Protecting SRKW from the Effects of Vessels-Briefing

Julie Watson, PhD

Killer Whale Policy Lead
Washington Department of Fish and Wildlife

January 13, 2023



Presentation Overview

- Background and Context
- Adaptive Management Process and Methodology
- Key Findings
- Recommendation & Rationale



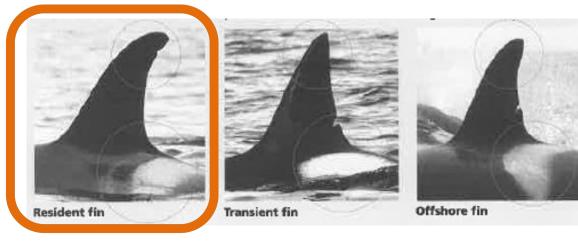


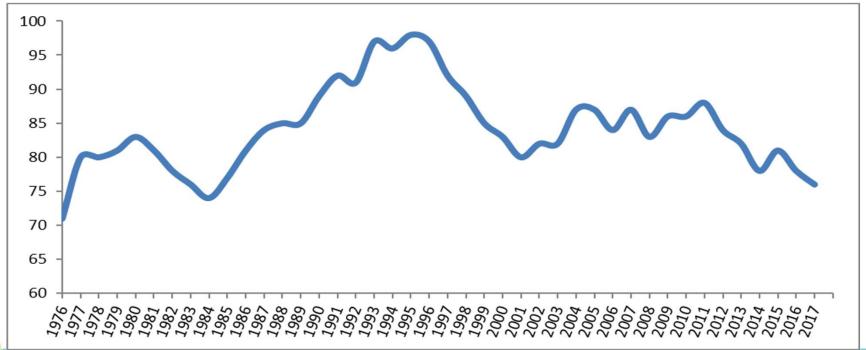
Background and Context

Southern Resident orcas in the spotlight

Southern Residents West coast transients

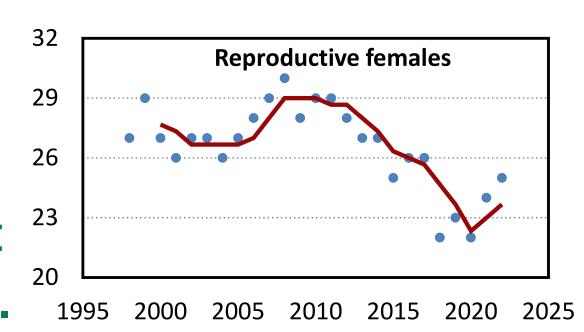
Offshores

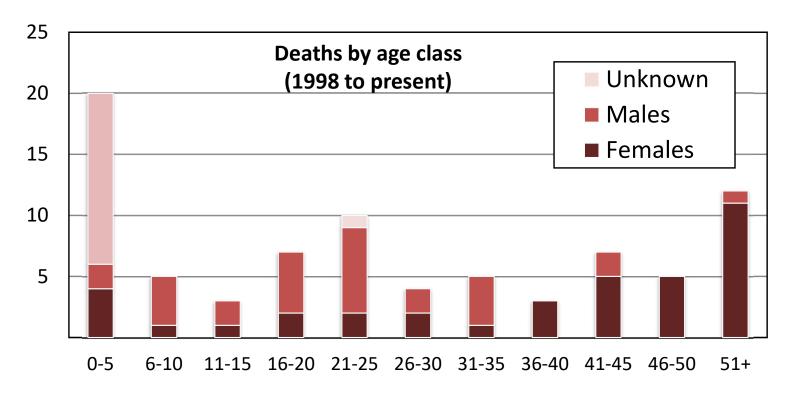






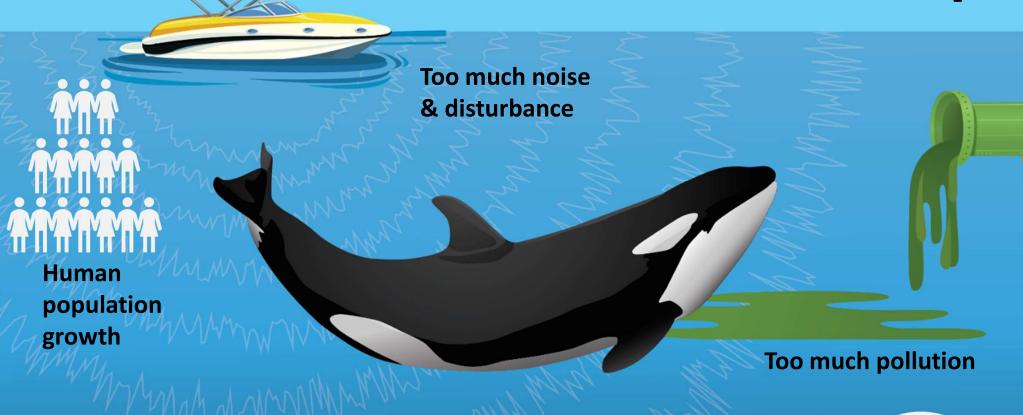
The SRKW
population is
endangered & at
risk of extinction.







Threats to Southern Resident orca recovery



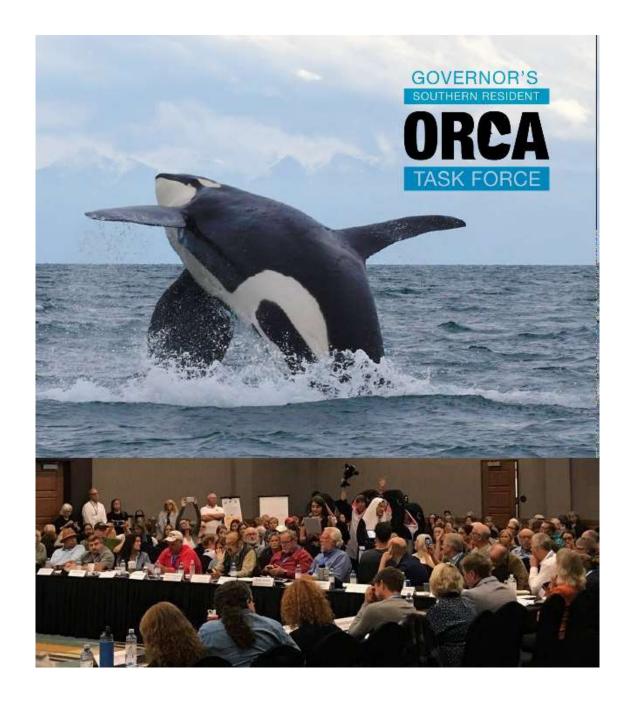




Governor Inslee's Orca Task Force

2018-2019

Generated 49 recommendations for addressing all major threats to Southern Resident orcas – led to 4 major pieces of legislation in 2019





SRKW legislation passed in 2019

- ✓ ESHB 1578 oil transportation safety
- ✓ 2SHB 1579 increase Chinook salmon and other orca prey abundance
- √ 2SSB 5577 reduce vessel noise and disturbance of orca
- ✓ SSB 5135 toxic pollution prevention











2SSB 5577 changed the restrictions for boating near SRKW.

- Be Whale Wise partnership
- Education
- Enforcement





2SSB 5577 regulated commercial whale watching.

"A new section is added to chapter 77.65 RCW to read as follows:

A commercial whale watching license is required for commercial whale watching operators."

- Defines fees per operator and per vessel (including kayak operations)
- Requires WDFW to adopt rules for license-holders, and specifies minimum considerations for the rulemaking
- Requires WDFW to convene an independent panel of scientists to review disturbance and noise impacts on SRKW from small vessels and commercial whale watching
- Requires WDFW to report on the effectiveness and recommended changes to the rules November 2022, 2024, and 2026.



The Department is required to adaptively manage the CWW license program and rules.

"The Department shall complete an analysis and report...on the effectiveness of and any recommendations for changes to the whale watching rules, license fee structure, and approach distance rules [in 2022, 2024, and 2026]."

RCW 77.65.620 (5)





There are many parallel efforts to protect SRKW from vessel impacts.

- Washington Governor's Salmon Recovery Office
- The Canadian national government
- Quiet Sound
- National Ocean and Atmospheric Administration (NOAA) Fisheries
- The San Juan County Marine resources Committee
- The WA Department of Ecology





Who can make changes to the license program and rules? When?

Commercial Whale Watching Licensing Program

RCW 77.65.615/620; RCW 77.15.815

- Who makes the changes? Legislature via legislation
- When? 2023 session, possibly

Commercial Whale Watching Rules *WAC 220-460*

- Who makes the changes? WDFW, via rulemaking process
- When? Possibly early 2023 (sequencing)

Rules to protect SRKW from vessel impacts *RCW 77.15.740*

- Who makes the changes? Legislature via legislation
- When? 2023 session, possibly

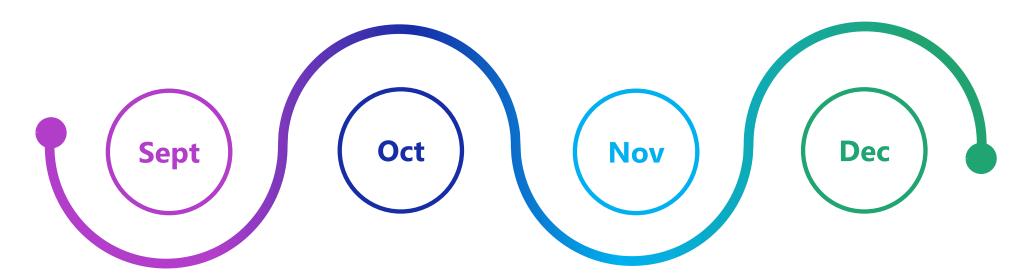






Adaptive Management Process and Methodology

2022 Adaptive Management Process



MILESTONE

Two online surveys: One to submit new science and one to collect feedback

Internal recommendation scoping conversations

MILESTONE

Stakeholder focus group conversations

Analysis of best available science, new studies, and compliance and enforcement data

Initial focus group and online survey data analysis

Refine recommendations

MILESTONE

Final focus group and online survey data analysis

Department review of final report

Finalize WAC/RCW recommendations

Submit final report to Legislature

MILESTONE

Ongoing conversations with stakeholders

Readiness for January legislative session



The adaptive management process was informed by several sources of data.

- Department review of relevant studies and best available science
- Third-party analysis of compliance, enforcement, and reporting data
- Third-party analysis of feedback collected through online survey and stakeholder focus groups
- Government partner coordination





The Department reviewed updates to the best available science since 2020, including:

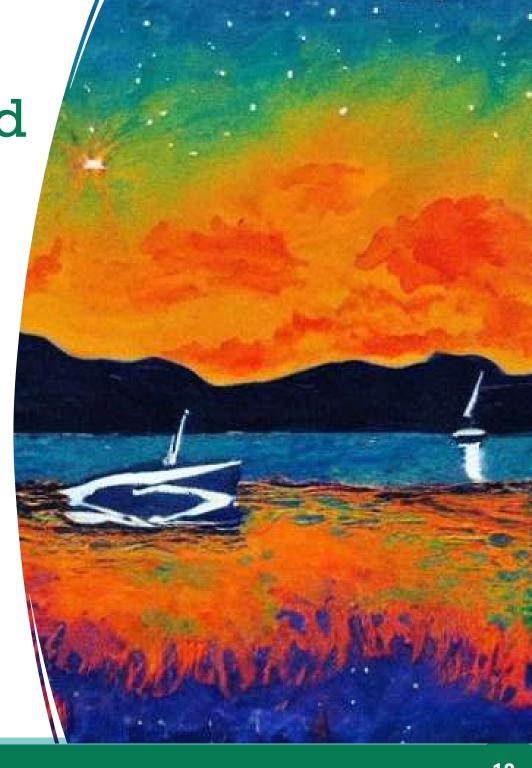
- Three new reports on vessel disturbance and whale behavior
- Five new articles or reports on "sentinel" and "magnet" effects
- Two new SR3 analyses on vulnerable individuals





The compliance analysis addressed four questions:

- Are all known CWW operators licensed?
- 2. Do licensed operators adhere to the new CWWLP regulations?
- 3. How has vessel behavior changed since the rules were implemented in 2021?
- 4. How has WDFW Enforcement changed to monitor compliance?





Feedback was collected through an online survey & focus group discussions.

852 survey respondents

Five stakeholder focus groups

- Two NGO groups
- Motorized CWW industry
- Kayak CWW industry
- Recreational boaters







Seven Key Findings Related to Vessel Regulations

Key Findings

- 1. Vessel regulations could be improved to better support SRKW.
- 2. The "sentinel" and "magnet" effects are not mutually exclusive and can co-occur.
- 3. Vessel regulations are difficult to communicate and confusing for the average boater.
- 4. SRKW-viewing rules restrict CWW vessels more than other vessels.
- 5. License holders likely comply with CWWLP requirements but cite administrative burdens.
- 6. The Department's "vulnerable whales" process could be refined.
- 7. Increased WDFW Enforcement onthe-water presence would be appreciated by all stakeholders.



Vessel traffic is linked to poor SRKW foraging.

- Foraging success decreases with vessels traveling within 1.5 km (1640 yards), even those operating at just 1-2 knots
- Foraging success further decreases with vessels closer than 400 yards
- Females are less successful than males (population-level implications)
- Whales dive more steeply
- Whale surface behavior increases





Recent studies do not qualify as definitive proof of either sentinel or magnet effect.

- Sentinel and magnet effects are difficult to measure and have contradictory effects on whales
- Need to consider negative impact of any boats in vicinity of SRKW compared to value from sentinel effect





CWW license holders appear to generally be in compliance.

- Majority of businesses and operators engaging in CWW in regulated waters are licensed
- Motorized CWW license holders are likely reporting SRKW encounters to WDFW and WhaleReport app
- No identified violations of "no-go zones"
- Very few violations of seasonal and hours-of-day limitations on SRKW viewing
- The exception to general compliance is with the training requirement and installation of AIS.



Some expressed interest in accommodating organizations

that do not view SRKW

within 1/2 nm.

 Suggested reducing fees or otherwise accommodating entities that do not view SRKW within one-half nm



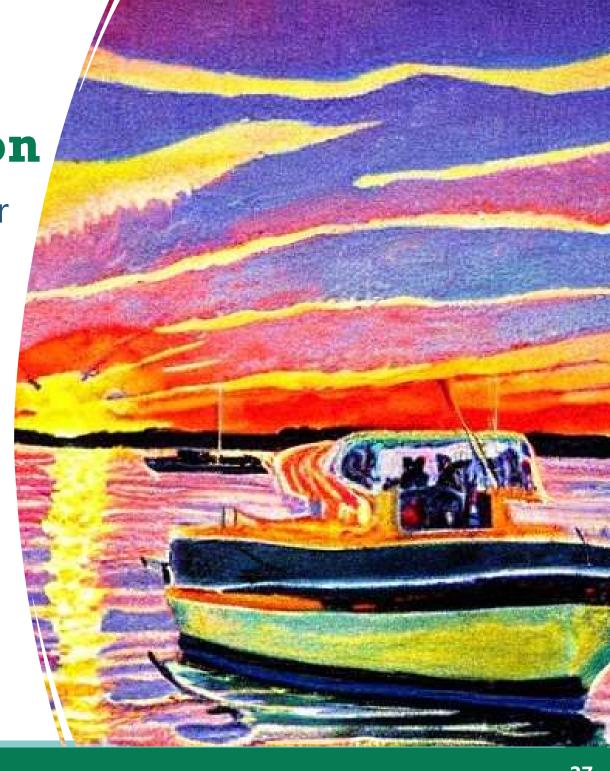




Department Recommendations

Department Recommendation

Increase the vessel buffer around SRKW to 1,000 yards (approximately one-half nm) for all vessels, including CWW vessels, and make complementary changes to the commercial whale watching licensing program.





The 1000-yard SRKW buffer can...

1. Lead to increased foraging success, which is critical to SRKW recovery.

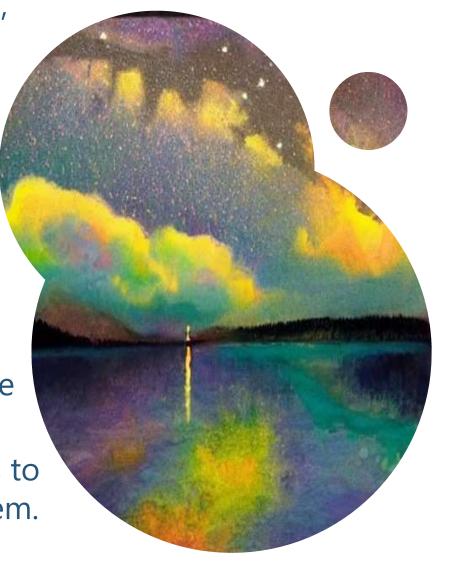
2. Simplify the current approach distance and SRKW-viewing rules.

3. Lean into potential benefits of the sentinel effect and avoid potential downsides of the magnet effect.

4. Streamline WDFW education & enforcement efforts.

5. Eliminate the need for a "vulnerable whales" process.

6. Continue to allow CWW customers to view SRKW and fall in love with them.



Interrelated Recommendations

General rules for vessels operating around SRKW (RCW 77.15.740)

1000-yard buffer around SRKW

Commercial Whale Watching License (RCW 77.65.615 and RCW 77.15.815)

- Distinguish sea paddle tour licensing from motorized CWW licensing
- Simplify & reduce fees
- Improve enforcement mechanisms

Commercial Whale Watching Rules (WAC 220-460)

 Simplify the CWW rules and requirements to align with RCW changes & make other improvements via a Department rulemaking process.







Questions?

Julie.Watson@dfw.wa.gov