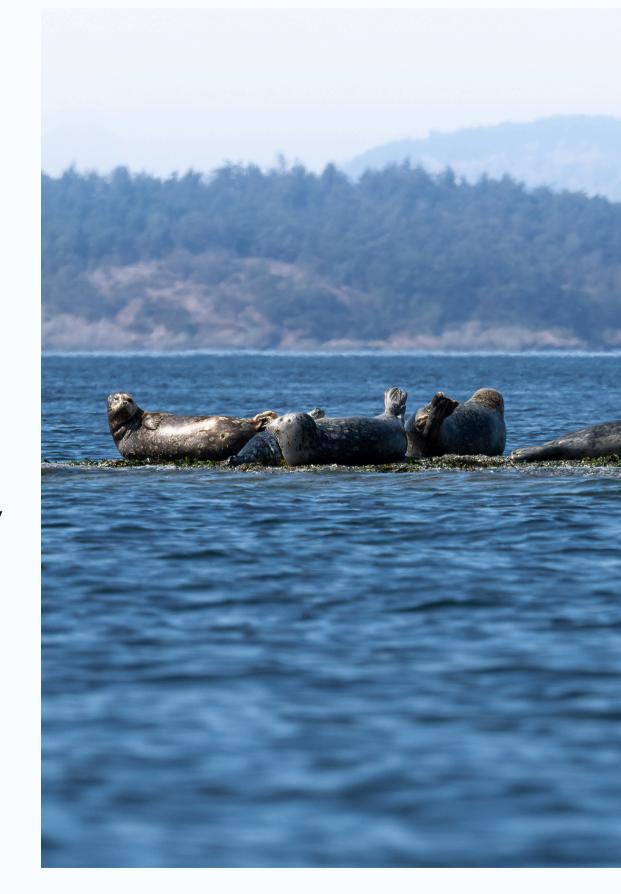


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QUESTIONS TO HELP FORMULATE FEEDBACK

- How do you perceive ocean noise affecting marine life in your area?
- What measures do you think could be implemented to reduce ocean noise in BC?
- Are there best practices from regions or communities that should be considered in the Strategy that would reduce or help monitor noise levels?
- How can compliance with noise reduction measures be effectively enforced?
- How can the Strategy better engage stakeholders, especially local communities, small businesses, and Indigenous groups, once implemented?
- Are the long-term goals of the Strategy realistic?
- What do you think of the Strategy overall? How can it be improved?



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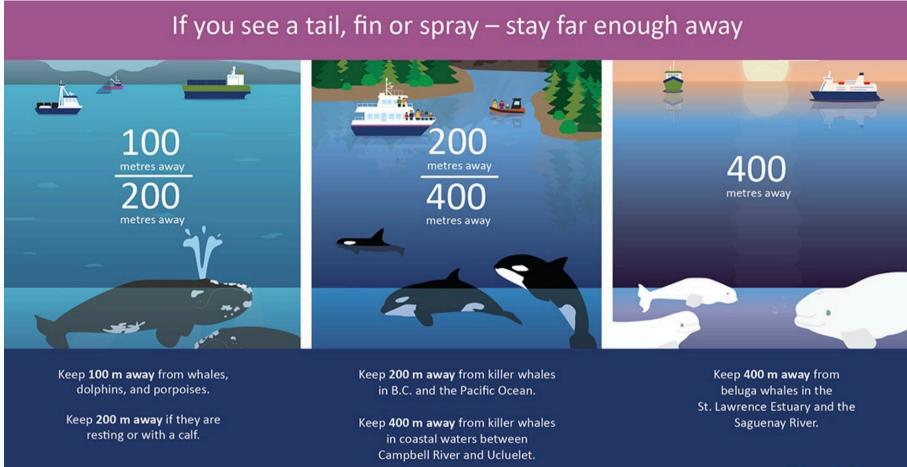
ADDITIONAL RESOURCES

WANT MORE INFORMATION?

These are some organizations in BC and across Canada that focus on ocean noise pollution:

- World Wildlife Fund Canada (WWF-Canada)
- Marine Education and Research Society (MERS)
- Ocean Wise
- BC Whales
- Clear Seas

WHAT CAN YOU DO TO REDUCE **NOISE POLLUTION?**



The current distances are not **good enough**. Washington State is implementing a 1000 yard distance for orcas while in BC, the law calls for only a 400 metre distance by boat - sign our petition below:

Fisheries and Oceans Péches et Océans Canada

- Slow down when operating boat vessels
- Use the <u>Whale Warning Flag</u> to warn others about whales nearby
- Be mindful of online purchases, as more stuff = more ship traffic!
- Educating one another about underwater noise pollution impacts
- Make your voice heard in the public consultation survey
- Choose land-based whale watching over boat tours

Click on image to enlarge!

Canadä

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ASK THE GOVERNMENT FOR A **1000 METRE BUFFER ZONE** CLICK HERE FOR A GUIDE TO LAND-BASED WHALE WATCHING

KEEP UP TO DATE ON GSA'S WORK

Did you enjoy this toolkit and/or found it helpful? Follow us on our social media to learn more about us: @GeorgiaStraitBC or click on the icons below to be redirected:



SIGN UP FOR OUR NEWSLETTER BY CLICKING ON OUR LOGO!



Georgia Strait Alliance

Future GSA Event:

[October 16] Ocean Noise in the Salish Sea Webinar-Get tickets <u>here</u>

Please consider donating so that GSA can continue protecting the Salish Sea.



