

Southern Resident Killer Whale Task Force Meeting #3: Discussion Guide – Vessels

The Vessels Working Group (WG) met on July 12, 2018 and identified the following draft actions for discussion and consideration by the Task Force. They evaluated the effectiveness, affordability, and ease of implementation for each action. The summary table produced during the Vessels Working Group meeting is available on the [SRKW website](#).

This document is intended to help summarize discussions and draft options that were discussed at the Working Group meeting. This document presents some key issues for discussion and consideration so the Task Force may shape the actions prepared by the Working Groups into potential recommendations.

Actions are NOT listed in priority order.

QUESTIONS FOR THE TASK FORCE

For each issue below, please discuss and reply to the following questions:

- Would you like this action to be considered as a potential Task Force recommendation?
- What questions do you have about this potential action?
- Do you have suggested revisions or clarifications to this action?

SMALL VESSELS

Small vessels generate relatively high-frequency underwater noise that can mask echolocation, making it more difficult for SRKW to find and capture prey. Because small vessels can no longer get as close to SRKWs (which provides a 200-meter buffer distance over which their propeller and engine noise can dissipate), the biggest remaining factor in the amount of noise reaching SRKW is the speed of boats operating nearby. In the presence of fast-moving boats, SRKW are subjected to louder noise emissions, greater masking effects, and potential for temporary and permanent hearing changes with longer exposures.

Updated action #1: Establish a no-wake zone for small vessels (<65ft) and commercial whale watching vessels within sight of orcas, while dedicating resources and capacity towards associated education and enforcement.

ECHO SOUNDERS

Electronic or sonar noise in the proximity of SRKW, especially at a 50-kHz frequency, can overlap with echolocation, potentially impairing SRKW ability to locate and hunt for prey. 50-kHz is a commonly used frequency for echo sounders by small vessel operators when over deep water (>200 feet) and casts a relatively broad beam compared to higher frequencies. Echo sounders that use a 200-kHz frequency do not overlap with SRKW hearing and tend to be used in shallower waters to detect the bottom and ensure safe navigation. Many modern echo sounders come with both settings, offering the possibility of advising operators to use 200 kHz when in the vicinity of SRKWs—while also maintaining navigational safety.

Proposed action #2: Encourage small vessel operators to avoid using echo sounders and other underwater transducers at the 50-kHz setting when near SRKWs (or switch to the harmless 200-kHz frequency on many models) except when necessary for safe navigation. Support adoption of best practices through education and outreach with boaters, and active and targeted engagement with echo sounder manufacturers and suppliers.

COMMERCIAL WHALE WATCHING VESSELS

Small vessels used for commercial whale watching frequently operate in relatively close proximity to SRKW where they have a greater likelihood of disturbing SRKW communication, echolocation, and behavior. Currently, these vessels are not subject to a permitting system, making it difficult to enforce regulations, guidelines and best practices. A permitting system could be utilized to limit the amount of time any given vessel can spend with whales, or cap the number of licensed commercial vessels near the whales at any given time and/or overall.

Proposed action #3: Pioneer a framework for commercial whale watching that: complements and reinforces other mitigation measures (approach distances, speed restrictions, etc.) and can be coupled with requirements, such as the use of Automatic Identification Systems (AIS), to promote effective monitoring and compliance.

Proposed action #4: Encourage all commercial whale watching operators to shut down their engines (rather than idle) as much as possible when in vicinity of SRKWs).

Proposed action #5: Establish a permit program to ration recreational boating community's access to SRKWs.

LARGE VESSELS

Now in its fifth year, the Enhancing Cetacean Habitat and Observation (ECHO) Program is Vancouver Fraser Port Authority-led initiative aimed at better understanding and managing the impact of shipping activities on at-risk whales throughout the southern coast of British Columbia. The long-term goal of ECHO is to develop mitigation measures that will lead to a quantifiable reduction in potential threats to whales as a result of shipping activities. Collaborators to date include Canadian, U.S., State, Provincial and local governments, individuals from First Nations in Canada, conservation groups, scientists, and marine transportation industries to mitigate the

impacts of commercial vessels on whales. Given this broad support, the ECHO program can be leveraged to help achieve SRKW recovery goals, especially those that require multi-jurisdictional support and engagement.

Development of the Trans Mountain Pipeline Expansion Project would increase the frequency of tankers carrying oil as cargo through the Strait of Juan de Fuca and Haro Strait/Boundary Pass from about one per week to one per day (a seven-fold increase). The recent acquisition of the pipeline by the Canadian government has raised a number of questions regarding potential changes to the "Puget Sound Pipeline" spur that supplies many of the north Puget Sound refineries with oil and the potential for additional vessel traffic in SRKW critical habitat.

Proposed action #6: Expand Washington State collaboration in—and support for—ECHO to: (1) promote voluntary participation by outbound ships in the lateral displacement trial in Strait of Juan de Fuca in summer 2018; and (2) advance and expand a Whale Report Alert System for potential use by professional mariners (pilots/ships/private ferries/navies/etc.) for potential lead-time (and real-time) ship course and speed management; and (3) more fully integrate Washington's vision and interests in the group's transboundary efforts following the summer trials described in (1) and (2).

Proposed action #7: Request Governor Inslee take action to address potential impacts related to vessel traffic impacts that may be generated by potential increases in vessel traffic that may result from any possible Puget Sound pipeline expansion. Work with state agencies and local governments to identify their authorities to issue permits, authorizations, or mitigation measure related to any expansion. Request Governor meet with Canadian officials to address state concerns and recovery goals.

Proposed action #8: Act to ensure that all tanker traffic from the Trans Mountain Pipeline expansion and associated impacts to SRKWs from vessel noise and potential risks from oil spills and ship strikes are addressed.

"NO GO" ZONE(S)

In late April, NOAA Fisheries asked Washington State to take additional action to protect SRKWs during the 2018 salmon fishing season. As a result, Washington State fish and wildlife managers have asked anglers and other boaters to avoid an area along the west side of San Juan Island to help protect the SRKWs' access to a historically important summer feeding area. The Washington Department of Fish and Wildlife (WDFW) is working with partner agencies and stakeholder groups to help educate people about the voluntary ¼-to-½ mile wide "no-go" zone, which applies to all recreational boats—fishing or otherwise—including commercial whale-watching vessels.

Proposed action #9: Convene affected user groups, interested parties, governments and Tribes in a systematic, finer-scale marine spatial planning effort for the west side of the San Juan Islands—using updated scientific methodologies that seek to balance competing objectives while helping meet and expedite the potential rule-making needs of NOAA. The aim is to

identify the size, shape, and locations of no-go zones that will maximize benefits to the whales at the least cost to ocean users.

Proposed action #10: Create a 400 yard “bubble” around the SRKWs. *(In other words: Double the 200 yard NOAA approach distance limit; there is already a 400 yard NOAA restriction on parking in the SRKWs’ path).*

Proposed action #11: Establish a voluntary, regular engine shutdown period for small vessels in the vicinity of SRKWs for 20 minutes every hour (on the hour) each day from May-October (when conditions are safe and effective to do so).

PERMIT APPLICATIONS AND VESSEL TRAFFIC IMPACTS TO SRKWS

Most in-water and nearshore projects that could affect SRKWs do not fully address those potential impacts. There are several changes or updates to permits and regulations that could more directly address potential vessel impacts to SRKWs.

Proposed action #12: Require all permit applications in Washington State that would increase vessel traffic to specifically address potential impacts to SRKWs (i.e., update the State Environmental Protection Act (SEPA) checklist (e.g., add a marine category to Section 3 “Water” and update Section 7B on “noise”), update the Joint Aquatic Resources Permit Application (JARPA) Form (e.g., add potential project application-related vessel traffic impacts to Part 8 – Waterbodies (other than wetlands): Impacts and Mitigations and add potential vessel traffic impacts to ESA species in Part 9I – Additional Information, ESA species in project vicinity), update the Prevention of Significant Deterioration (PSD) Permit to Construct to specifically include potential vessel traffic impacts to SRKWs, update state regulations and Ecology’s Shoreline Master Program (SMP) Handbook to address vessel traffic impacts, require SRKW expertise for all state application submittals, and etc.).

FERRIES

As a class of vessels using our waterways, the steady, high levels of ferry traffic through Puget Sound represent by far the largest anthropogenic source of underwater noise in the region. Washington State Ferries has been proactive in seeking options to decrease their vessels’ noise output in general, and near SRKWs specifically. Advancing these efforts will require a mix of technical and funding support in the immediate and longer-term.

Updated action #13: Support and accelerate transition of Washington State Ferries fleet to quieter designs and technologies to achieve data-driven noise reduction goals.

Proposed action #14: For central Puget Sound during fall (October-December), encourage elective slowdown by Washington State Ferries (WSFs) in presence of orcas (when conditions are safe and effective to do so).

Proposed action #15: Promote elective slowdown by private ferries (Victoria Clipper, Black Ball, etc.) in presence of orcas (when conditions are safe and effective to do so).

Proposed action #16: Support funding of WSF noise analysis pilot project to collect additional new data to fill information gaps and develop baseline noise levels for the entire fleet.