

COMPROMISE PROPOSAL FROM NORA, MICHAEL, REIN, LOVEL, JOE

July 8, 2020

OVERVIEW

This proposal temporarily allows no commercial whale watch (CWW) vessel to approach within one-half nautical miles of a group of southern resident orcas, with a single exception described below that would apply in the absence of enforcement and Soundwatch vessels. It represents a substantial compromise from our original proposal, given that the science and the precautionary approach otherwise dictate that we eliminate every possible CWW vessel interaction with the southern residents. We have proposed a limited exception given the possibility that it may provide a net benefit for the whales, and believe that any additional allowance of commercial whale-watching would be inconsistent with both the precautionary approach and the best available science. As explained in the “Justification and Discussion” section below, our proposal is also consistent with the State’s economic viability analysis and with the recent analysis of vessel behavior conducted by Todd Hass.

Requirements related to number of motorized CWW vessels and hours:

- This proposal prohibits licensed commercial whale watch operators from viewing southern resident orcas until such time that the population shows signs of recovery and a precautionary approach determines that an incremental increase in the number of commercial whale watch boats that view southern resident orcas will not cause adverse impacts.
- This proposal also includes an exception, only between 10:00 am and one hour before sunset, that allows one commercial whale watch vessel to approach within one-half nautical miles of a group of southern resident orcas, only if neither Soundwatch nor WDFW enforcement vessel is present, in order to 1) confirm the presence of southern resident orcas; 2) provide immediate notifications about their presence to WDFW, Soundwatch, and the Whale Report Alert System (WRAS), and 3) alert vessel operators (e.g., commercial, recreational, ferries, Navy) in the vicinity of the southern resident orcas’ presence.

Requirements related to kayaks:

- Under this proposal, kayak operators would be treated differently, given the lesser mobility of kayak operators and the opportunistic nature of their whale-watching.
- For license holders that are kayak tour operators, this proposal codifies best practices of the Kayak Education Leadership Program (KELP).

Additional requirements where we understand there to be consensus:

- Codifies the existing voluntary no-go zone on the west side of San Juan Island.
- Requires AIS on all motorized CWW boats, deferred until Jan. 1, 2023 due to the economic impacts of COVID-19.
- Prohibits CWW vessels from approaching SRKW within ½ nm in low-visibility conditions, including fog, regardless of the one license holder motorized vessel exception.

Adaptive management:

- WDFW is authorized to make changes to the number of CWW boats viewing southern resident orcas based on their population equaling or exceeding 84 whales, not including calves under two years of age.
- Authorizes WDFW, per best available science, to amend the boundaries of the San Juan Island no-go zone and/or designate additional no-go zones, provided that there is no evidence of adverse impacts to economic viability and provided that the USCG confirms the safety of the amended or new no-go zone boundaries per the Cooperative Vessel Traffic Service.

Additional proposals outside the core scope of the rulemaking:

- WDFW should develop civil enforcement options.
- Waive license fees for the first 2 years due to the economic impacts of COVID-19.
- As best practices and control technologies are identified for the quieting of underwater noise from small vessels, require and incentivize (via discounted license fees) transitions to quieter vessel designs and commercial-off-the-shelf technology (e.g., echosounders, propulsion systems) to reduce underwater noise.
- PWWA allows the BC Cetacean Sightings Network to grant DFW enforcement and Soundwatch access to WRAS sightings data, including PWWA reports.

JUSTIFICATION AND DISCUSSION

We have proposed allowing zero commercial boats to view the southern residents until the population has experienced some meaningful recovery, with the sole exception (described below) where a single vessel could provide a notification benefit in the absence of WDFW enforcement and Soundwatch. This exception represents a significant compromise from our original proposal.

Fundamentally, our proposal is based on the critical status of the southern resident orca population and the best available science indicating that:

1. the precarious status and dramatic decline of southern resident orcas necessitates a precautionary approach to any allowance for disturbing southern resident orcas; and,
2. vessel acoustics and presence adversely impact southern resident orcas' socializing and foraging effectiveness, and that small vessels at 300/400 meters and beyond can adversely affect southern resident orcas' foraging behavior.

As the WSAS science panel has noted, fewer vessels around whales is better for the whales, and reducing masking effects and behavioral disturbance from vessels is important for maximizing the whales' foraging opportunities. A precautionary approach to management dictates that we eliminate every possible interaction of CWW vessels with southern residents until the population recovers.

A suspension of viewing southern resident orcas would NOT negatively impact the economic viability of commercial whale watch operators, according to the recent Industrial Economics, Inc. analysis commissioned by the State. This conclusion reflects the facts that viewing of southern resident orcas occurs in only 10% of the industry's tours, and that sustainable whale-watching can be conducted instead on other available species and populations, including transient killer whales, humpback whales, minke whales, and gray whales. The Industrial Economics, Inc. analysis further documents that Canadian members of the PWWA experienced an *increase* in ridership and associated economic benefits "following signature of an agreement that members would refrain from offering tours to view SRKW," even as U.S. members experienced a 5.6 to 11 percent decline due to negative public perception of their impacts on southern residents:

As previously noted, the PWWA reports that U.S. ridership declined between 2018 and 2019. Specifically, San Juan County-based PWWA members experienced a 5.6 percent decline in ridership during that period, while members on the mainland experienced an 11 percent decline. During the same period, however, Canadian PWWA members saw a 7.6 percent increase in ridership. PWWA representatives attribute the incongruent experience between U.S.- and Canada-based firms on the period of intense U.S. media attention surrounding the decline of SRKW generally, and the death of a J-pod calf that occurred at that time, as well as the establishment of the [Washington State Orca] Task Force. Although not conclusively linked, these results suggest the potential that and likelihood of participating in a whale watching trip may be affected public perception of the whale watch industry in general and its potential effects on the SRKW population. However, they also suggest that the industry has been able to maintain viability despite

that level of reduction in ridership. Additionally, the 7.6 percent rise in ridership experienced by Canadian PWWA members occurred following signature of an agreement that members would refrain from offering tours to view SRKW, further suggesting that the industry's ability to adapt to limitations on SRKW viewing while maintaining viability.” (Economic Viability of Commercial Whale Watching License Holders at 39-40.)

This recent history suggests that a suspension of commercial viewing of southern residents, if properly communicated and supported by the environmental community, could have a net economic *benefit* for the industry. In any case, the suspension we have proposed would not affect the industry's economic viability, and, with the 1-boat exception for notification purposes, can explicitly support positive publicity and financial growth.

The PWWA has argued that commercial viewing of southern residents should be allowed in light of industry's "sentinel effect." As the Science Panel has noted, however, there is little empirical evidence of that effect. The recent analysis of 2019, by Todd Hass, does not show that boater violations decrease when commercial whale-watch vessels are present. On the contrary, it suggests that boater incidents increase with one or two additional whale-flag vessels on the scene, and then decrease, as further flag vessels are added, to a baseline that is no better than the incident rate that occurs with only the Soundwatch boat present. By contrast, analysis of five years of Soundwatch data indicates that the presence of WDFW enforcement vessels around the southern residents substantially reduces incident rates. There is no empirical evidence on which to base a sentinel effect or any benefit for the population from CWW presence when Soundwatch or enforcement vessels are present.

For these reasons, commercial viewing on southern residents should be suspended until such time as the whales have experienced some recovery; indeed, we believe that a temporary suspension is the only responsible policy consistent with a precautionary approach. If any viewing is allowed, we believe it should be strictly limited to situations where Soundwatch and WDFW vessels are not present and where a single commercial vessel could potentially provide a net benefit to the southern residents via notification and alerting enforcement, Soundwatch, ships (via the WRAS), and the Navy to the presence of the whales. Consistent with this, our proposal would allow the viewing of southern residents for a limited time, by a single commercial vessel, under those circumstances, for the purposes of notifying those entities, and of flying the whale-warning flag until an enforcement or Soundwatch vessel arrives. The exception would be limited to a single CWW vessel within ½ nm of a group of southern resident orcas as defined by a matriline or pod so long as pods or multiple matriline are separated by at least one-half nautical mile. In the absence of committed resources for full WDFW monitoring,

we are proposing this compromise, tailored to allow only one vessel on scene and to avoid extensive and continuous CWW presence.

This aspect of our proposal is informed by Todd Hass's updated analysis and further conversations with fellow Advisory Committee members. We believe it eliminates the industry's concern about negative publicity from a pure zero-boat suspension with no exceptions, and lends itself to more nuanced and positive publicity about protections for the endangered orcas and the industry's role in those protections. It is clear, from our understanding of public sentiment and as documented by the 2019 U.S. CWW decrease in ridership, that any proposal that would allow more extensive commercial whale-watching on southern residents would receive strong public opposition and not generate a shift in publicity.

We have proposed conditioning the suspension of commercial viewing of southern residents on the abundance of the population, using the target of 84 whales, exclusive of calves (given their low recruitment rates), as recommended by the State's Orca Task Force. As stated by the WSAS science panel (Q10), "Adaptive management plans can stipulate changes in the plan based on changes in population status over time." While population abundance is not an appropriate measure of the success of the whale-watch licensing program, given the number of confounding factors that are driving abundance, we believe that metrics related to demographics, such as abundance and growth rates, are appropriate basic measures of a population's recovery and, by extension, of its resilience to stressors. By contrast, we do not believe it would be appropriate or precautionary to use the indirect metric of annual fish counts from a single hatchery, given the abstraction of that metric from the conservation status and recovery of the population. We have specifically asked the Science Panel to provide additional guidance on this issue.

We have significantly modified our proposal to address concerns voiced by the whale-watching representatives at our last Advisory Committee meeting and in our subsequent discussions. Specifically:

- We have changed from allowing 0 motorized commercial whale-watching boats to view southern resident orcas, to allowing a 1-boat exception in certain specific circumstances when WDFW enforcement and Soundwatch are not on scene.
- We have changed the hour-of-day restriction from 9am-5pm or 10am-6 pm to 10am-1 hour before sunset, to reflect input from PWWA as well as to enable the 1 boat allowed to approach southern residents in the absence of WDFW and Soundwatch to serve a notification function. This is a compromise that we are willing to make **only if** the final rule limits viewing to a single boat under the specified circumstances.

- We have changed from requiring AIS immediately to requiring AIS as of 2023, to reflect the findings of the economic viability analysis as well as input from Jeff during discussions last week.

Two sticking points prevented full Advisory Committee consensus in the creation of this proposal:

- PWWA has said that a limit of 1 boat would create competition between PWWA members in viewing the southern resident orcas. We believe this is a problem that could effectively be solved within PWWA given what we have heard about how closely they collaborate. We also do not see a significant difference between the competition that could occur as a result of a 1-boat limit vs. a 2- or 3- boat limit.
- PWWA has said that the reporting responsibilities will be difficult for boat captains, if only 1 boat can be on scene, because they already multitask so much. We believe these responsibilities are manageable because most of the required reporting is comprised of actions that PWWA says its members do already, often when only 1 boat is present. We also see that more flag-flying/CWW boats results in more recreational boater incidents (per Todd Hass's analysis) and is significantly more likely to bring vessel disturbance to a level that disrupts foraging, and we don't believe any added reporting capacity from more boats would outweigh those serious drawbacks. We also recognize that this proposal can only address CWW vessels; however, recreational vessels must also be included in the evaluation of impacts from the total number of vessels in the vicinity of SRKW. Finally, PWWA captains may opt out of viewing as the single on-scene vessel if they do not feel they have the capacity to undertake the required notifications.

Finally, our proposal is consistent with our legislative mandate. Our interpretation of the intent of the legislation in saying "reduce the daily and cumulative impacts on southern resident orcas and consider the economic viability of license holders" is that we must:

- Apply a precautionary management approach, per the WSAS science panel, and reduce daily and cumulative impacts to the *greatest possible degree* within our scope and without damaging economic viability of the industry.
- Reduce daily and cumulative impacts to a degree that is *meaningful and significant* for the southern resident orcas, not just to any degree.
- "Reduce the impacts of vessel noise and disturbance *so whales can effectively forage, rest, and socialize,*" per our charter.
- Reduce impacts from a 2019 baseline, when the legislation was passed, not an earlier baseline; and on top of the new speed and distance regulations, as the legislature clearly framed the license program as an additional measure that would have new rules for license-holders.

- Consider the economic viability of license holders, which we have done by deferring the implementation date for AIS (per the Industrial Economics, Inc. analysis).

In summary, this proposal is founded on the precautionary management approach, as recommended by the WSAS science panel, and it is consistent with the economic viability analysis findings and the new analysis of vessel behavior from Todd Hass.

PROPOSED RULE

RCW 77.65.XXX

Commercial Whale Watch License Holder Requirements

(1). **General.** Except as provided herein, it is unlawful for a license holder to take passengers to view southern resident orcas or cause a motorized vessel to approach within one-half nautical mile of a group of southern resident orcas (as defined in section (7)(a)) .

(a) Any orca that cannot be definitively identified shall be assumed to be a southern resident orca.

(2) WDFW Authority and Requirements.

(a) WDFW is required to make a determination on the viewing of southern resident orcas each year based on best available science on population abundance and health, subject to the following requirements:

(i) WDFW shall not allow the viewing of southern resident orcas beyond the one license holder motorized vessel exception set forth in section (3) unless the population abundance of southern resident orcas equals or exceeds 84 whales, not including calves under two years of age;

(ii) If the best available science demonstrates that the southern resident orca population is recovering, WDFW is authorized to incrementally allow limited commercial whale watch operations within the following parameters to minimize impacts on southern resident orcas as adaptive management triggers are reached, accompanied by monitoring:

(A) Additional motorized commercial whale-watching vessels beyond the 1-boat exception allowed in the initial rules may only be authorized within one-half nautical mile of southern resident orcas in locations where a Soundwatch or WDFW vessel are in the same area at the same time (within one-half nautical mile of southern resident orcas), and with the number informed by the best available science.

(B) Viewing time shall be limited per license holder per day and only allowed between 10am and 6pm.

(C) Viewing shall be further limited to alternating days, hours, or times of day (morning/afternoon) to minimize continuous vessel effects and/or allow for research on vessel effects on southern resident orcas.

(D) Additional requirements outlined in Section 3 and Section 6 (a), (b), (d), (e), (f), shall apply.

(iii) If, at any time, the population abundance of southern resident orcas falls below 84 whales, any allowance granted under subsection (ii) of this section is immediately suspended.

(b) WDFW is authorized, based on best available science, to issue emergency rules at any time in regard to one or all southern resident orcas in response to acute events, including but not limited to injury or indications of malnourishment or illness.

(c) WDFW shall regularly review all available data for purposes of evaluating compliance with sections (3) and (4) to determine whether any modifications are needed.

(3) *One license holder motorized vessel exception.* A license holder operating a motorized vessel is allowed to approach within one-half nautical mile of a group of southern resident orcas (as defined in section (7)(a)), up to the distances allowed by law or regulation, only if neither Soundwatch nor a WDFW enforcement vessel is present, in order to provide notifications and alert area boaters of the southern resident orcas' presence.

(a) Only one license holder motorized vessel is permitted within one-half nautical mile of a group of southern resident orcas pursuant to this exception, and only if WDFW enforcement and/or Soundwatch vessels are not present.

(b) The one license holder motorized vessel exception applies only from 10 am to one hour before sunset.

(c) Upon identifying the whales as southern resident orcas, the license holder shall immediately:

(i) Notify WDFW enforcement and Soundwatch and remain on scene until WDFW enforcement or Soundwatch arrives, whereupon the license holder must immediately depart;

(ii) Raise the whale warning flag and to the extent possible alert vessels in the vicinity to the presence of southern resident orcas, with the purpose of reducing interactions with the whales;

(iii) Report the location of the southern resident orca(s) using the Whale Report Alert System (WRAS) and any other whale-reporting tool designated by WDFW; and

(iv) Notify Washington State Ferries and any other state and/or federal entities as appropriate.

(d) WDFW, in consultation with CWW operators, shall issue a protocol for carrying out the required notifications in (3)(c) to enable consistent, safe, and effective response; and may revise this protocol as it deems necessary for such purpose.

(e) If the license holder on-scene is unable to remain with the group of southern resident orcas, and neither Soundwatch nor a WDFW enforcement vessel has arrived, another license holder or another motorized vessel belonging to the same license holder may assume the one license holder motorized vessel exception, pursuant to all the requirements set forth in this rule. In addition, the following conditions apply:

(i) Only one motorized vessel may wait to replace the license holder on-scene, and it will time its arrival in communication with the on-scene vessel operator to keep the waiting period to a minimum.

(ii) The replacement vessel must wait at least one-half nautical mile from the group of southern resident orcas and may approach within one-half nautical mile only when the first-on-scene license holder begins its departure.

(iii) In assuming the on-scene role, this vessel must remain on scene for at least 45 minutes or until a Soundwatch or WDFW vessel arrives.

(f) WDFW shall eliminate the exception set forth in this section if it determines, based on monitoring and adaptive management requirements under subsection (2)(b) and (7)(a) and the best available scientific information, that it does not provide a net benefit to southern resident orca whales.

(4) **Kayak tour operations.** License holders of kayak tour operations must require kayakers in their tour groups to maintain the required distances from southern resident orcas and prevent kayakers in their tour groups from disturbing southern resident orcas. All kayakers in license holder tour groups must adhere to the following requirements:

(a) Kayakers must not be launched from shore until kayakers can maintain 300 yards (400 front and back) from any southern resident orcas in the vicinity.

(b) To avoid being in the path of southern resident orcas, kayakers will start moving out of the path of on-coming whales well before the whales are within 400 yards.

(c) If orcas are approaching within 200 yards of shore, inshore kayakers will move in as close to shore as possible (ideally in kelp beds), secure themselves, raft up and stop paddling until the whales have passed by.

(5) **Closed Areas**

(a) The following critical foraging and socializing habitat for southern resident orcas are closed to license holders' motorized vessels until such time that it is determined by WDFW that motorized commercial whale watch vessels would have no adverse impact on southern resident orcas' foraging and socializing success.

- (i) The no-go zone located on the west side of San Juan Island, including from Mitchell Bay in the north to Cattle Point in the south, extending a quarter-mile offshore for the entire stretch. In an area around the Lime Kiln Lighthouse, the no-go zone extends offshore for half a mile. License holders of kayak tour operations must keep all kayaks within 100 yards of shore when transiting the no-go zone off the west side of San Juan Island, except when safety conditions preclude that.
- (b) WDFW shall amend the boundaries of the no-go zone on the west side of San Juan Island based on [wording to be provided by SJC] provided that the USCG confirms the safety of the amended no-go zone(s) boundaries per the Cooperative Vessel Traffic Service.
- (c) Periodically, and at intervals no greater than two years, WDFW will review the best available science to identify other important foraging areas for southern resident orcas throughout the inland waters of Washington state, and will close such areas to license holders motorized vessels provided that there is no evidence of impacts to economic viability of the CWW industry and that the USCG confirms the safety of the no-go zone(s) boundaries per the Cooperative Vessel Traffic Service.

(6) *Additional requirements that apply to all sections of this rule.*

- (a) As of January 1, 2023, an automatic identification system (AIS) transponder must be fitted aboard all motorized commercial whale watch vessels. The AIS must be capable of providing information about the vessel (including the vessel's identity, type, position, course, speed, and navigational status) to state and federal authorities automatically. Vessels fitted with AIS will maintain the AIS in operation at all times that the vessel is in operation or under sail.
- (b) All license holders' motorized boats must comply with the Puget Sound Harbor Safety Committee's Echosounder Standard of Care.
- (c) License holders must not market trips for viewing southern resident orcas.
- (d) All license holders on motorized vessels must have a WDFW endorsement if they view, or plan to view, southern resident orcas. Whale-watching endorsements require passing an online exam administered by WDFW which covers 1) the ability to distinguish among killer whale ecotypes, 2) the ability to estimate distances on the water, 3) status of southern resident orcas and other marine mammals, 4) impacts of vessel noise and disturbance on marine mammals, 5) the duties of the first-on-scene one commercial whale watch boat exception pursuant to these regulations and any protocols adopted hereunder, and 6) any other topic prescribed by WDFW. WDFW will develop its endorsement requirements and exam in consultation with commercial whale watch operators and whale scientists. Endorsements shall be renewed at least once every three years or when changes to these regulations occur.

- (e) In low-visibility conditions, including fog, license holders are prohibited from causing a motorized vessel to approach southern resident orcas within one-half nautical mile regardless of the one license holder motorized vessel exception set forth in this section.
- (f) Licensed motorized vessels operating pursuant to the exception set forth in this section shall remain downwind from southern resident orcas to reduce vessel exhaust, if it is safe to do so.

(7) **Definitions.** The definitions in this subsection apply throughout this section unless the context clearly requires otherwise.

- (a) A group of southern resident orcas is defined as:
 - (i) A pod (J, K, or L) so long as two or more pods are separated by at least one-half nautical mile; or
 - (ii) A matriline so long as multiple matriline are separated by at least one-half nautical mile.

Additional proposals outside the core scope of the rulemaking

- WDFW should develop civil enforcement options.
- Waive license fees for the first 2 years due to the economic impacts of COVID-19.
- As best practices and control technologies are identified for the quieting of underwater noise from small vessels, require and incentivize (via discounted license fees) transitions to quieter vessel designs and commercial-off-the-shelf technology (e.g., echosounders, propulsion systems) to reduce underwater noise.
- PWVA to allow the BC Cetacean Sightings Network to grant WDFW enforcement and Soundwatch access to the WRAS reports, including all reports submitted by PWVA.

Follow-up questions to WSAS

1. What is the WSAS panel's interpretation of Todd Hass's analysis of the purported "sentinel effect" for CWW? Does the analysis indicate the potential for a "magnet" effect, where the presence of a CWW or flag vessel attracted recreational boaters? Does the analysis provide any justification for allowing CWW on southern residents, in order to fulfill a "sentinel role," when WDFW enforcement or Soundwatch vessels are present? Does the statistical analysis appropriately take into account all the variables, including variability of CWW vessels, recreational vessels, enforcement vessels, and infractions?
2. What triggers for relaxing or tightening limits on commercial viewing of southern residents are most appropriate to a precautionary approach to management?

3. Is the $\frac{1}{4}$ mile no-go zone distance off the west side of San Juan Island scientifically beneficial to the SRKW, or does it need to be expanded (e.g., to $\frac{1}{2}$ mile)?