

Washington Southern Resident Killer Whale Recovery Update

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Killer Whale Policy Lead
Washington Department of Fish and Wildlife

September 2020



Washington
Department of
**FISH and
WILDLIFE**

Updates

- 73 SRKW in the wild
- Superpod 9/6
- Be Whale Wise



J35's new calf, J57

Photo by Katie Jones, Center for Whale Research

Washington Department of Fish and Wildlife

Home / News / Give pregnant killer whales space to forage, agencies and partners request

Give pregnant killer whales space to forage, agencies and partners request

Date
Aug 10, 2020

Contact
Eryn Couch, WDFW, 360-890-6604

Washington regulations require boaters stay 300 yards from Southern Resident killer whales

With news of multiple pregnancies among the endangered Southern Resident killer whales, the Washington Department of Fish and Wildlife, NOAA Fisheries, whale watch leaders, and other partners are asking boaters to steer clear of the whales and give them extra space on the water at this critical time.

"The whales, for the first time in a couple years, are very present, unfortunately we're having a lot of people get too close to orcas within these regulated boundaries," said Washington Department of Fish and Wildlife Police Captain Alan Myers said. "That bubble of protection is extremely important in order to keep boaters either intentionally or unintentionally from interfering with these animals while they feed, forage, and transit Washington's waters."

A photogrammetry team from SR3 and Southall Environmental Associates last month [documented pregnancies](#) in all three Southern Resident pods. While this is promising news, research has shown that many Southern Resident pregnancies fail or the calves do not survive beyond their first year.

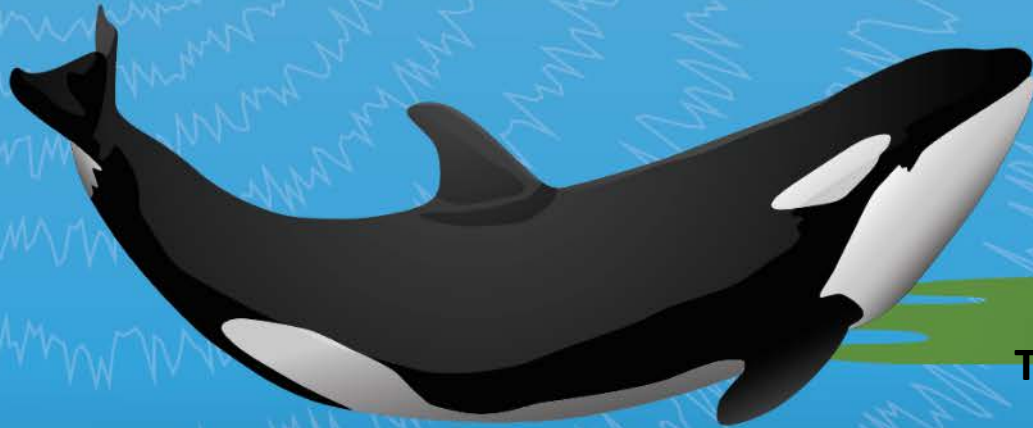
While the lack of sufficient Chinook salmon prey is a threat to the whale population, vessel traffic can interrupt echolocation clicks the whales use to track and capture fish. In the presence of vessel traffic, the whales have been



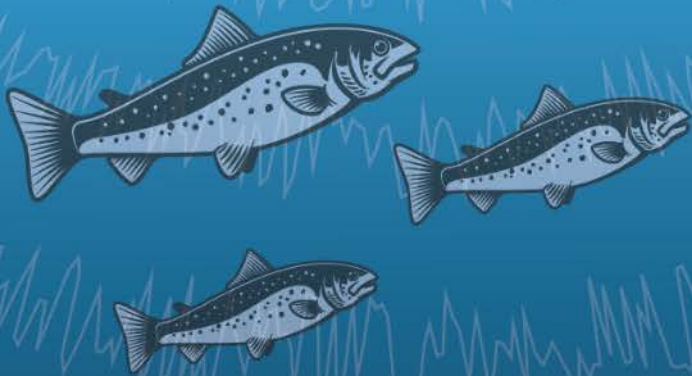
Threats to Southern Resident orca recovery



Too much noise



Too much pollution



Too few fish

GOVERNOR'S
SOUTHERN RESIDENT

ORCA

TASK FORCE



Task Force Priorities

Prey availability (salmon)

Contaminants

Disturbance and noise

Funding for implementation

Growing human population
Climate change

Year 2





2018 Recommendations

36 recommendations

- ✓ Prey - 16 recommendations
- ✓ Vessels - 10 recommendations
- ✓ Contaminants - 10 recommendations

+13 additional recommendations in 2019 final report

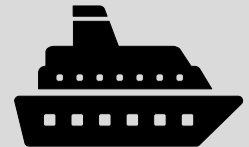
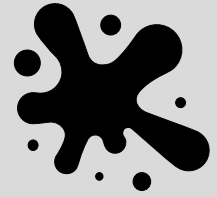


**4 Governor Bills;
Budget Requests**
2019 legislative session



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



Progress Recommendation

✓	17 Establish a statewide “go-slow” bubble for small vessels and commercial whale watching vessels within half a nautical mile of Southern Resident orcas.
✓	18 Establish a limited-entry whale-watching permit system for commercial whale-watching vessels and commercial kayak groups in the inland waters of Washington state to increase acoustic and physical refuge opportunities for the orcas.
+	19 Create an annual Orca Protection endorsement for all recreational boaters to ensure all boaters are educated on how to limit boating impacts to orcas.
✓	20 Increase enforcement capacity and fully enforce regulations on small vessels to provide protection to Southern Residents.
+	21 Discourage the use of echo sounders and underwater transducers within one kilometer of orcas.
+	22 Implement shipping noise-reduction initiatives and monitoring programs, coordinating with Canadian and U.S. authorities.
✓	23 Reduce noise from the Washington state ferries by accelerating the transition to quieter and more fuel-efficient vessels and implementing other strategies to reduce ferry noise when Southern Residents are present.
+	24 Reduce the threat of oil spills in Puget Sound to the survival of Southern Residents.
+	25 Coordinate with the Navy in 2019 to discuss reduction of noise and disturbance affecting Southern Resident orcas from military exercises and Navy aircraft.
✓	26 Revise chapter 77.15.740 RCW to increase the buffer to 400 yards behind the orcas.
+	27 Determine how permit applications in Washington state that could increase traffic and vessel impacts could be required to explicitly address potential impacts to orcas.
-	28 Suspend viewing of Southern Resident orcas.



Second Substitute
Senate Bill (2SSB) 5577

SOUTHERN
RESIDENT
ORCA WHALES—
PROTECTION FROM
VESSELS

**Progress on Vessels Work Group
Recommendations (2019 Task Force Report)**



Legislation: 2SSB 5577

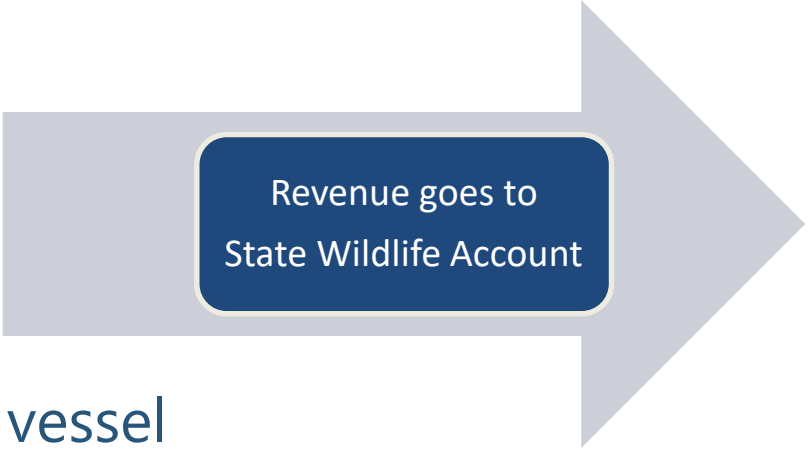
“A commercial whale watching license is required for commercial whale watching operators.”



- **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.



Annual Fees



Revenue goes to
State Wildlife Account

License: \$275

+ Per boat

- \$325: 1-24 passenger vessel
- \$525: 25-50 passenger vessel
- \$825: 51-100 passenger vessel
- \$1,825: 101-150 passenger vessel
- \$2,000: > 150 passenger vessel

+ Kayaks

- \$125: 1-10 kayaks
- \$225: 11-20 kayaks
- \$425: 21-30 kayaks
- \$625: >31 kayaks

+ Alternate operator : \$275

Industry Stats:

- 29 members of Pacific Whale Watch Association
- >100 vessels
- 15 U.S. based businesses



Definitions from 2SSB 5577

"**Commercial whale watching**" means the act of taking, or offering to take, passengers aboard a vessel in order to view marine mammals in their natural habitat for a fee.

"**Commercial whale watching operators**" includes commercial vessels and kayak rentals that are engaged in the business of whale watching.

"**Commercial whale watching vessel**" means any vessel that is being used as a means of transportation for individuals to engage in commercial whale watching.

"**Sustainable whale watching**" means an experience that includes whale watching from land or aboard a vessel that reduces the impact on whales, provides a recreational and educational experience, and motivates participants to care about marine mammals, the sea, and marine conservation.

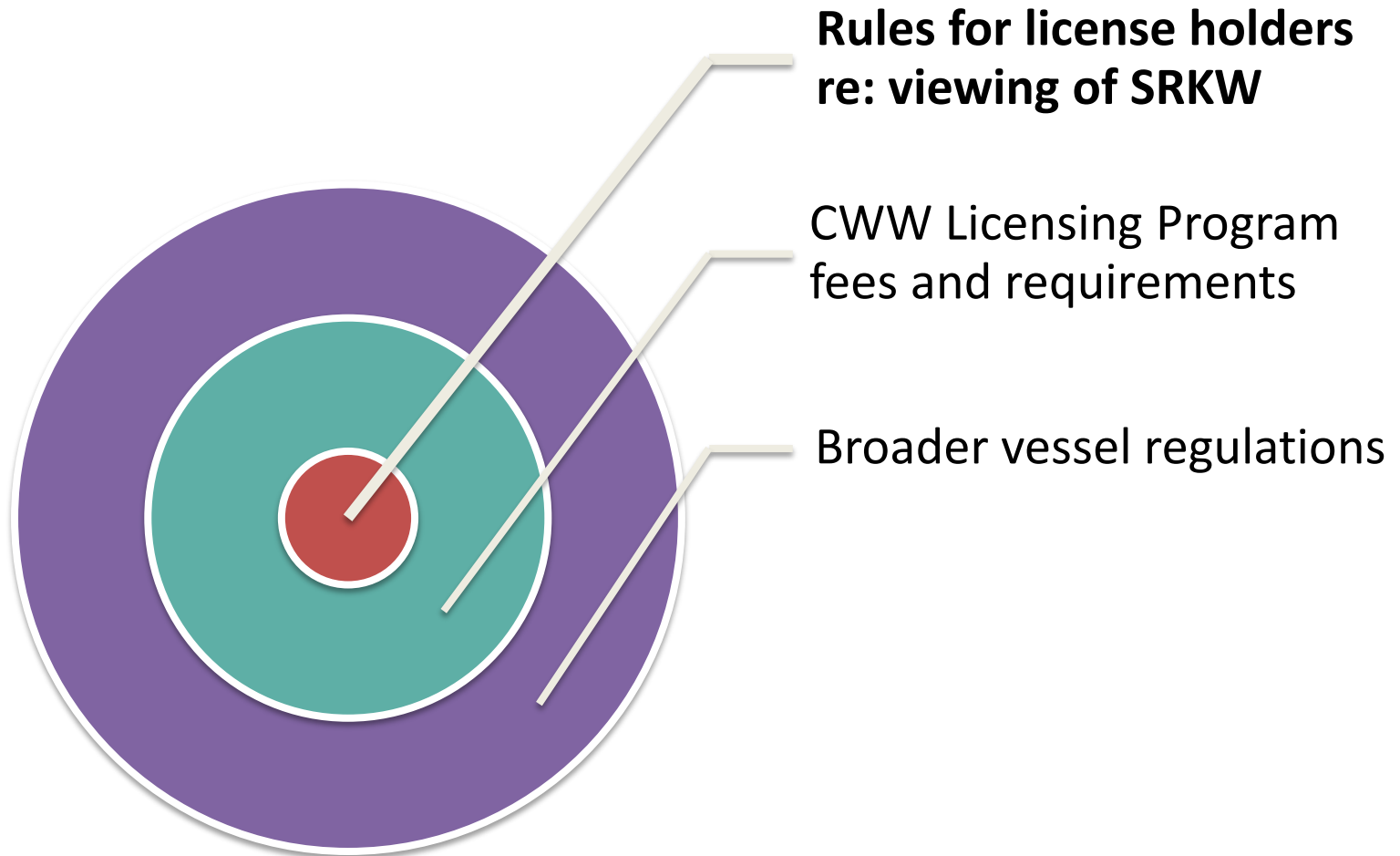


RCW 77.65.620 Section 1

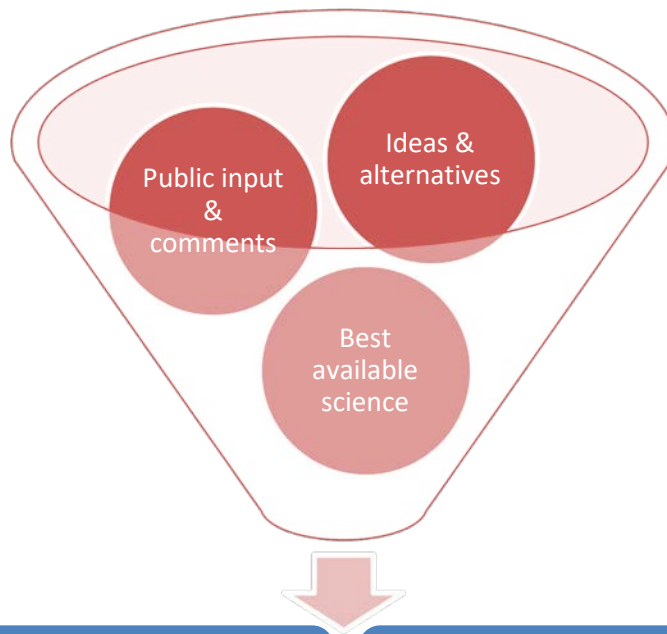
The department *must adopt rules*
**for holders of a commercial
whale watching license**
established in RCW [77.65.615](#) **for
the viewing of southern resident
orca whales** for the inland waters
of Washington by January 1, 2021...



Rules focus on the bullseye



Rulemaking Process



Parallel Tracks



Advisory Committee

Context
Alternatives
Recommendation



Intergovernmental Coordination Group

Guidance
Implementation and enforcement counsel
Transboundary coordination



Independent Science Panel

Workshops
Q&A
Report
Review
Adaptive management



SEPA & economic analysis

Scoping
Comment periods
Public meeting(s)
Viability analysis
Small Business
Economic Impact
Statement



WDFW Licensing

System development
Launch/FAQ





**Independent Science Panel
WA State Academy of Sciences**



Science-driven

“The department must use the **best available science** in the establishment of the southern resident orca whale watching rules and continue to **adaptively manage the program** using the most current and best available science.”



WSAS

Science Panel

Report on Best Available Science
08/31/2020

The report was informed by:

- Committee meetings
 - March 18, April 23, May 13, June 25, July 24, and August 20, 2020
- Workshops
 - Scientists April 27, 2020
 - Stakeholders May 6, 2020
- Committee preparation of answers to questions from the WDFW Advisory Committee (6/8/2020)
- Committee review of draft rules (7/31/2020)

Forthcoming deliverables:

- Adaptive management recommendations
- Review of draft regulations and public comment



Department of Fish and Wildlife

WASHINGTON STATE
Academy of Sciences
Science in the Service of Washington State

Summary of Key Research Findings about Underwater Noise and Vessel Disturbance

Prepared for the Washington State Department of Fish and Wildlife

August 2020

Committee on Underwater Acoustics and Disturbance:

Ronald Thom, *chair*, Pacific Northwest National Laboratory (emeritus), WSAS President (2018-2020)
Peter Dahl, University of Washington
Marla Holt, National Oceanic and Atmospheric Administration
David Lusseau, University of Aberdeen and Technical University of Denmark
Dawn Noren, National Oceanic and Atmospheric Administration
Susan Parks, Syracuse University
Dom Tollit, SMRU Consulting

WSAS Staff:

Donna Gerardi Riordan, Executive Director
Yasmeen Hussain, Program Officer
Devon Emily Thorsell, Program Operations Manager
Lynne Peeples, Science writer

Suggested citation: Washington State Academy of Sciences. (2020). Summary of Key Research Findings about Underwater Noise and Vessel Disturbance. Seattle, WA: WSAS, 1-25.



Advisory Committee

Advisory Committee

11 members

- Industry
- NGOs
- Public



Advisory
Committee

WDFW

FWC



Advisory Committee- Best Case 2030

*Words the Advisory
Committee members
hope will be used to
describe the program*

protective
innovative
science-based
effective
enforceable
collaborative
precautionary
inclusive
smart
beneficial
positive
educational
results-oriented
scientific
successful
model
leading
implemented
unprecedented
adaptive



Advisory Committee Best Case 2030 Headlines

“Evidence that whale watching licensing helped put the orcas on the path to recovery”

“Role model case study: how government, industry and science partnered to create world's most respected, conservation-focused whale watching community”

“Southern resident orcas thrive in quieter Salish Sea”

“Washington state’s commercial whale watching licensing program becomes the model for responsible wildlife viewing worldwide.”

“The commercial whale watching licensing program is embraced and applauded by all”

“Program aids in recovery of southern residents; considered model for multi-species whale-watching”

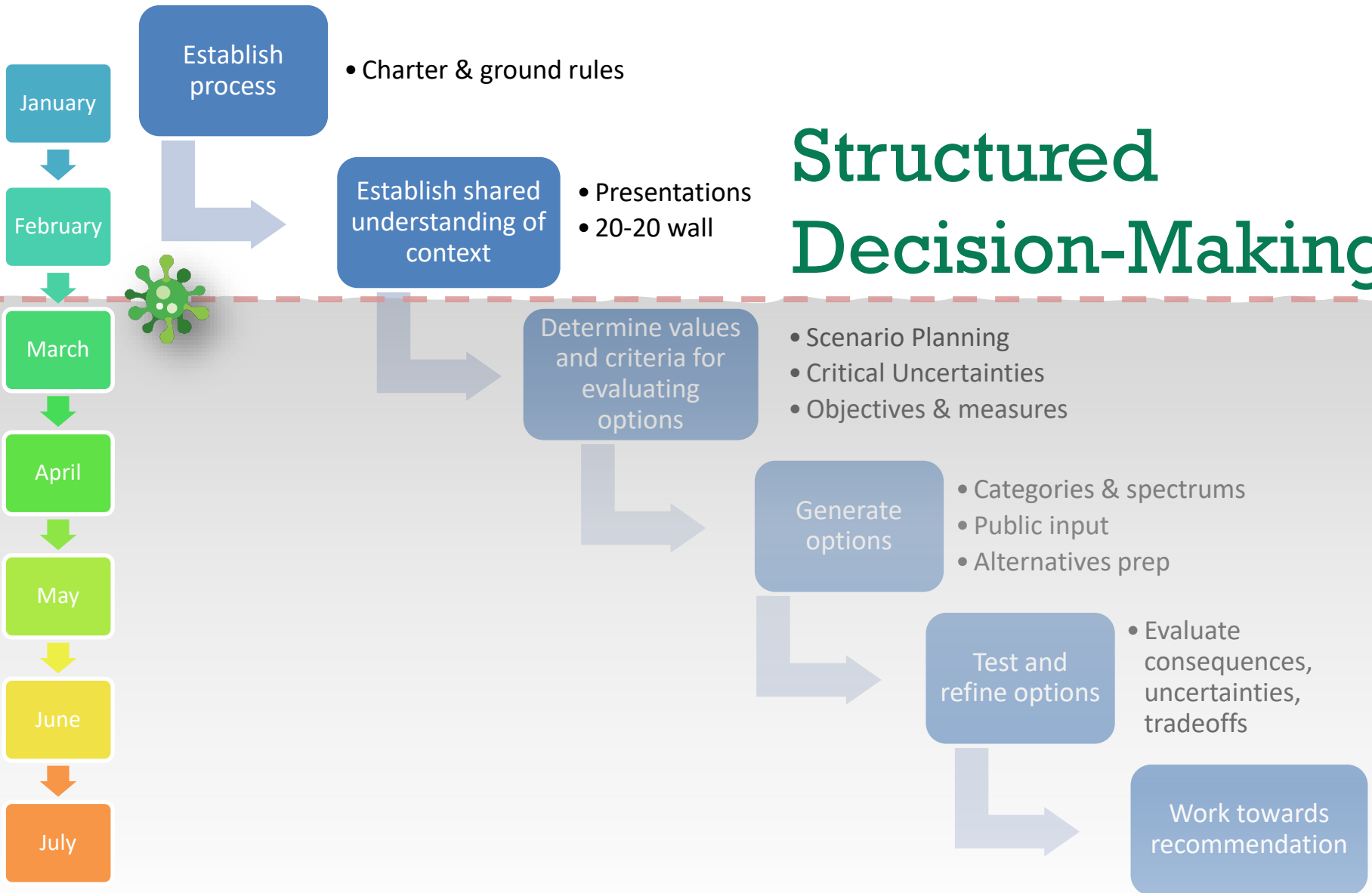


Advisory Committee Best 2022 Headlines

- ✓ **“Whale-watch industry takes leadership role in protecting endangered orcas”**
- ✓ **“Washington State partners with Whale Watching and Science Community to create world leading responsible whale watching certification”**
- ✓ **“New whale watch program is spot-on for orcas and operators”**
- ✓ **“Whale watchers and scientists work together to develop ideal model for sustainable tourism”**
- ✓ **“Businesses and managers stand hand in hand in protecting SRKWs”**

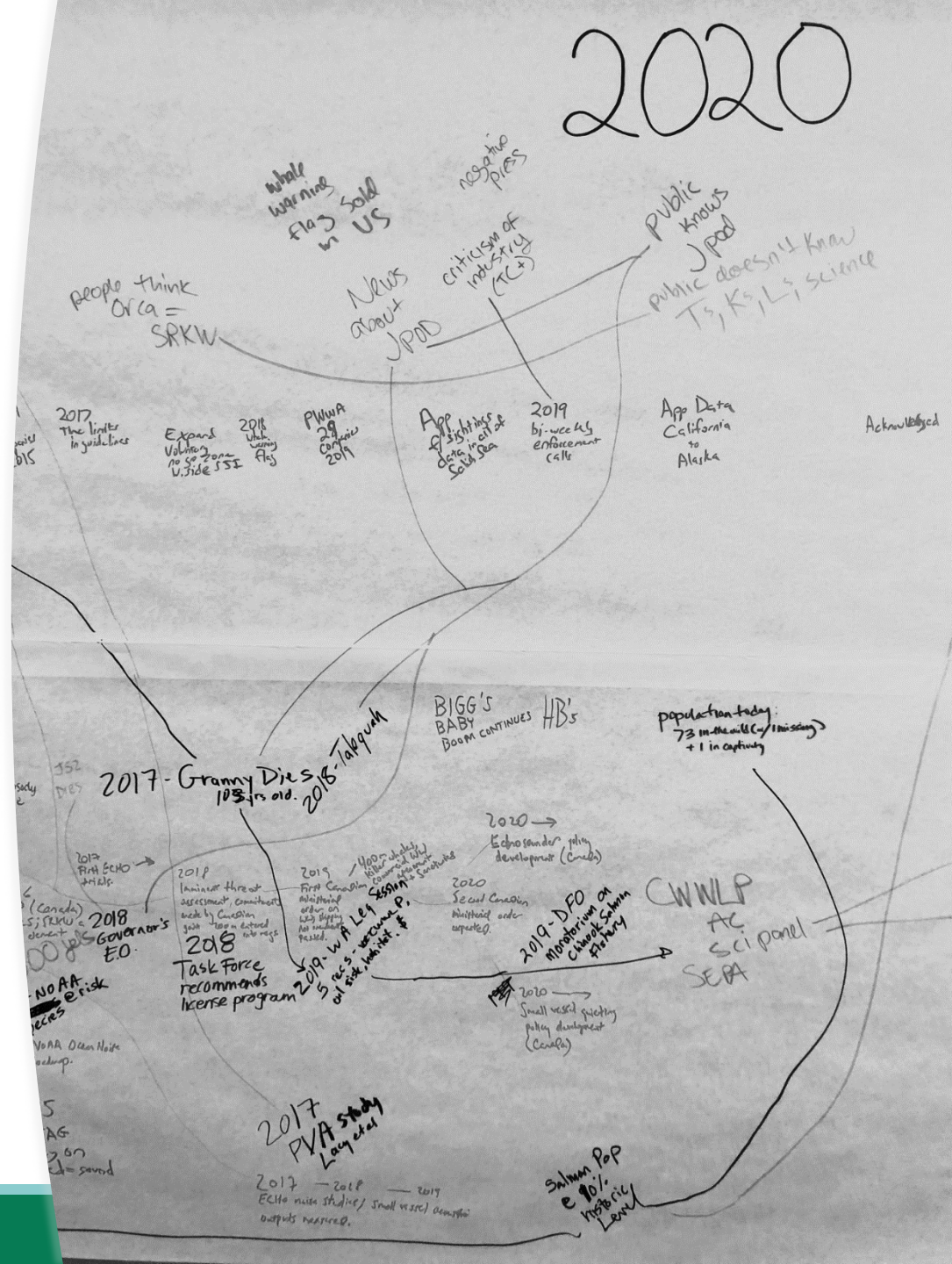


Structured Decision-Making



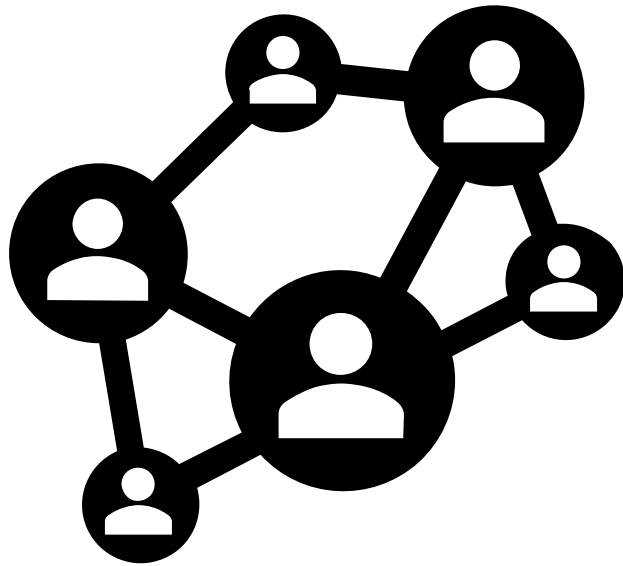
Advisory Committee status & outputs

- Two compromise proposals reviewed by the Science Panel
- Members consulted on draft WDFW rules





Intergovernmental Coordination



ORGANIZATIONS

Western WA Treaty Tribes + Fish Commission

Puget Sound Partnership

NOAA National Marine Fisheries Service

U.S. Coast Guard

San Juan County & MRC

Transport Canada

Fisheries and Oceans Canada

WDFW Enforcement, Policy, Licensing, SEPA

Intergovernmental Coordination Group

State, tribal, federal, and local government representation:

This group discusses **sideboards** and **implementability** of options explored by the advisory committee and feeds **information** into the process at several touchpoints.





Economic Analysis

“Consider the economic viability”

- Viability = direct compliance and/or reduction in ticket sales/ridership that would result in profitability being reduced to \$0
- Factors that could affect viability
 - Purchase of AIS during COVID downturn
 - Hiring new/additional staff
 - Closures beyond existing no-boat zone

VARIABLE

BREAK-EVEN ANALYSIS

Weighted Average Adult Ticket Price	\$87
Ridership	145,000
Profits	\$1.7 million - \$3.5 million
Ticket sales equivalent to industry profits	21,000 – 40,000
Percent ridership reduction equivalent to profits	14% - 27%

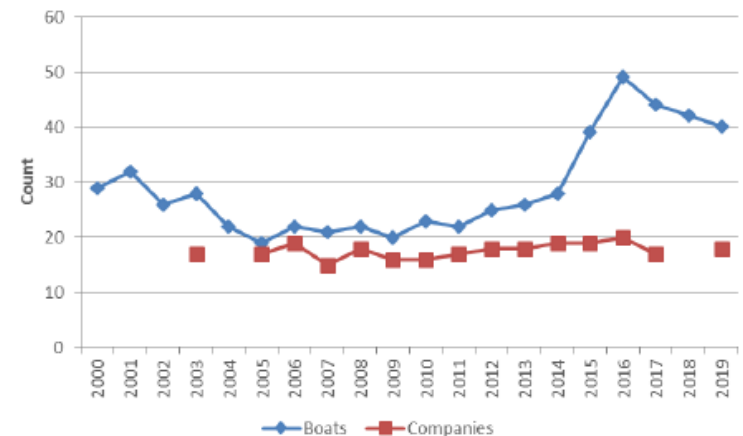


EXHIBIT 6. POTENTIAL FOR REGULATORY IMPACTS BY INDUSTRY SECTOR

INDUSTRY SECTOR	PRIMARY ACTIVITY	IS LICENSING REQUIRED?	DEPENDENCE UPON WHALE WATCHING	POTENTIAL FOR ECONOMIC IMPACTS
Primary Motorized Whale Watch	Motorized or sailing vessel excursions with the express and primary purpose of viewing whales.	Yes.	High. Ability to continue CWW activity critical to business.	High.
Kayak Touring	Human-powered group paddling tours, including day trips and multi-day excursions, for sightseeing, coastal exploration, camping, and wildlife viewing.	Yes. Explicit inclusion of kayaks in RCW 77.65.615.	Low. Whale watching occurs incidental to other primary activities. ¹	Moderate.
Incidental Whale Watch	Motorized or sailing excursions primarily for non-whale viewing purposes including sightseeing, dining cruises, transportation (ferry, water taxi), charter fishing, viewing other wildlife (e.g., birds), etc.	Uncertain. It is not clear whether licensing will be required.	Low. Primary line of business, and driver of customer participation, is not viewing whales.	Low.

Source: Personal communication with Tom Murphy, Outdoor Odysseys Sea Kayaking on June 5, 2020. Interviewee indicated a low dependence on whale watching for his business, and we extrapolate this assumption across all kayak tour businesses.

EXHIBIT 7. COUNT OF ACTIVE U.S. WHALE WATCH COMPANIES AND BOATS (2000 - 2019)



Source: Shedd et al. (2019). Soundwatch Program Annual Contract Report. The Whale Museum, Friday Harbor, Washington.

Small Business Economic Impact Statement (SBEIS)

In complying with the **Regulatory Fairness Act's** requirements when proposing a new rule, a state agency must:

- Determine whether the proposed rule would impose more than "minor" costs.
 - A minimum of \$100 of costs will usually trigger the SBEIS requirement.
- **Prepare an SBEIS if a proposed rule would impose more than "minor" costs.**
- Provide notice of an SBEIS to small businesses
- If the SBEIS reveals disproportionate costs on small business, reduce or mitigate the costs imposed by the rule... or explain why it is not legal or feasible for the agency to do so.





SBEIS Contents



ANALYSIS OF THE **COST OF COMPLIANCE** FOR BUSINESSES, INCLUDING COSTS OF EQUIPMENT, SUPPLIES, LABOR, PROFESSIONAL SERVICES AND INCREASED ADMINISTRATIVE COSTS



CONSIDERATION OF **WHETHER COMPLIANCE WITH THE RULE WILL CAUSE BUSINESSES TO LOSE SALES OR REVENUE**



DESCRIPTION OF **HOW THE AGENCY WILL INVOLVE SMALL BUSINESS** IN THE DEVELOPMENT OF THE RULE



LIST OF **INDUSTRIES REQUIRED TO COMPLY** WITH THE PROPOSED RULE



ESTIMATE OF THE **NUMBER OF JOBS THAT WILL BE CREATED OR LOST** AS THE RESULT OF COMPLIANCE WITH THE RULE



DESCRIPTION OF **THE STEPS TAKEN TO REDUCE OR MITIGATE COSTS** FOR SMALL BUSINESSES OR AN EXPLANATION WHY THE AGENCY CAN'T REDUCE COSTS





SEPA Environmental Impact Statement & Public Engagement

SEPA Environmental Impact Statement (EIS)

- **Conducting “scoping,”** which initiates participation by the public, tribal governments, and other local, state and federal agencies to comment on a proposal’s alternatives, impacts, and potential mitigation measures to be analyzed in the EIS.
- **Preparing the draft EIS,** which analyzes the probable impacts of a proposal and reasonable alternatives, and may include studies, modeling, and other information.
- **Issuing the draft EIS for review and comment** by the public, tribal governments, and other local, state, and federal agencies.
- **Preparing the final EIS,** which includes analyzing and responding to all comments received on the draft EIS, and may include additional studies and modeling to evaluate probable impacts.
- **Issuing the final EIS** and using the information in decision-making.





Developing the rules for commercial viewing of SRKW

Rulemaking focus: RCW 77.65.620

The rules must be designed to reduce the daily and cumulative impacts on southern resident orca whales and consider the economic viability of license holders.



The department shall at a minimum consider protections for southern resident orca whales by establishing limitations on:

(a) The **number of commercial whale watching operators** that may view southern resident orca whales at one time;

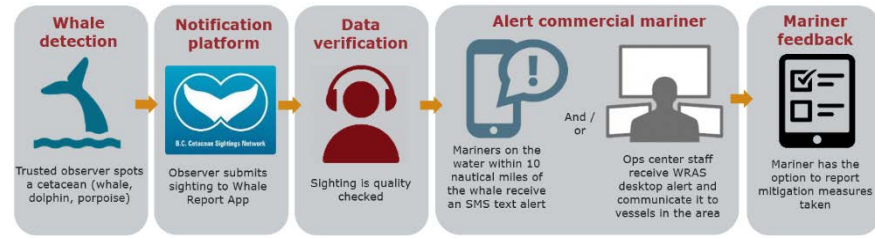
(b) The **number of days and hours** that commercial whale watching operators can operate;

(c) The **duration spent in the vicinity** of southern resident orca whales; and

(d) The **areas** in which commercial whale watching operators may operate.



Optimizing



Whale Report Alert System
B.C. Cetacean Sightings Network

Indirect effects
benefitting SRKW

Implementable,
enforceable, measurable,
and able to be adaptively
managed

The rules must be
designed [using best
available science] to
reduce the **daily and
cumulative impacts**
on southern resident
orca whales and
**consider the
economic viability** of
license holders.



Whale Warning Flag
San Juan County MRC



What are we considering?



Number of vessels in the vicinity



Duration in the vicinity



SRKW viewing hours, days, seasons



Geographic restrictions



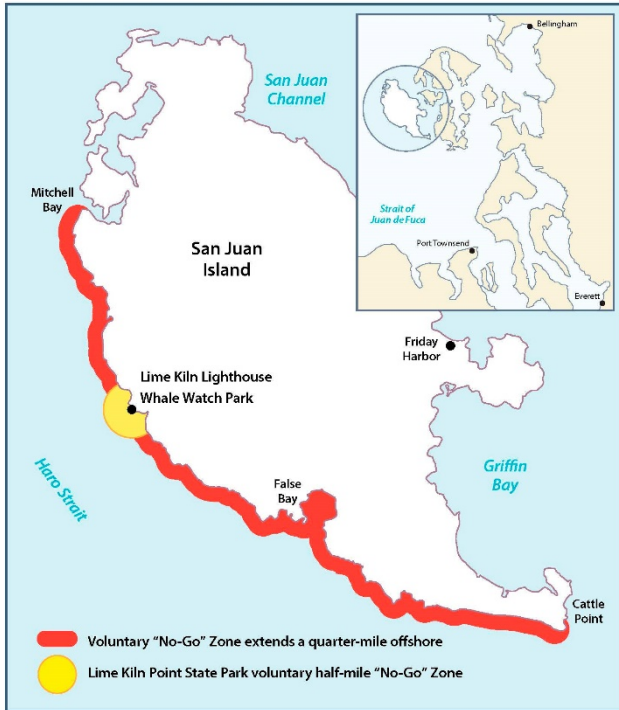
Kayak-specific requirements



Other (reporting, AIS, echosounders, educational requirements, etc.)



Spectrums (examples)



Variable	Description	More restrictive	Somewhat restrictive	Less restrictive	Status quo
Number of vessels	# of CWW vessels that can view SRKW at one time	0-2	3-4	5-10	Unlimited
SRKW viewing hours	Number of hours CWW can view SRKW per day	0-4	4-8	1 hour after sunrise to 1 hour before sunset	Unlimited
Geographic restrictions	Establish specific areas in which CWW vessels can and cannot operate	Close multiple areas	Close a couple areas	Close the West Side of San Juan Island	Unrestricted, but voluntary no-boat zone on the west side of SJI



Nesting for optimization



VARIABLE VIEWING HOURS DURING
DIFFERENT SEASONS



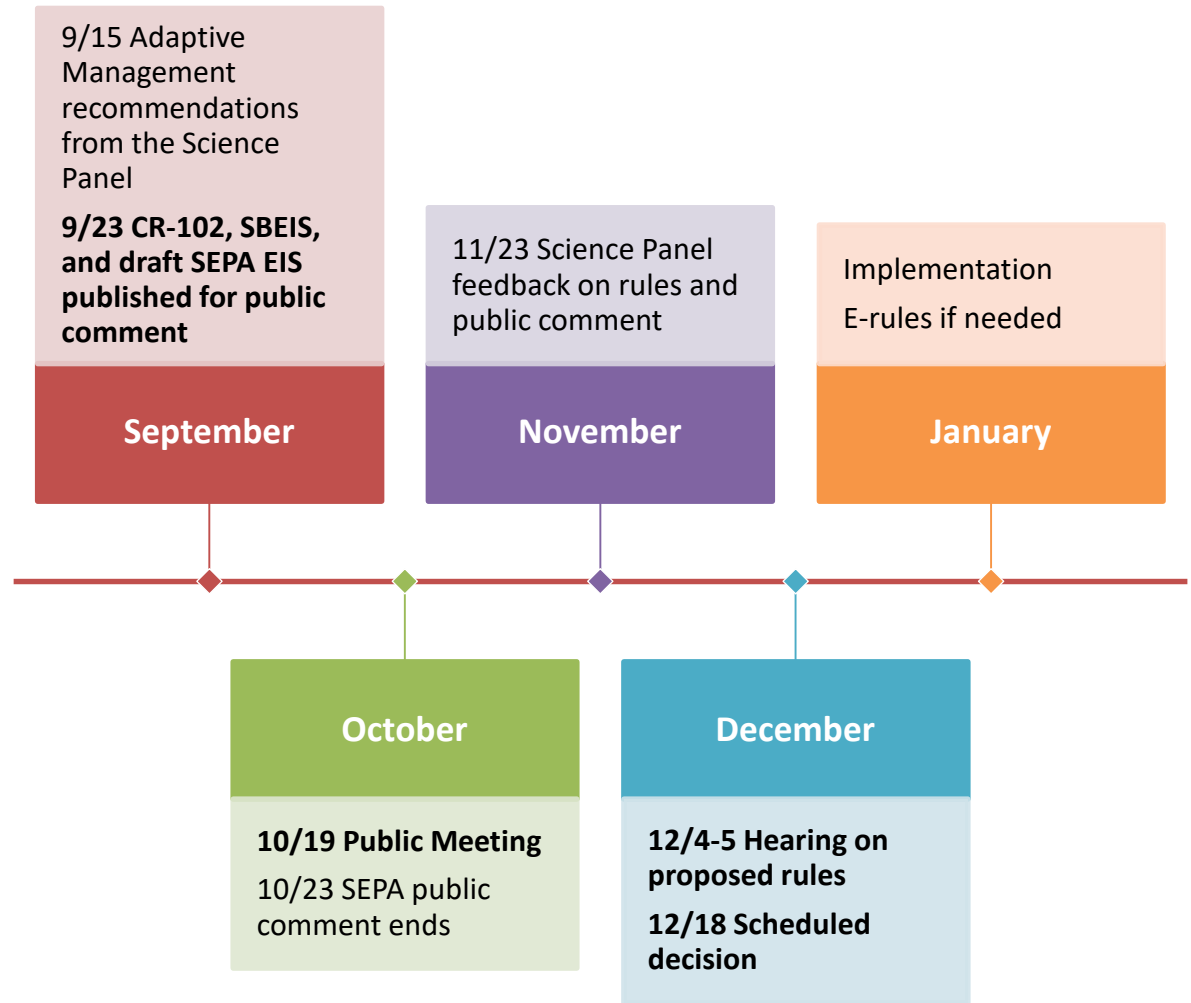
VARIABLE NUMBER OF CWW
VESSELS PERMITTED IN THE VICINITY
OF SRKW BASED ON GEOGRAPHIC
AREA



LAUNCH RESTRICTIONS FOR KAYAKS
BASED ON SRKW PRESENCE



**YOU
ARE
HERE**



What comes next?





Questions?

Julie.Watson@dfw.wa.gov



Washington
Department of
**FISH and
WILDLIFE**

Commercial whale watching lic... x +

wdfw.wa.gov/species-habitats/at-risk/species-recovery/orca/rule-making

Washington Department of Fish and Wildlife

Menu Search

Home / Species & Habitats / At-risk species / Species recovery and protection / Killer whale (orca) conservation

Commercial whale-watching licensing program

In spring 2019, the Washington Legislature (via [RCW 77.65.620](#)) directed the Washington Department of Fish and Wildlife (WDFW) to develop rules for a new commercial whale-watching licensing program enacted via [Senate Bill 5577: a bill concerning the protection of Southern Resident Orca Whales from vessels](#).

The purpose of creating and defining rules for a new licensing program is to enable sustainable whale watching while reducing the impacts of vessel noise and disturbance so whales can effectively forage, rest, and socialize.

