

SOUTHERN RESIDENT KILLER WHALE TASK FORCE VESSELS POTENTIAL ACTIONS

SUMMARY TABLE OF ALL VESSELS POTENTIAL ACTIONS ASSESSED IN 2018

The Table below (Pages 1-7) is intended to be a condensed way to see the outcomes of the Vessels Working Group surveys and discussions on each action. For more detailed information on an action and an explanation of ratings, please see the two [survey results files](#) (and [photos of flip charts from the meetings](#)). Please see the [summary compiled by NOAA](#) for answers to Task Force questions and additional context. Actions with an effectiveness rating of High are indicated in **Bold**. High, Medium and Low (H, M, and L) scoring determinations were made by identifying which category predominated in terms of highest percentage and had a difference exceeding 10% of the next highest score; otherwise such close scorings were characterized as M. Two effectiveness scores and one implementation score were upgraded from the initial survey results based on feedback during WG discussions and marked with an *.

Effectiveness (E): The ability for the action to contribute to SRKW recovery by reducing vessel disturbance and/or underwater noise

Affordability (A): High, Medium, Low

Ease of Implementation (I): Considers technical, regulatory, social, and political factors

Timeline of SRKW benefits once action is implemented: Immediate (0-3 years), Intermediate (3-10 years), Long-term (10+ years)

Note: The scores for actions marked “updated” were assessed before the WG directed modification to the action. Actions marked “new” arose from actions recommended for further assessment by the WG on July 12.

The ^{EE} superscript indicates the need to add significant capacity for associated education and enforcement activities, per Actions 25 and 26 in Appendix.

The ^{A1, A2, etc.} superscripts indicate conceptual overlap between the action and specific numbered actions in the longer Appendix list of potential actions. The Vessels WG requested that these actions be “nested” (associated) with each assessed action where appropriate.

The Vessels Working Group would like to acknowledge that there is a great deal of uncertainty related to many of the rankings of the considerations for actions due to incomplete knowledge. More specificity on the scope and leads for each action (this is often pending) and time to source information or create information through models, studies, etc. would/will create greater certainty around these assessments.

	Action	E	A	I	Timeline for SRKW Benefits	Supporting and Dissenting Opinions on Ratings from Discussion (if applicable)	Geographic Specificity Progress	Notes
SMALL VESSELS								
1	Potential action 1. (updated) 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. ** EE, A22	H	M	M	Immediate	Supporting <ul style="list-style-type: none"> Research indicates vessel speed is best explanatory factor on noise level received by SRKW Prevents loud noise spikes by vessels departing/arriving > 5knots Reduces likelihood and severity of vessel strikes Dissenting <ul style="list-style-type: none"> Enforcement challenges cited by NOAA in 2011, however most expressed that modification to a “no wake” standard would promote compliance by boaters 	Puget Sound	<ul style="list-style-type: none"> Focuses on regulating recreational vessel compliance with approximation of Soundwatch guidelines—such vessels have shown 20x+ lower compliance than commercial whale watching vessels (incident rate ~<1/hour) Potential 13dB reduction in underwater noise (Jasco 2018) Up to 20% gain in SRKW energy budget (Bain 2006)
ECHO SOUNDERS								
2	Potential action 2. (updated) 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. EE, A2	H*	H	M	Immediate		Puget Sound	<ul style="list-style-type: none"> *WG discussion of the NOAA DTAG results indicated that potential interference is happening >1/3 of the time, so WG supported higher effectiveness score.

	Action	E	A	I	Timeline for SRKW Benefits	Supporting and Dissenting Opinions on Ratings from Discussion (if applicable)	Geographic Specificity Progress	Notes
COMMERCIAL WHALE-WATCHING VESSELS								
3	Potential action 3. (updated) 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 <small>A17, A18, A20, A29</small>	H*	M	M	Immediate	Supporting <ul style="list-style-type: none"> *WG Discussion highlighted the potential for this action to amplify the effectiveness and implementation of other actions (e.g., USV1-2, SV5-7) on this list, so raised the post-survey score to high. Dissenting <ul style="list-style-type: none"> Challenges in permitting what could equate to a “take” under ESA and participation/compliance by Canadian operators are foreseen. International challenges with treaty on law of the sea (‘innocent passage’) may apply. 	Puget Sound	<ul style="list-style-type: none"> “Pioneering” aspect not further described/evaluated
4	Potential action 4. (new) Encourage all commercial whale watching operators to shut down their engines (rather than idle) as much as possible when in vicinity of SRKWs).	M	H	M	Immediate		Puget Sound	
5	Potential action 5. (new) Establish a permit program to ration recreational boating community’s access to SRKWs.	M	L	L	Immediate		Puget Sound	
LARGE VESSELS								
6	Potential 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). <small>A1, A6, A8, A14</small>	H	H	M	Immediate		Salish Sea, emphasizing Strait of Juan de Fuca and Haro Strait/ Boundary Pass	

	Action	E	A	I	Timeline for SRKW Benefits	Supporting and Dissenting Opinions on Ratings from Discussion (if applicable)	Geographic Specificity Progress	Notes
7	Potential action 7. (new) 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.	M	H	H	Immediate		Puget Sound	
8	Potential action 8. (new) 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.	H	M	M	Intermediate		Salish Sea	
“NO-GO” ZONES								
9	Potential action 9. (updated) 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.	M	M	M	Immediate		San Juan Islands	<ul style="list-style-type: none"> Addresses need for finer-scale, shared and updated understanding of locations (subdivisions) within current zone where SRKW feeding and socializing is concentrated (Ashe et al. 2010)

	Action	E	A	I	Timeline for SRKW Benefits	Supporting and Dissenting Opinions on Ratings from Discussion (if applicable)	Geographic Specificity Progress	Notes
10	Potential 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) ^{EE}	H	M	M*	Immediate	Supporting <ul style="list-style-type: none"> Ability of SRKW to detect Chinook is more than doubled when small vessels are 400 yards—rather than 200 yards—away from the whales (over a range of speeds) (Holt 2008) Dissenting <ul style="list-style-type: none"> The Canadian standard was just updated to 200m, so this would de-synchronize. Possible challenges related to Federal pre-emption. 	Statewide	<ul style="list-style-type: none"> Survey indicated low ease of implementation, but WG discussion indicated moderate ease.
11	Potential action 11. (new) 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).	L	M	L	Immediate		San Juan Islands	
PERMIT APPLICATIONS								
12	Potential action 12. (new) 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, etc.).	M	H	H	Intermediate		Statewide	

	Action	E	A	I	Timeline for SRKW Benefits	Supporting and Dissenting Opinions on Ratings from Discussion (if applicable)	Geographic Specificity Progress	Notes
FERRIES								
13	Potential action 13. (updated) Support and accelerate transition of WSF fleet to quieter designs and technologies to achieve data-driven noise reduction goals ^{A30}	H	L	M	Intermediate to Long-term		Puget Sound	
14	Potential action 14. (new) 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).	H	M	H	Immediate		Puget Sound	• Different seasonal focus than most other measures
15	Potential action 15. (new) Promote elective slowdown by private ferries (Victoria Clipper, Black Ball, etc.) in presence of orcas (when conditions are safe and effective to do so).	H	M	M	Immediate		Puget Sound	
16	Potential action 16. (new) 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. ^{A30}	H	M	M	Intermediate		Puget Sound	
	Placeholder for late-breaking Task Force suggestions							

***The dorsal fins of adult SRKWs are generally between 3 and 5 feet tall, and based on visual standards used for signage (readability for highways, roads, etc.), should be conspicuous to boaters at 360-600 feet (and detectable to 2500 feet, or 3/4 km) without binoculars—depending on sea conditions and the height of the observer above the water. Thus, the scale of this action would reinforce the 400 yard Federal (NOAA) restriction for vessels operating in the paths of orcas, and aligns with voluntary best practices of the whale watching industry.