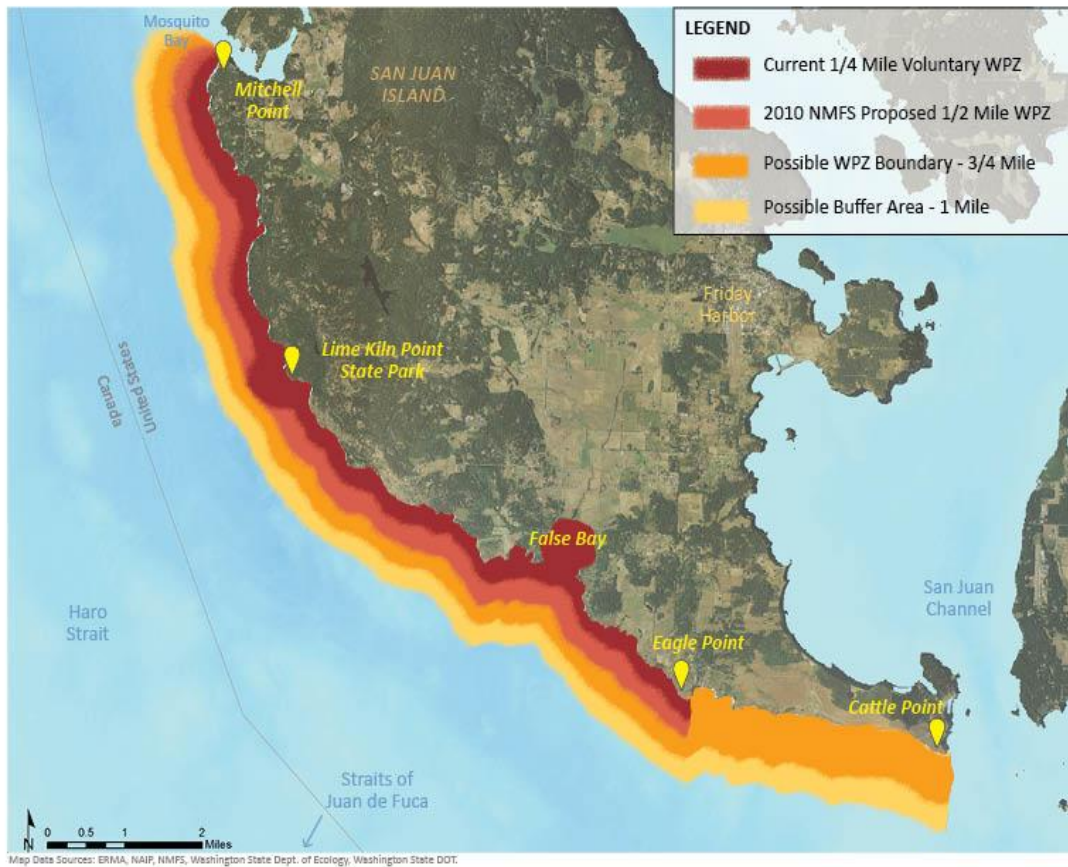


Concept for a Whale Protection Zone for the Endangered Southern Resident Killer Whale



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**The concept described in this document includes
information on how a protected area for the
endangered Southern Resident Killer Whale could
be designed, managed, monitored, and enforced.**

EXECUTIVE SUMMARY

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Why Is a Whale Protection Zone Needed?

The Southern Resident Killer Whales Are Endangered and Still Declining

In 2005 the US National Marine Fisheries Service (NMFS) listed the Southern Resident Killer Whale (SRKW; *Orcinus orca*) population as endangered under the Endangered Species Act. There are now 77 individual SRKWs; declining from a peak of 98 in 1995, the population is now at its lowest level since 1985, and is poised for further decline.¹

Measures taken by NMFS to date have not recovered the Southern Residents and, based on the recent trend, have not been sufficient to maintain the population at a stable level. The current vessel separation rules, established Critical Habitat, and existing voluntary “no-go-zone” are not providing enough protection. Furthermore, future recovery efforts will be confounded by the SRKWs’ distorted age-sex composition and declining reproductive capacity.

Minimizing “Noise and Disturbance” Is Necessary for Recovery

The main thrust of recovery efforts must be to conserve key habitat. All the major risk factors – described in the 2008 SRKW recovery plan – are forms of habitat degradation. They include insufficient prey (primarily Chinook salmon), environmental contaminants, and vessel-caused noise and disturbance. NMFS has determined that minimizing the disturbance of the SRKWs by vessels is necessary for their recovery.

Over a decade of research by NMFS specialists and other scientists has determined that the Southern Resident Orcas are harmed by this dangerous set of factors:

1. In years of low Chinook salmon returns, SRKWs are under stress to find food.
2. Constant pursuit by vessels (primarily by the commercial motorized whale watching fleet and the recreational boats the fleet attracts) leads to increased stress levels, increased metabolic rates, and an increased need for food, while simultaneously reducing the whales’ sonar – and therefore

¹ Based on publicly available data from the Center for Whale Research and National Marine Fisheries Service.

hunting – efficiency. This is happening during daylight hours from May to October; then:

3. As whales starve, they consume the toxins locked in their blubber reserves, which very likely harm their reproductive capacity and overall health.

Increasing the number of salmon and reducing toxins in Puget Sound must be accomplished, but will likely take many decades and huge expenditures of scarce public resources. In contrast, establishing a Whale Protection Zone for the endangered Orca can be achieved relatively easily, inexpensively, and quickly (see Map 1).

The Existing Federally Designated Critical Habitat Is Not Sufficient

While valuable, Critical Habitat currently provides only limited regulatory control of federal activities that might be harmful to the SRKWs, and no control of the commercial whale watching fleet and other private boats. A WPZ in the heart of the SRKW Critical Habitat will provide significant opportunities for these endangered whales to hunt, socialize, and rest, unhampered by the noise and disturbance they experience currently.

Immediate Assistance Is Required

As the federal agency entrusted with helping the SRKW to recover, NMFS has promised to “expeditiously” pursue the work necessary to develop a WPZ. NMFS must begin the process now, because the population is continuing to decline and the best available information indicates there would be a significant conservation benefit to the whales if they were free of vessel disturbance in one of their core foraging areas (off the west side of San Juan Island, Washington).

Objectives of the Orca Relief Citizens' Alliance (Orca Relief) Concept

Orca Relief's goal is the recovery of the Endangered Southern Resident Killer Whales. A significant step toward that recovery is to create a Whale Protection Zone, and to create a WPZ NMFS must initiate, conduct, and conclude the required public process. To help catalyze this public process, Orca Relief offers the recommendations below on a number of key elements of a WPZ, including how to design, manage, and enforce such a protected area.

The objectives of this WPZ concept are to enhance Orca resting and feeding opportunities by reducing the noise and disturbance the Southern Residents experience. This can be accomplished by protecting the center of SRKW Critical Habitat. We expect that a WPZ off the west side of San Juan Island will enhance the experience of shore-based whale watching (especially at the Limekiln Lighthouse “Whale Watch Park”). We also provide ideas for meaningful additional management elements and mechanisms for enforcement.

The Orca Relief seeks to work with all interested parties to address the causes of, and solutions for, reversing SRKW decline.

Significant Elements of a Whale Protection Zone for the SRKW

Element A: Geographic Dimensions

The WPZ should be established off the west side of San Juan Island, Washington, with boundaries that specifically account for SRKW feeding, socializing, resting, and other behaviors. The WPZ will be relatively small compared with the total area of the current federally designated Critical Habitat. Some of the key features to be researched carefully during a public regulatory process are feeding “hot spots,” as well as areas known to be important for resting and communications. Careful consideration should be given to the details within the general area of a mile offshore between Mitchell Point and Cattle Point. Some parts of this area may need more (or less) protection due to locations of shore-based whale watching, noise coming from large ships in nearby shipping lanes, bottom topography, and other factors.

Element B: Temporal Dimensions

Orca Relief recommends that the WPZ be in force annually from April 15 to October 15, although a year-round zone and other dates should be carefully considered.

Element C: Buffers and Edge Effects

Orca Relief recommends that a “No Wake” speed restriction be in effect at all times within the WPZ and whenever vessels are within 400 yards of any whale throughout their Critical Habitat.² The effects of boats waiting at the edge of the zone for whales should be carefully studied.

Element D: Additional Sections of the WPZ and Connections to Networks

Orca Relief recommends that other areas be considered in depth (e.g., areas around Stuart Island, Hood Canal, Vashon Island) for future additions to the WPZ. The WPZ should also have a significant role in the Whale Trail system of shore-based whale watching.

Element E: Additional Regulatory Components

A permit system for the commercial whale watching fleet is recommended, likely combined with required Automated Identification Systems (AIS). Other regulatory techniques should also be carefully considered, specifically observers on whale watching boats and video monitoring (especially

² Although the SRKWs would be the most likely to be found in the WPZ, the regulations should apply to all whales when they were inside the zone.

on shore). In addition, the US Environmental Protection Agency should regulate the air pollution in the WPZ and other parts of the SRKW's Critical Habitat. Special parameters for kayaks, fishing boats, and other vessels in the WPZ will need careful consideration.

Element F: Compliance Monitoring and Enforcement

Monitoring and enforcement will be the key to the WPZ aiding the recovery of the SRKW. Effective enforcement of the WPZ will depend on sufficient funding and engagement by NMFS and especially the Washington Department of Fish and Wildlife. Strategies include Notices to Mariners, shore-based video and/or listening stations, labeling and signs, and strengthening of the state/federal Joint Enforcement Agreement. Much greater effort should also be made to harmonize U.S. enforcement efforts with those in Canada.

Element G: Education

Greater and improved education will be needed to ensure that the WPZ actually aids in SRKW recovery. The WPZ will need to be reflected in boater education cards, changes to the "Be Whale Wise" guidelines, announcements by Washington state government agencies and the US Coast Guard, phone apps, notices in state fishing rule books, outreach on social media, and changes to the KELP education programs. Much greater effort should also be made to harmonize U.S. education efforts with those in British Columbia.