

The following proposal is being submitted as suggested rules under the Washington state commercial whale watching licensing program. The suggestions below apply to viewing SRKWs only, as specifically outlined in the related legislation.

The rules for viewing SRKWs outlined below, along with updated 2019 regulations and professional whale watching guidelines, represent a dramatic shift in viewing SRKWs compared to the time period prior to the implementation of the first federal regulations in 2011. The combination of these proposed licensing rules around viewing SRKWs, existing regulations, and guidelines will achieve the goal of reducing potential vessel impacts and will also enable policy makers to effectively manage professional whale watching of SRKWs.

Justification

Sentinel Role of Professional Whale Watchers

Professional whale watch boats provide a sentinel role for recreational boats by modeling appropriate distance, speed and behavior and by *proactively* contacting private boaters, ferries, commercial shipping and military vessels to warn them of the presence of Southern Resident orcas.

Some of this sentinel effect is documented by Soundwatch data, and additional documentation has been provided by observers watching from shore (see attachment). PWWA has initiated data collection on the sentinel actions starting in 2020. As sentinels, members of the Pacific Whale Watch Association are able to help mitigate and decrease noise and disturbance from other vessels on the water and decrease the likelihood of a tragic boat strike. This sentinel effect offers a net positive in reducing potential vessel impacts.

It is also important to note that Soundwatch and DFW cannot be everywhere at once, especially with the increasing wide spread distribution of SRKWs as they travel and forage. With the spread of different groups of SRKWs, licensed professional whale watch vessels enhance the presence of enforcement and monitoring vessels. Operating at approach distances of 300 yards and slow speeds allow professional vessels to mitigate their own potential impacts while also serving to mitigate the greater potential impacts of high speed, unaware vessels.

Research Contribution from Professional Whale Watchers

In addition to providing a sentinel role, professional whale watch operators are an important source of real time sighting data for researchers. Dr. Deborah Giles from the Conservation Canine program has stated that approximately 60% of the sightings she receives come from Pacific Whale Watch Association. Ken Balcomb from the Center for Whale Research stated the following during a webinar on June 1st. "Respectful professional whale watching has gone a long way in helping us look at the distribution and status of the Southern Resident killer whales. I don't think a moratorium on whale watching per se is helpful to the whales at all. It has

absolutely no value to the whales. It has a negative value in the sense of lost information about their distribution and occupancy in Salish Sea waters.”

Adaptive Management Strategy

It is widely agreed upon that the primary threat to SRKW is the lack of prey abundance, specifically the collapse of Chinook salmon. Historically, the driver for SRKW presence in the inland waters of Washington state and British Columbia between April – August is Fraser River Chinook.

The 2018 Southern Resident Killer Whale Priority Chinook Stocks Report by NOAA and WDFW score the Fraser River at 4.25 of a maximum total score of 5. This is based on 3 factors:

- Observed diet of SRKW through prey tissues/scales and fecal samples from 2004 to present
- Consumed during reduced body condition or diversified SRKW diet—body condition determined through photogrammetry; diversified diet determined through estimates of proportion of Chinook salmon consumed by season and region using prey tissues/scales and fecal samples
- Degree of spatial and temporal overlap— determined through prey mapping and reports from the Chinook Technical Committee of the Pacific Salmon Commission and published literature

An analysis of prey consumed by Southern Resident orcas in their historical summer range from 2004 to 2008 supported earlier studies showing that Chinook salmon are by far the preferred prey. The study concluded that 80% to 90% of the Chinook sampled originated from the Fraser River while only 6% to 14% originated from Puget Sound rivers. (Hanson et al. 2010) A recent genetic analysis of fecal samples confirmed that Chinook made up almost 80% of the sequences from May to September. “Over all years, a clear pattern emerged with Chinook salmon dominating the estimated diet early in the summer, and coho salmon contributing an average of >40% of the diet in late summer.” (Ford et al. 2018)

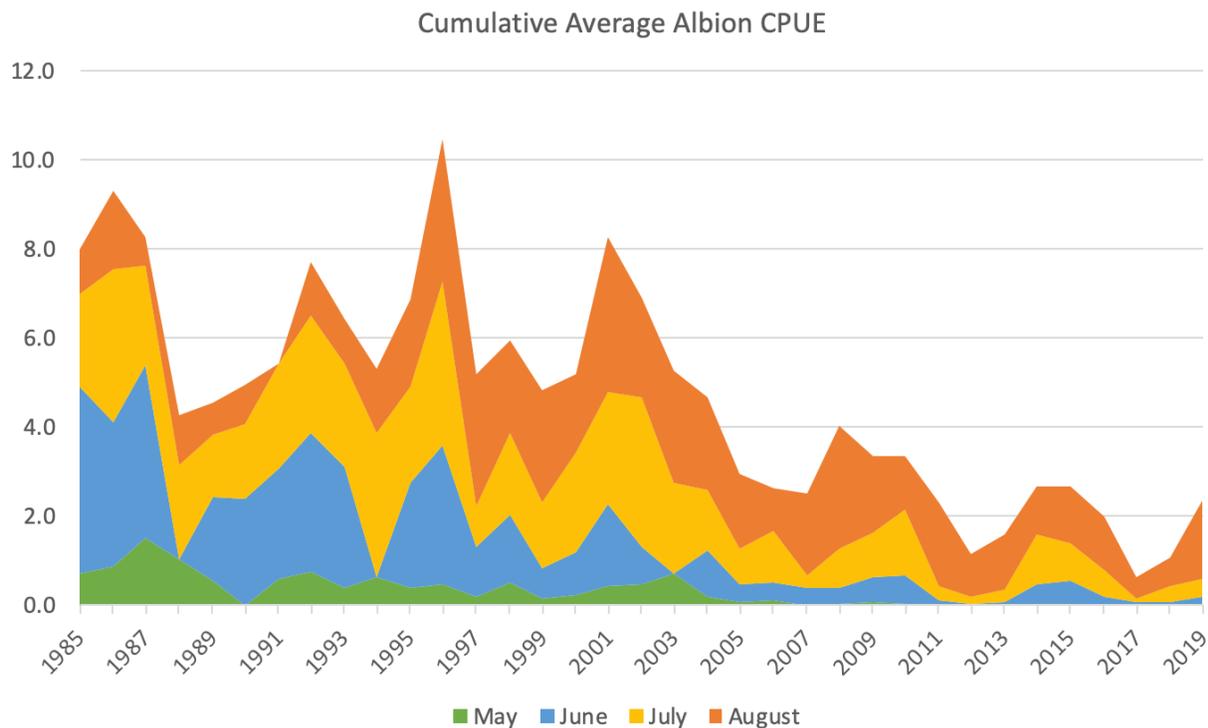
During the late summer, fall, and early winter months, SRKW presence in the inland waters is driven by Coho, Chum and winter Chinook, which are now more abundant than the spring and early summer Fraser River Chinook runs. As a result, with more abundant and diverse food, SRKW presence is now higher in the fall and early winter than spring and summer.

It is also agreed upon by many scientists that potential vessel impacts are primarily concerning during times of increased food scarcity (Ayres et al. 2012 for example) and that when food is available potential vessel impacts are negligible when mitigation efforts are used, primarily vessel speed and distance. This is clearly evidenced by the populations of Pacific Northwest Bigg’s killer whales who have an abundant food supply, year-over-year increased presence around professional

whale watching, and a population of roughly 400 individuals, increasing at over 4% per year. With approximately 100 calves born since 2012 and over 90% surviving, they are a thriving and frequently watched population.

The Albion Test Fishery (Fraser River) has operated consistently since 1981. It operates daily between April – October and fishes two sets to coincide with the daily high tide and publishes its catch each day. Using data from the Albion Test Fishery would allow us to see, in almost real-time, periods of time of increased and decreased food scarcity. It would also allow us to see long-term trends for various months. It makes sense that this metric provides us both short-term and long-term guidance on vessel management as it relates to salmon abundance, and the desperate need for Fraser Chinook restoration.

This metric allows for a reliable and trusted data source during the most concerning months, April – August, when the Fraser River Chinook is the primary food source for SRKWs when they are present in the inland waters.



Overview:

The main focus of the rules below is to limit the number of licensed professional whale watch vessels that may view SRKWs at one time. This allows professional whale watch vessels to continue to provide an educational experience for the public that promotes conservation actions to help SRKWs. The vessel limits vary seasonally and are based on several factors:

1. The number of vessels needed to be effective in a sentinel role, recognizing that more vessels are needed during months of higher recreational (and

other) vessel traffic. These months also coincide with months of greater prey abundance

2. Months of greater food scarcity, which also coincide with months of reduced vessel traffic

Maximum Number of Licensed Vessels around SRKWs

We propose setting a maximum number of licensed vessels “viewing SRKWs,” defined as the established standard of within a half mile of SRKWs. Commercial kayak license holders with multiple kayaks should be considered as 1 licensed vessel, unless they are being approached by SRKW in a manner that would preclude the kayak operators from limiting the number of kayak groups in an area. SRKWs can often be spread into multiple groups well over a half mile apart. As long as the groups are greater than a half mile apart, this would satisfy the maximum vessel requirements.

Professional whale watching vessels throughout the region are in constant communications throughout each day through several networks. These communications will enable the professional whale watching community to self-enforce the number of licensed vessels viewing SRKWs. This will greatly reduce the enforcement burden on WDFW and the communications protocols already established by professional whale watchers will enhance the role of WDFW on the water.

At the establishment of the licensing program in 2021, we propose licensed vessels be limited to a maximum of 3 licensed vessels year-round.¹

West Side San Juan Island No-Go-Zone

The PWWA has an established voluntary no-go zone on the west side of San Juan Island. The No-Go-Zone extends from Mitchell Point to Cattle Point, one quarter mile offshore and a half mile from the Lime Kiln Lighthouse. Including this limit within the license program would officially codify this as a rule. This regulation would also act as a further example to recreational vessels to remain outside of the No-Go-Zone.

All non-human powered license holders must remain outside of the San Juan Island no-go-zone and all commercial kayak license holders must remain within 100 yards of shore when possible on the west side of the island in Haro Strait year-round. Kayaks and other non-human powered license holders are exempt from remaining outside the no-go-zone rule but must maintain best practices including the Whale

¹ Modified (from a variable limit that allowed a 5 boat maximum during certain months) by Julie 7/8 1:30pm per conversation with Jeff—They would request the other proposal remove the AIS requirement.

Warning Flag, KELP Guidelines, and other regulations outlined within the license program.

Other Considerations

Data Sharing & Reporting

License holders will be required to notify WDFW of the presence of SRKWs when they are identified in Washington waters. To reduce potential of burden on WDFW from multiple reports, license holders will establish a protocol so that one contact will notify WDFW.

Time of Day and Days of the Week

These could potentially be useful at some date in the future when SRKWs return to presence patterns similar to 2005 and earlier, when there was predictability and consistency in their presence and movements.

However, because their presence patterns have increasingly changed, there is no predictability or consistency that warrants these restrictions. Setting time of day and day of week restrictions for SRKWs who are not present in any consistency does not help us achieve our goals of limiting potential impact and it does risk putting unnecessary negative consequences on professional, licensed whale watchers.

Communications

To help support the sentinel role, communications from the licensing process, WDFW and other entities can help educate other boaters that when they see professional whale watching vessels they should reduce their speed, assess their route of transit, and hail one of the whale watching vessels on VHF if they need assistance to determine the best route to transit around the area.

Communications from WDFW, other agencies and NGOs regarding the licensing program should include information that positions professional whale watching in the state as one of the most responsible whale watching communities in the world. By participating in the regulatory process as an engaged partner, consistently leading through science-based guidelines, serving as sentinels in our shared waterways, and participating in research, education, and conservation, Washington state should take great pride in its professional whale watching community. It is not like this in many places around the world. Additionally, communications should promote accurate education about SRKWs, as well as information about thriving populations of whales in the region, including Bigg's killer whales, Humpbacks, and Minkes. This position should be promoted in press releases about the new rules and at public meetings to help educate the public.

Time Limits of Viewing SRKWs

We propose viewing of SRKW by a single license holder vessel be limited to 45 minutes around (half mile) SRKWs per whale watching tour. This would limit the total time a commercial whale watch vessel could spend around SRKWs at one time. If the company offers multiple trips a day or operates multiple vessels each is granted 45 minutes per tour. Kayak groups would be exempt from this rule due to the nature of human powered craft and behavior of the SRKW.

When a vessel arrives "on scene" there is typically a period in which the operator assesses the scene and determines the best placement of the vessel for prevailing conditions and behavior of whales. This includes talking with other professional whale watch operators to determine the best entry and placement of that vessel. With caution and professionalism, this could take up to 15 minutes depending on the behavior of the whales. This is one of the reasons that 45 minutes is an appropriate viewing time to correctly educate passengers, and gain an experience with SRKWs.

As mentioned above, the communications protocols established by professional whale watching vessels will allow for self-enforcement of time limits, which will reduce the burden on WDFW.

Discussion:

Several Advisory Committee members have been uncertain about the value of the sentinel role and other benefits of professional whale watching and as a result had proposed a limit of zero or one licensed vessel be permitted to view SRKWs at limited times of day. The justification outlined above and the included attachment is intended to provide more detail and clarity around how the sentinel effect actually *reduces* overall potential vessel impacts.

By limiting the number of licensed vessels proposed here, we can achieve our mandated goal of reducing potential vessel impacts on SRKWs. The proposed vessel limits represent a reduction in the number of professional whale watch vessels from historical numbers while allowing a limited number of vessels to mitigate potential impact from other vessels via the sentinel effect.

If we can agree on consensus to the limits proposed here, we will be able to move past the main sticking point between the two proposals.

Conclusion:

As mentioned above, this proposal combined with the recent 2019 approach distance (300 yards) and speed regulations (less than 7 knots), and professional whale watching guidelines, represent a dramatic shift in viewing SRKWs compared to the time period prior to the implementation of the first federal regulations in 2011.

Understanding the data gap between much of the science around vessels and several updates in regulations and whale watching best practices, we are interested in having the science panel provide their best assessment on the following:

- Mitigation benefit of 3 – 5 vessels at a distance of 300-yard approach distance and slow speed limits versus historical vessel numbers at 200-yard approach distance with no legal slow speed zone
- Expected benefits of 3 - 5 slow vessels at 300 yards working to slow high speed transiting vessels

ATTACHMENT

Commercial Whale Watching Licensing Program

July 8, 2020

Dear Advisory Committee,

As we prepare for our final conversation before submitting two separate proposals to the science panel I want to reach out to you once again regarding the sentinel role of professional whale watching boats. I know this has been a source of disagreement throughout this process because of the uncertainty and lack of data. But as I have mentioned before, sometimes there is more to the situation than what can be documented.

I have spent the better part of the last four days with a group of people watching J Pod from shore on the west side of San Juan Island and we have documented several instances of disturbance, harassment and near misses by recreational boats and kayaks. On one occasion a boater motored in at high speed, noticed the whales and stopped just as he or she should, then altered course and motored right into the middle of the group of whales to get a better look. We witnessed several occasions when motor boats and sailboats traveled right next to or over the whales, often at high speed, and one occasion where private kayakers paddled out to the middle of the channel to be next to the orcas. Soundwatch and WDFW enforcement can only cover so much ground geographically, and many of the whale watch boats have been avoiding the area and opting to view other wildlife because of the scrutiny and criticism they have been experiencing around watching Southern Residents. These incidents are representative of scenarios we see all the time from shore on the west side of San Juan Island, but none of them will show up in the data because there is no one (neither PWWA, Soundwatch, or WDFW) to document them. J Pod has spent the last several days foraging and very widely spread everywhere from the south end of the island up to Lime Kiln Point State Park, and as is typical during foraging behavior, have often been taking long dives. While some of the boater incidents we observed were intentional, most were likely due to the boaters simply not knowing the whales were there. During all of the recreational boat infractions, there were zero whale watch boats present to provide a sentinel role. By contrast, on one occasion there were two whale watch boats present and a private boater stopped and modeled their behavior at the appropriate distance. A compilation of these observations has been prepared by Monika Wieland Shields and can be viewed at this link:

https://www.dropbox.com/s/ztwnceolfmdsl4j/IMG_8484.MOV?dl=0

Photos of some of the observed incidents:



Photos: Monika Wieland Shields



Photos: Cindy Hansen

I am asking you once again to take the sentinel role of professional whale watching seriously. The infractions we observe when no one is present to take data are real and they are serious. In addition to concerns about noise and disturbance there is very real concern about the potential of a boat strike. As I'm sure you have all heard by now, a humpback whale was struck by a Washington State Ferry on June 6th and may not have survived. Southern Resident orca J34 was struck and killed by an unknown vessel in 2016. His mother was one of the whales present during many of the infractions by recreational boaters noted in the past few days. It is only a matter of time before another boat strike occurs and right now we have the opportunity to formalize the sentinel role of professional whale watch boats to try to prevent this from happening. While some recreational boaters may not notice a whale warning flag, as noted in Todd Hass's preliminary analysis of Soundwatch data, commercial whale watch boats are reaching out and making contact. As we have heard throughout this process from the PWWA operators and during public comment, the professional whale watchers will often be proactive and contact boaters by radio, sound their horns or even provide a physical barrier between oncoming boats and whales. One professional whale watch boat per group of whales is not enough to fulfill this role as evidenced during the times we observed multiple infractions occurring simultaneously.

What I and others noted over the last several days should provide evidence for the necessity of the sentinel role of whale watch boats around Southern Resident orcas, not only to help mitigate noise and disturbance but also to potentially prevent a tragic accident. I hope you will consider this information during our final deliberations this afternoon and in your final proposal.

Thank you,
Cindy Hansen
Education and Outreach Coordinator
Orca Network