

# Potential Mitigation Options to Address the Supplemental SEPA Checklist for Southern Resident Orcas

*The mitigation options below were compiled in 2022 and 2023 by the Governor's Salmon Recovery Office and the Puget Sound Partnership with ideas and review by former representatives of the Vessels Working Group of the Governor's Killer Whale Task Force and contributors to the Washington Department of Ecology's supplemental State Environmental Policy Act (SEPA) checklist for Southern Resident orcas development process. Both efforts have sought to advance Recommendation 27 of the Governor's orca task force. This compilation may be revised in the future to accommodate new options or refine existing ones.*

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The Washington Department of Ecology has completed several months of public engagement and now is in the final stages of developing a supplementary SEPA checklist to help SEPA lead agencies and project proponents characterize on-water vessel activities that may affect Southern Resident orcas. Many high-level ideas, best management practices, and mitigation options that were proposed during Ecology's effort, as well as new ones, have been summarized below.

The options below describe ways for SEPA lead agencies and project proponents to potentially reduce and mitigate the adverse effects of vessel activities (especially underwater noise and physical disturbance near Southern Residents) when addressing the supplementary SEPA checklist for Southern Resident orcas.

The ideas below provide opportunities for SEPA lead agencies and project proponents to mitigate impacts or implement best management practices, where feasible and appropriate, as determined by the lead agency. Mitigation opportunities will vary depending on the project type and project proponent.

1. Hire licensed Puget Sound Pilots (when applicable) who are equipped with and actively use the regional "Whale Report Alert System and emerging resources such as the upcoming Cetacean Desk of the Vessel Traffic Service in U.S. Coast Guard's Puget Sound sector to slow down near Southern Residents in near real-time.
2. Participate in voluntary shipping slowdown efforts such as Enhancing Cetacean Habitat and Observation (ECHO) efforts and Quiet Sound when/where applicable.
3. Clean and maintain hulls and/or propeller blades annually or at a specified frequency.
4. Consider upgrades to propellers and other hydrodynamic elements (boss cap fins, pre-swirl stators, etc.) to reduce underwater noise due to cavitation.
5. Participate in programs aimed at improving the understanding of underwater radiated noise levels for different types of vessels, such as working with organizations deploying hydrophones to record vessel sounds or evaluating the effectiveness of mitigation

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measures. For example, estimate ship underwater radiated noise levels for at least one typical vessel in a fleet (ideally before and after project implementation to track mitigation measure progress).

6. Voluntary use dual frequency transducers (including a low-power setting) for navigation by ocean carriers (e.g., using low amplitude “chirp” technology compatible with chart plotters that are required by the U.S. Coast Guard, or LIDAR depth finders, etc.), provided that doing so does not compromise navigational safety.
7. Integrate best management practices for underwater noise reduction by applying for and maintaining an appropriate level of certification in the [Green Marine](#) program.
8. Encourage service vessel companies to minimize the distances that secondary and service vessels (escorts, fueling, etc.) travel and/or choose routes and timing that reduce overlap with Southern Resident foraging areas.
9. Discourage or limit commercial and recreational vessels’ use of ultrasonic anti-fouling equipment and transducers in Puget Sound until or unless environmental tradeoffs are better understood.
10. [Identify appropriate mitigation](#) measures during the environmental review and permitting process. Set mitigation conditions that require monitoring and reporting of vessel movements and call for specific mitigation measures if the volume or number of transits exceeds the level described in the proposal.
11. Encourage shipping companies to describe whether and how they are integrating the International Maritime [Organization’s 2014 guidelines \(or future updates\)](#) for reduction of underwater noise in their fleets.
12. Consider how facilities could encourage or incentivize better boater behavior and education such as the following:
  - a. Require or encourage boaters using the facility to take trainings such as “Whales in Our Waters,” a 90-minute training by the Vancouver Fraser Port Authority or watch the Be Whale Wise video.
  - b. Provide Be Whale Wise signs and brochures at all facilities.
  - c. Provide whale warning flags to boaters.
  - d. Encourage users to sign an agreement to follow Be Whale Wise rules if using port or marina.
  - e. Report orca and other cetacean sightings to Whale Alert, WhaleReport, or a local sightings network.

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13. Support efforts through Quiet Sound, Green Marine, and others to provide recognition of or awards for entities that succeed in achieving or exceeding any of the above benchmarks.
14. For marinas and other facilities with recreational boaters, use the Puget Sound Harbor Safety Committee's voluntary Standard of Care for prudent use of sonar (underwater transducers), including echosounders, fish finders, and depth finders within 1 kilometer of orcas.

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## Participating Organizations

Earthjustice	Port of Vancouver
Friends of the San Juans	Puget Sound Pilots
Governor's Salmon Recovery Office	Puget Sound Partnership
National Resource Defense Council	Quiet Sound
Orca Conservancy	Seattle Aquarium
Pacific Merchant Shipping Association	United States Coast Guard
Pacific Whale Watch Association	United States Navy
Port of Bellingham	Washington Conservation Action
Port of Everett	Washington Department of Ecology
Port of Kalama	Washington State Ferries
Port of Longview	Washington Department of Fish and Wildlife
Port of Seattle	