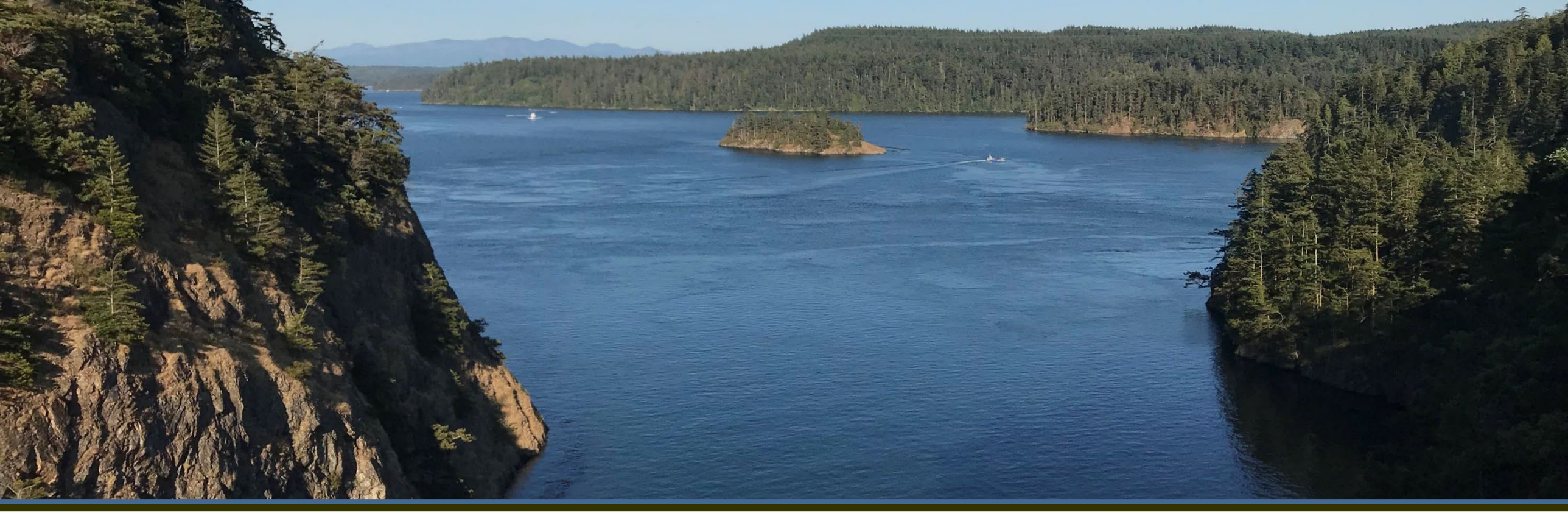


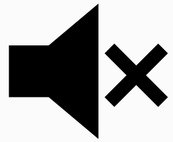
Tug Escort Rulemaking
Tribal Government Workshop 11
February 2025

Board of Pilotage Commissioners Washington State

Department of Ecology State of Washington

Zoom Reminders, Meeting Logistics

- Please use the raise hand function.
- Please use the comment function.
- Please mute while not speaking.
- Transcript of the meeting to support note-taking only.
- Please don’t interrupt others. We want to hear from everyone today.
- Closed captions are available.



Meeting Objectives

- ✓ Gain a clear understanding of the EIS and preliminary cost-benefit analysis and least-burdensome alternatives analysis findings to inform decision-making
- ✓ Review rule components needed to draft WAC
  - Functional and operational requirements
  - Geographic escort area
  - Mitigation measures
- ✓ Review potential rule proposals to be recommended by the Oil Transportation Safety Committee and voted on by the Board of Pilotage Commissioners

Introductions and Overview

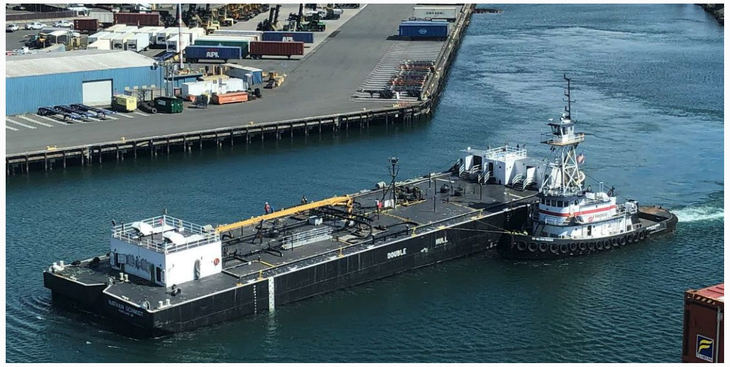
Rulemaking Overview (ESHB 1578)

Vessel Types: The BPC, in consultation with Ecology, must adopt tug escorts rules for the following vessels:

- Oil tankers, 5,000 – 40,000 DWT
- ATBs, and towed barges greater than 5,000 DWT designed to transport oil in bulk internal to the hull

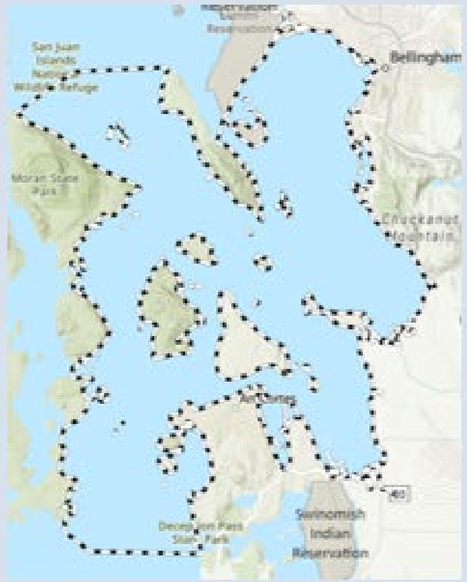
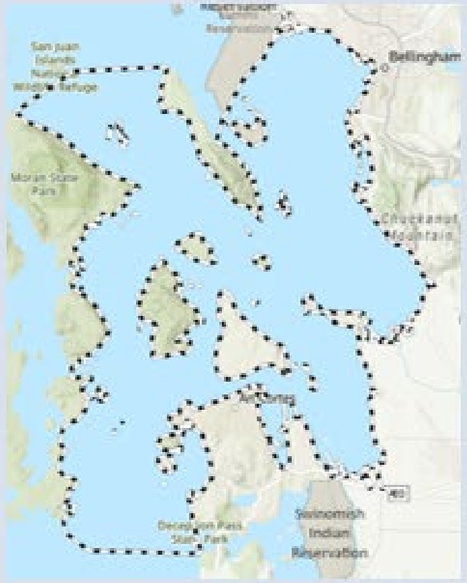
Tanker

ATB



Tank Barge

BPC vote: Alternatives under consideration

	Alt. A: No Action	Alt. B: Addition of FOR Only	Alt. C: Expansion	Alt. D: Removal
Geography	No change from 2020 	No change from 2020 	Keep 2020 + expand to SoG/SoG S. 	Remove reqs. w/in 2020 boundary 
Functional and Operational Requirements (FOR)?	No change from 2020.	ADD pre-escort conference, minimum horsepower, propulsion specifications	ADD pre-escort conference, minimum horsepower, propulsion specifications	No requirements for target vessels

BPC Vote: Elements of the environment

Element	Include in EIS
***Air Quality and GHG Emissions**	Yes
Water Quality	Yes
***Plants and Animals** (incl. SRKW, marine mammals)	Yes
Energy and Natural Resources	Yes
***Environmental Health: Releases** (oil spills)	Yes
***Environmental Health: Noise** (incl. underwater noise, ambient/operational noise)	Yes
Aesthetics, Light, and Glare	Yes
***Tribal Natural and Cultural Resources**	Yes
***Transportation: Vessel Traffic**	Yes
Recreation	Yes

Note: BPC support for focus on environmental justice – to be integrated throughout and included as its own chapter
** = Priority Element as identified by the BPC*

BPC vote: Functional and operational requirements (FORs)

Functional requirements

Tug escorts must have a minimum of:

- 3,000 horsepower
- Twin-screw propulsion

Operational requirement

- A pre-escort conference shall be held before commencing an escort.

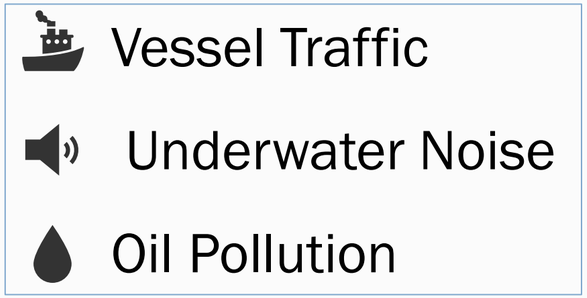
Staff Presentation

Environmental Findings (15 min)

Determination of Significance (WAC 197-11-794)

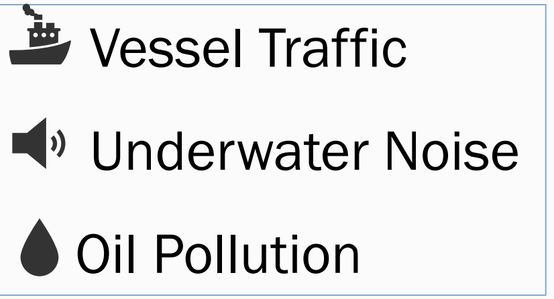
- Reasonable likelihood of more than a moderate adverse impact on environmental quality.
- Involves context and intensity (magnitude and duration of impact).
- Not a formula or quantifiable test.
- May vary with the physical setting.
- The severity of an impact should be weighed along with the likelihood of its occurrence. An impact may be significant if its chance of occurrence is not great, but the resulting environmental impact would be severe if it occurred.

EIS: Preliminary Significance Determinations



Element of the Environment	Alternative A (No Action)	Alternative B (Addition of FORs)	Alternative C (Expansion)	Alternative D (Removal)
Vessel Traffic	No	No	No	No
Oil Pollution	No	No	No	Yes
Tribal Resources	Yes	Yes	Yes	Yes
Plants and Animals	Yes	Yes	Yes	Yes
Underwater Noise	Yes	Yes	Yes	No
Air Quality	No	No	No	No
Environmental Justice	Yes	Yes	Yes	Yes

EIS: Preliminary Significance Determinations Cont'd



Element of the Environment	Alternative A (No Action)	Alternative B (Addition of FORs)	Alternative C (Expansion)	Alternative D (Removal)
Water Quality	No	No	No	Yes
Recreation	No	No	No	Yes
Visual Resources	No	No	No	No
Energy and Natural Resources	No	No	No	No

Significance Findings

1. **Tribal Resources (Alternatives A, B, C)**
    1. Environmental Justice
2. **Underwater Noise (Alternatives A, B, C)**
    1. Plants and Animals
3. **Oil Pollution (Alternative D)**
    1. Tribal Resources
    2. Plants and Animals
    3. Environmental Justice
    4. Water Quality
    5. Recreation

Tribal Resources Significance Finding (Alternatives A-C)

- Vessel traffic impacts to Tribal fishing
  - **Relevant Threshold:** Impacts to treaty fishing
- Tribes have stated that current levels of vessel traffic negatively impact treaty fishing.
- Incidents with tugs described specifically to Ecology

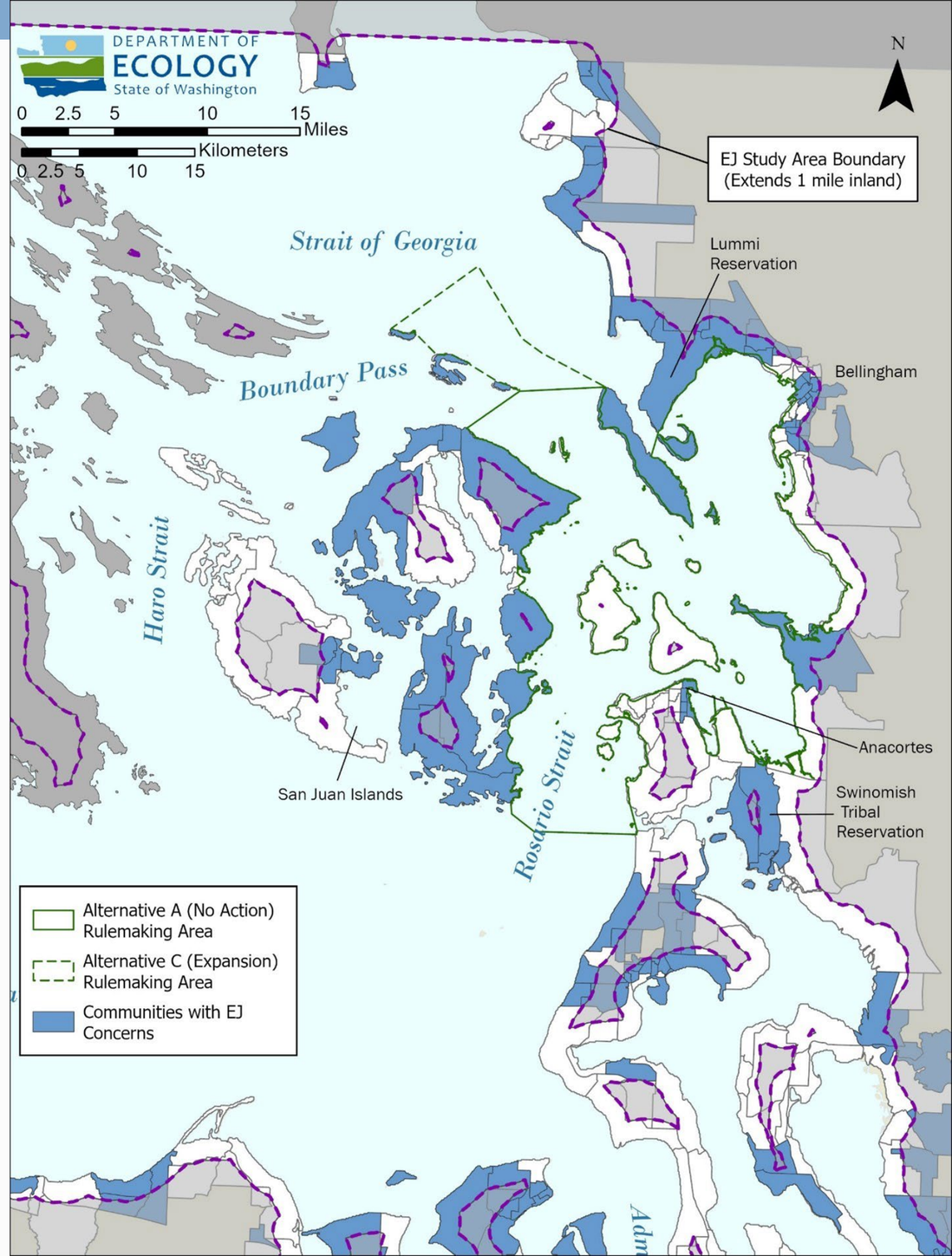
“The designated shipping lanes and anchorages in that same area take up 27% of the same waters of the Salish Sea.”

“The current amount of vessel traffic interferes with Swinomish treaty fishing in important fishing areas.”

Loomis, L. (2021). Vessel Traffic Impacts Swinomish Treaty Fishing. Shared with the Puget Sound Harbor Safety Committee.

Tribal Resources & Environmental Justice (Alternatives A-C)

- EJ Analysis includes:
  - Populations of color
  - Low-income populations
  - Tribes
- Impacts to Tribes are also EJ impacts

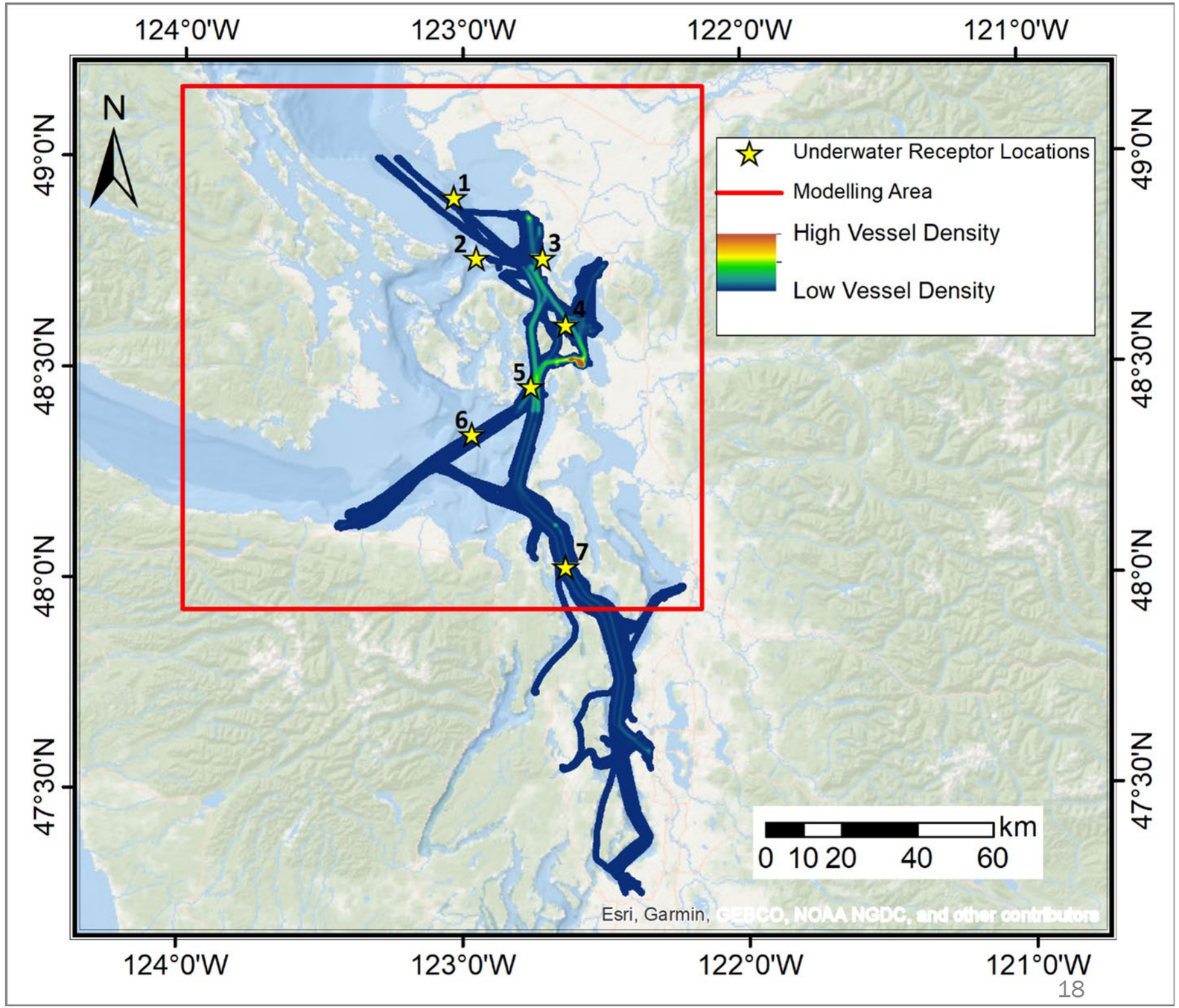


Underwater Noise Significance Findings (Alternatives A-C)

- **Relevant Threshold:** Increase in exceedance of 120 dB NMFS threshold (10% increase in time or area)
- Alternative A (No Action):
  - Average noise levels at most receiver locations higher than Alt. D
  - All 7 receiver locations reach the 120 dB threshold
  - Increase of > 10% in **time** over 120 dB from Alt. D at: Rosario, Anacortes, and Lummi locations

Underwater Noise Modeled Receiver Locations

1. Strait of Georgia
2. Boundary
3. Lummi
4. Anacortes
5. Rosario
6. Haro
7. Puget



Underwater Noise Significance Findings (Alternatives A-C), Cont'd

- Alternative B (Addition of FORs):
  - Same as Alternative A, possible minor increases in noise due to FORs
- Alternative C (Expansion):
  - Time over 120 dB remains the same as Alternative A
  - Minor increase in the area over 120 dB
  - Average noise levels: Minimal increase during winter at Boundary and Lummi locations. Minimal decrease in summer at Lummi and Anacortes locations.
- Alternative D (Removal) Note: Harmful levels of underwater noise still exist for all modeled locations.

Underwater Noise Finding Affects (Alternative A-C) :

Element of the Environment	Relevant Significance Thresholds
Plants and Animals	More than a moderate increase in adverse impacts to: • special-status species • degradation of sensitive ecological areas • Impacts expected to affect the viability of a population or ecosystem Marine mammals: increase of at least 10% in noise levels above the NMFS behavioral disturbance threshold.

Oil Pollution Significance Finding (Alternative D)

- **Relevant Threshold:** Reasonable likelihood of increase in frequency, severity, and/or extent of spills from target vessels
- Probability of a target vessel drift grounding in the EIS Study Area increases by 11.84% compared to Alternative A.
  - 167-year event (Alt. D) vs. 186-year event (Alt. A)
  - Within the rulemaking area, the increase is 90.5% (0.00042/year in Alternative A vs. 0.00081/year in Alternative D)

Oil Pollution Affects (Alternative D) :

Element	Relevant Significance Threshold
Tribal Resources	Adverse impacts to • Wildlife or habitats of cultural significance • Tribes' water-dependent activities (water quality) • Coastal cultural resources • Treaty fishing (access, operation, quality)
Environmental Justice	Disproportionate adverse impact to populations of color, low-income populations, and/or Tribes
Plants and Animals	More than a moderate increase in adverse impacts to • special-status species • degradation of sensitive ecological areas • Impacts expected to affect the viability of a population or ecosystem
Water Quality	Meaningful increase in frequency of acute water quality standard exceedances from spills
Recreation	Long-term or permanent changes to recreational access or quality

EIS: Significance Findings

Alternative	Proposed Significance Findings	
Alternative A (No Action)	• Underwater Noise	• Tribal Resources • Plants and Animals • Environmental Justice
Alternative B (Addition of FORs)	• Underwater Noise	
Alternative C (Expansion)	• Underwater Noise	
Alternative D (Removal)	• Oil Pollution • Water Quality • Recreation	

Mitigation Measures Included in the EIS

- In Rulemaking Language
- Required by Other Regulations
- Voluntary

Mitigation Measures Included in the EIS

In Rulemaking Language

Elements of the Environment	Mitigation Measures
All	• Selection of geographic alternative • Inclusion of FORs
Tribal Resources	• Operators must consider opportunities to coordinate with interested Tribes to avoid/reduce impacts
Underwater Noise, Plants and Animals	• Operators must consider opportunities to participate in voluntary noise reduction efforts

Mitigation Measures Included in the EIS

Already Required by Other Regulations

Elements of the Environment	Mitigation Measures
All	• Existing vessel traffic safety requirements • Existing oil pollution regulations
Underwater Noise, Plants and Animals	• Existing federal and state regulations protecting SRKW and other marine mammals (e.g. reducing speed, maintaining distance)
Water Quality	• Existing water quality and vessel discharge regulations
Tribal Resources	• Northwest Area Contingency Plan policies and procedures for oil spill response and cultural resource protection.

Mitigation Measures Included in the EIS

Voluntary

Elements of the Environment	Mitigation Measures
All	• Continued participation in PSHSC Standards of Care and industry best practices • Extension of applicable PSHSC Standards of Care to 5,000 – 40,000 DWT escorts
Underwater Noise, Plants and Animals	• Voluntary noise reduction efforts in the EIS Study Area • Adoption of Be Whale Wise guidance • Transition to quieter, hybrid, and/or electric propulsion when technology and cost make this feasible.
Plants and Animals	• Voluntary environmental certification programs
Tribal Resources	• Encourage operators to develop agreements with interested Tribes to improve communication and reduce impacts to treaty fishing. • Encourage operators to limit waiting time at rendezvous locations

Proposed Mitigation Rule Language

Operators must consider:

1) Opportunities to coordinate with interested Tribes to avoid or reduce impacts of tugs to treaty fishing and
2) Opportunities to participate in voluntary underwater noise reduction measures and best practices where safe and feasible to do so.

Staff Presentation

Economic Findings (10 min)

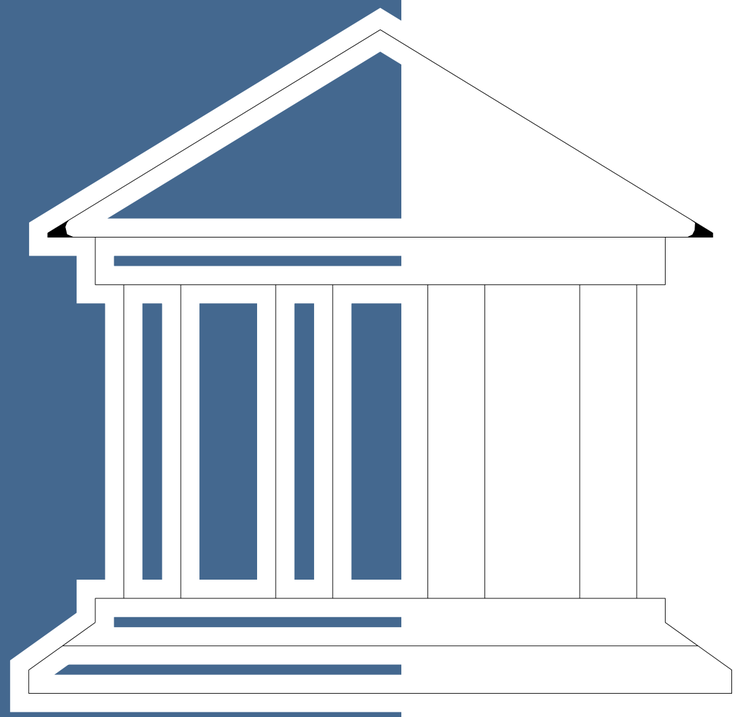
Administrative Procedures Act

Chapter 34.05.328 RCW

1. **Cost-Benefit Analysis (CBA)**
   - The benefits of the proposed rule must outweigh the costs
   - Qualitative and quantitative measures are equally considered

2. **Least-Burdensome Alternatives Analysis (LBA)**
   - The chosen alternative must meet the goals and objectives of the authorizing statute
   - Among the options considered, the least burdensome alternative for those that must comply with it must be chosen

Engrossed Substitute House Bill 1578 (2019)



"...it is the **intent of the legislature to enact certain new safety requirements designed to reduce the current, acute risk from existing infrastructure and activities of an oil spill** that could eradicate our [Southern Resident Killer] whales, violate the treaty interests and fishing rights of potentially affected federally recognized Indian Tribes, damage commercial fishing prospects, undercut many aspects of the economy that depend on the Salish Sea, and otherwise harm the health and well-being of Washington residents..."

Framework for Spill Prevention

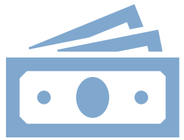
Chapter 90.56 RCW

Oil and Hazardous Substance Spill Prevention and Response

"…the legislature finds that the primary objective of the state is to achieve a zero spills strategy to prevent any oil or hazardous substances from entering waters of the state."

Quantitative Oil Spill Costs

Clean up costs



Damage Costs

SRKW Premium

Cleanup Costs

- **Factors influencing cleanup costs**: Oil type, spill location, timing, sensitive areas affected, liability limits, laws, and cleanup strategy.

- **Modern costs**: A 2019 California study estimated cleanup costs in various scenarios. We took from that $29,539 per barrel (~$36,403 per barrel in 2024). The authors note this reflects recent higher public expectations for cleanup standards.

Damage Costs

- **Natural resource and community impact costs**: Lost tourism, fishing revenues (including Tribal), recreation, and commerce.

- **San Juan Islands spill damage estimates**: 2019 Earth Economics study estimated $84.3M–$243.2M in damages for a 24,000-barrel heavy fuel oil spill across five impact categories, including property values, tourism, and ecosystem services.

- **Damage costs per barrel**: High-end damage estimate of $243.2M translates to **$12,578** per barrel in 2024 dollars.

Total Costs per Barrel

Cleanup Cost + Damage Cost = Total cost per Barrel

$36,403 + $12,578 = $49,981 (rounded up to $50,000)

The Southern Resident Killer Whales were declared endangered nearly 20 years ago.

SRKW Premium

- Contingent valuation survey in 2010.
- Valuation was for conservation efforts that would in 50 years move the SRKW from “endangered” to “recovered”.
- Households were willing to pay (WTP) roughly $1,000 over 10 years.
- This survey was mailed 8 years prior to global headlines.
- Adjusting this WTP from 2014 to 2024 dollars and multiplying the value by Washington State’s 3 million households we obtain **$3.5 billion**.

Public preferences for endangered species recovery: an examination of geospatial scale and non-market values

-Kristy Wallmo and Daniel K. Lew (Frontiers in Marine Science, 2015)

Worst-case* spill method

- Assumes a drift grounding will occur and that it will result in a worst-case spill (a spill of the entire cargo and fuel of the vessel).
- The largest target vessel has a cargo capacity of 259,000 barrels.
- Possible damage costs to vessels from drift grounding is $10 million (D)

Calculation:

($10 million + (259,000 barrels X $50,000/barrel)) + $3.5 billion =

$16.46 billion

*Defined in statute, RCW 90.56.010

Low Probability, High Impact

CBA Methods

- The methods estimate expected **avoided spill costs** by considering the probability of a drift groundings.
- A drift grounding is one specific type of incident escort tugs are well suited to addressing.
- While drift groundings are rare, they have the potential to result in catastrophic consequences.

Alternative	Reoccurrence interval for a drift grounding*	% chance of drift grounding in 20 years
A and B	186 years	10.8% chance over 20 years
C	189 years	10.6% chance over 20 years
D	167 years	12% chance over 20 years

*Chance of a spill from a grounding estimated at 0.73%

Method factoring in probability of a drift grounding

- Assumes a drift grounding will result in a worst-case spill.
- The largest target vessel has a cargo capacity of 259,000 barrels.
- Includes the difference in the odds of a drift grounding occurring using the Spill Risk Model (O).
- Possible damage costs to vessels from drift grounding is $10 million (D.)

Calculation of expected avoided oil spill cost benefit from Alternative C

O X ((D+ (259,000 X C)) + SRKW) = **Benefit**

(1/186 – 1/189) x (($10 M +(259,000 barrels x $50,000/barrel)) + $3.5 billion) =

$1.4 million /yr

❖Factoring in probability of a drift grounding AND probability of a spill from a grounding (0.73%) would result in benefit of **$11,101 /yr.**

Some quantitative cost estimates

- **Pre-escort conference**: Total cost per year based on time spent per escort, number of escorts per year, and hourly wage: **$15,581 /yr**
- **Additional costs of serving expansion area**: Includes extra tug operation time and conference costs. **$850,000 /yr**
- **Expense of added (since 2020) tug escorts**: Total cost per year based on number of escorts per year and average price of an escort based on sheets from providers operating in the area: **$20 million /yr**

Qualitative Oil Spill Costs

Unquantifiable impacts: devastating, immeasurable harm to ecosystems, cultural heritage, and community well-being, threatening critical habitats and biodiversity.

Tribal resources: Tribal nations would face severe cultural and spiritual losses, disruption of treaty fishing and harvest rights, and exacerbated social and economic inequities due to their place-based rights.

Widespread community impacts: Loss of natural and cultural resources would harm livelihoods, mental health, and public health, with long-term consequences for both Tribal and non-Tribal communities.

CBA Summary
Alternative B – Addition of FORs

Benefits

- No quantified change from Alterative A, Drift Grounding is 186-year event.
- FORs are considered to enhance safety and ensure adequate power and maneuverability to prevent drift grounding

Costs

- Pre-escort conference = $15,851/yr
- EIS adverse significant impacts:
  - Plants and animals from underwater noise
  - Tribal resources from vessel traffic

CBA Summary
Alternative C – Expansion

Benefits

- DG risk goes from a 186-year event to a 189-year event.
- FORs
- Avoided spill costs up to $1.4 million/yr IF DG➔ WCS. Total cost of WCS is $16.46 B.
- Local geography and ecosystem
- Efficiency and suitability of geographic area

Costs

- Pre-escort conference + extra operation time = $850k/yr
- EIS adverse significant impacts:
  - Plants and animals from underwater noise
  - Tribal resources from vessel traffic

Drift grounding (DG)
Worst-case spill (WCS)

CBA Summary
Alternative D – Removal

Benefits

- Amount saved on tug escorts = $20 million/yr
- Less vessel traffic
- Reduction in underwater noise
- Reduction in impacts to Tribal resources

Costs

- DG goes from a 186-year event to a 167-year event. 10.8% to 12% chance of a drift grounding / 20 yrs
- IF drift grounding ➔ WCS $10.1 million/yr, using WCS cost of $16.46 billion.
- EIS adverse significant impacts:
  - Increased Oil pollution risk affects:
    - Tribal resources
    - Plants and animals
    - Water quality
    - Recreation

Drift grounding (DG)
Worst-case spill (WCS)

Least-Burdensome Alternatives Analysis

The rule requirements must:

1. Achieve the goals and objectives of the authorizing statute; **and**
2. Be the least burdensome to those required to comply with them

1. Identify whether it achieves statutory goals and objectives

2. Choose which alternative is the least burdensome

Goals and Objectives of Chapter 88.16

- Be designed to achieve Best Achievable Protection (BAP), which considers:

  "(a) The additional protection provided by the measures;
  (b) The technological achievability of the measures; and
  (c) The cost of the measures."

- Reduce spill risk
- Specify functional and operational requirements
- Consider geographic area for tug escort requirements
- Avoid or minimize additional vessel noise
- Reduce Tribal impacts

LBA Summary

Alternative	Estimated Cost to Comply (per year)	Drift Grounding Risk Over 20 years	Other Statutory Considerations	Does it achieve BAP?
A –No Action	$20M	186-year event (10.8% chance)	Vessel noise and Tribal impacts	No
B – Addition of FORs	$20M+ $15k (FORs)	186-year event (10.8% chance)	Vessel noise and Tribal impacts	TBD
C- Expansion	$20M+ $15k+$850k	189-year event (10.6% chance)	Vessel noise and Tribal impacts	TBD
D - Removal	$0	167-year event (12% chance)	Significant oil spill risk impact	No

Discussion and Questions (10 min)

Draft Rule Language (30 min)

EIS Significance Finding Summary

Alternative	Proposed Significance Findings	
Alternative A (No Action)	• Underwater Noise	• Tribal Resources • Plants and Animals
Alternative B (Addition of FORs)	• Underwater Noise	
Alternative C (Expansion)	• Underwater Noise	
Alternative D (Removal)	• Oil Pollution • Water Quality • Recreation	

Cost Benefit Summary

	Cost (qualitative & quantitative)	Benefit (qualitative & quantitative)
B	• $**15,851** per year (FOR) • Underwater noise, tribal, and plants and animal impact	• FORs ensure escorts communicate and have sufficient maneuverability and power • Drift Grounding is **186-year event** • **10.8%** chance of a drift grounding /20yrs
C	• **$850,000** per year (FOR and expansion) • Underwater noise, tribal, and plants and animal impact	• Save up to **$1.4 M** in spill costs per year. Total cost of worst possible spill is **$16.46 B** if spill prevented by expanded escorts. • Drift Grounding **189-year event. 10.6%** chance of a drift grounding/ 20yrs • Expansion provides high escort efficiency, refines RCW area based on model and OTSC input.
D	• Up to **$10.1 M** in spill costs per year. Total cost of worst possible spill is **$16.46 B** if spill occurred due to removal of escorts. • Drift Grounding **167-year event. 12%** chance of a drift grounding / 20 yrs • Oil Pollution, water quality, and recreation impact	• Save **$20 M** in escort costs (removal of Alt A escorts) • Reduced noise and vessel traffic.

Least Burdensome Alternative Summary

	A	B	C	D
Cost to comply	• Status quo costs **$20 million** • **$0** additional costs to comply	• Status quo costs **$20 million** • **$15,851** additional cost per year to comply (FOR)	• Status quo costs **$20 million** • **$850,000** additional cost per year to comply (FOR and expansion)	• **$0** to comply
Goal: Spill risk reduction	• Drift Grounding is **186-year event** • **10.8%** chance of a drift grounding /20yrs	• Drift Grounding is **186-year event** • **10.8%** chance of a drift grounding /20yrs	• Drift Grounding is **189-year event** • **10.6%** chance of a drift grounding /20yrs	• No spill reduction achieved, Drift Grounding is **167-year event** • **12%** chance of a drift grounding /20yrs
Goal: Consider Tribal Impacts and Noise	• Vessel noise, Tribal impacts found significant in the EIS	• Vessel noise, Tribal impacts found significant in the EIS	• Vessel noise, Tribal impacts found significant in the EIS	• Oil spill risk to Tribal Resources found significant in the EIS
Goal: BAP	• No - no FORs	TBD	TBD	• No – no spill reduction achieved

Rule components needed to draft WAC text

- Functional and operational requirements
- Geographic escort area
- Mitigation measures

Potential rule language with placeholders for rule components

WAC 363 – 116 – 600: Tug escort requirements for tank vessels up to 40,000 DWT.

(1) Escort requirements in WAC 363 – 116 – 600 do not apply to:

a) vessels providing bunkering or refueling services, as defined by the Board;
b) towed general cargo deck barges; or
c) vessels in ballast or unladen, as defined by the Board.

(2) The following vessel types shall not operate in [geographic area] unless they are under the escort of a tug with [functional requirements]:

a) Oil tankers of between five thousand and forty thousand deadweight tons;
b) Articulated tug barges that are designed to transport oil in bulk internal to the hull and greater than five thousand deadweight tons; and
c) Towed waterborne vessels or barges that are designed to transport oil in bulk internal to the hull and greater than five thousand deadweight tons.

(3) [Placeholder for additional functional requirements]

(4) [Placeholder for operational pre-escort requirement]

(5) [Placeholder for mitigation]

Functional and Operational Requirement Rationale

Requirement	Rationale
Pre-escort conference	Ensures both vessels have a shared understanding of key elements of the escort operation
Twin-screw propulsion	Provide a higher level of confidence that the escort tug will be able to successfully maneuver to intervene to prevent a drift grounding and subsequent spill.
2,000 horsepower tug for 5,000 – 18,000 DWT vessels	Current industry practice for escorting of vessel less than 18,000, least burdensome alternative for these DWT vessels.
3,000 horsepower tug for 18,000 - 40,000 DWT vessels	Provides a higher level of confidence that the escort tug will have sufficient power to successfully intervene to prevent a drift grounding and subsequent spill.

Geographic escort area rationale

Area	Rationale
None (Removal)	This was considered to have a baseline to compare other alternatives against with the awareness that it could result in an increase in oil spill risk but could reduce tug escort traffic and related impacts.
Rosario Strait and connected waterways to the east (current escort area)	This is the no action alternative which was required to be considered.
Expansion area	This area is adjacent to the Rosario and waters east escort area. The Ecology model showed this area to have a high escort efficiency, and the OTSC agreed that the characteristics of this zone make it a good candidate for an escort requirement.

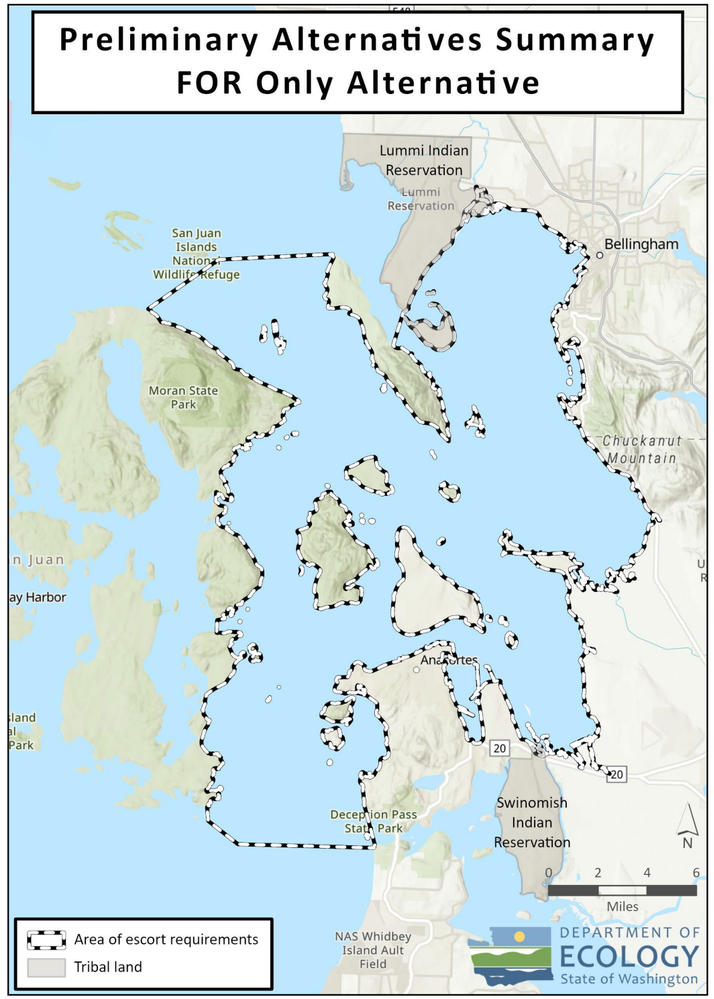
Proposed Geographic escort area

Rosario Strait and connected waterways to the east

or

Rosario Strait and connected waterways to the east and expansion area

B



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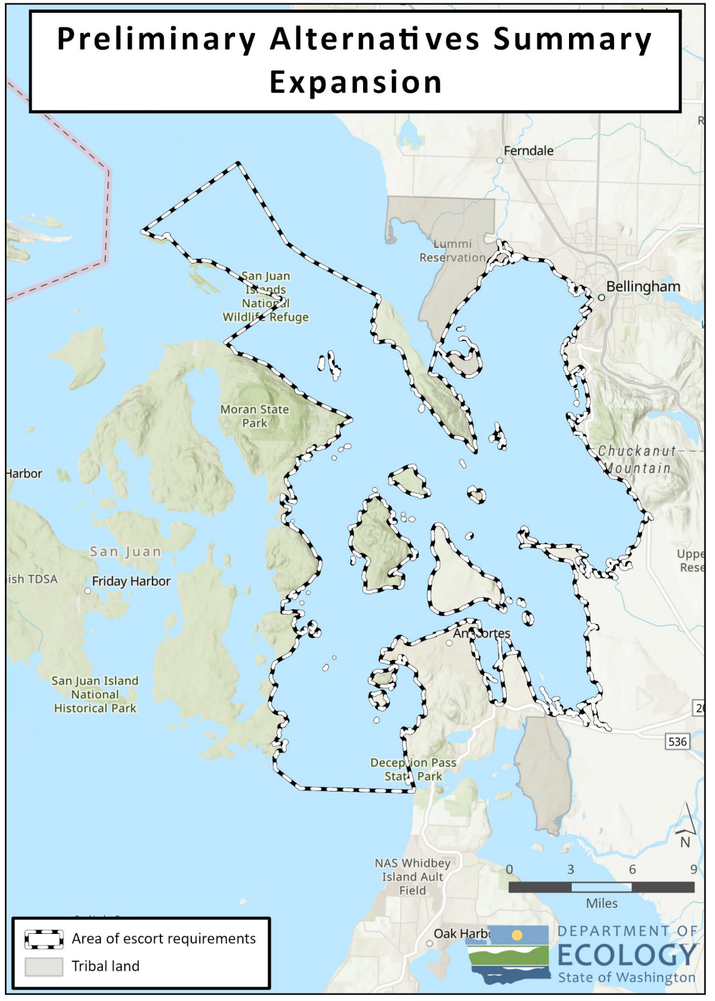


Mitigation Measures Included in the EIS

In Rulemaking Language

Elements of the Environment	Mitigation Measures
All	• Selection of geographic alternative • Inclusion of FORs
Tribal Resources	• Operators must consider opportunities to coordinate with interested Tribes to avoid/reduce impacts
Underwater Noise, Plants and Animals	• Operators must consider opportunities to participate in voluntary noise reduction efforts

Mitigation Measures – Rule Language

Operators must consider:

1) Opportunities to coordinate with interested Tribes to avoid or reduce impacts of tugs to treaty fishing.
2) Opportunities to participate in voluntary underwater noise reduction measures where safe and feasible to do so.

Mitigation Measures - Voluntary

Elements of the Environment	Mitigation Measures
All	• Continued participation in PSHSC Standards of Care and industry best practices • Extension of applicable PSHSC Standards of Care to 5,000 – 40,000 DWT escorts
Underwater Noise, Plants and Animals	• Voluntary noise reduction efforts in the EIS Study Area • Adoption of Be Whale Wise guidance • Transition to quieter, hybrid, and/or electric propulsion when technology and cost make this feasible.
Plants and Animals	• Voluntary environmental certification programs
Tribal Resources	• Encourage operators to develop agreements with interested Tribes to improve communication and reduce impacts to treaty fishing. • Encourage operators to limit waiting time at rendezvous locations

Q&A Time

Narrowing to preferred Alternative

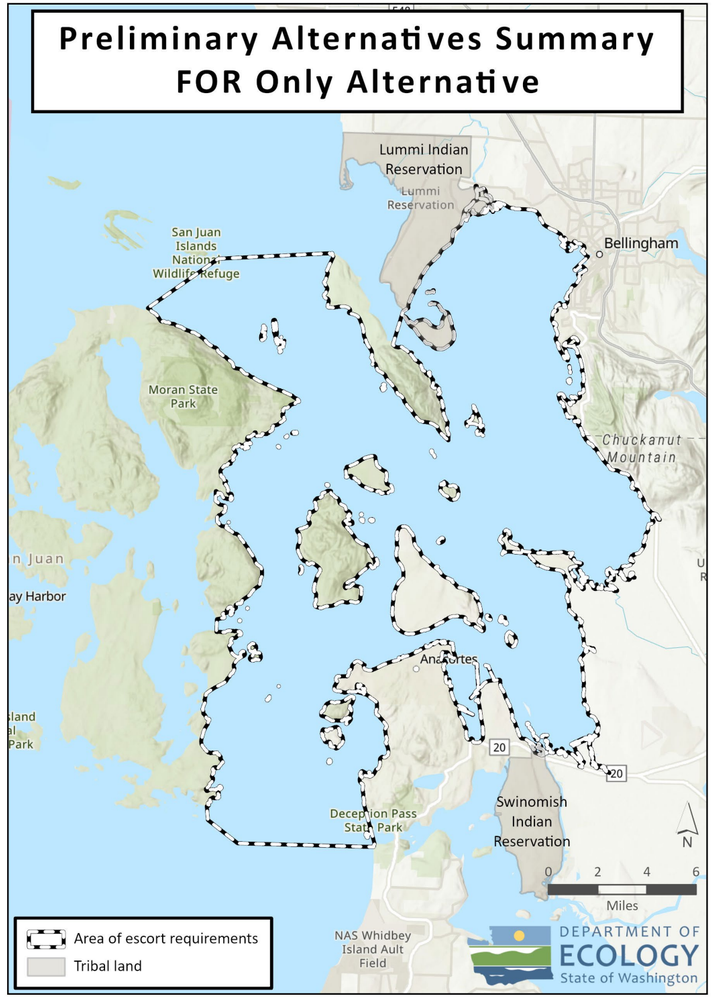
Suggest not continuing consideration of the following Alternatives:

- **A:** Does not pass the Least Burdensome Alternative criteria of achieving the Best Achievable Protection since it does not include the functional and operational requirements.

- **D:** Does not pass the Least Burdensome Alternative criteria of meeting the spill risk reduction intent of this rulemaking and does not achieve best protection.

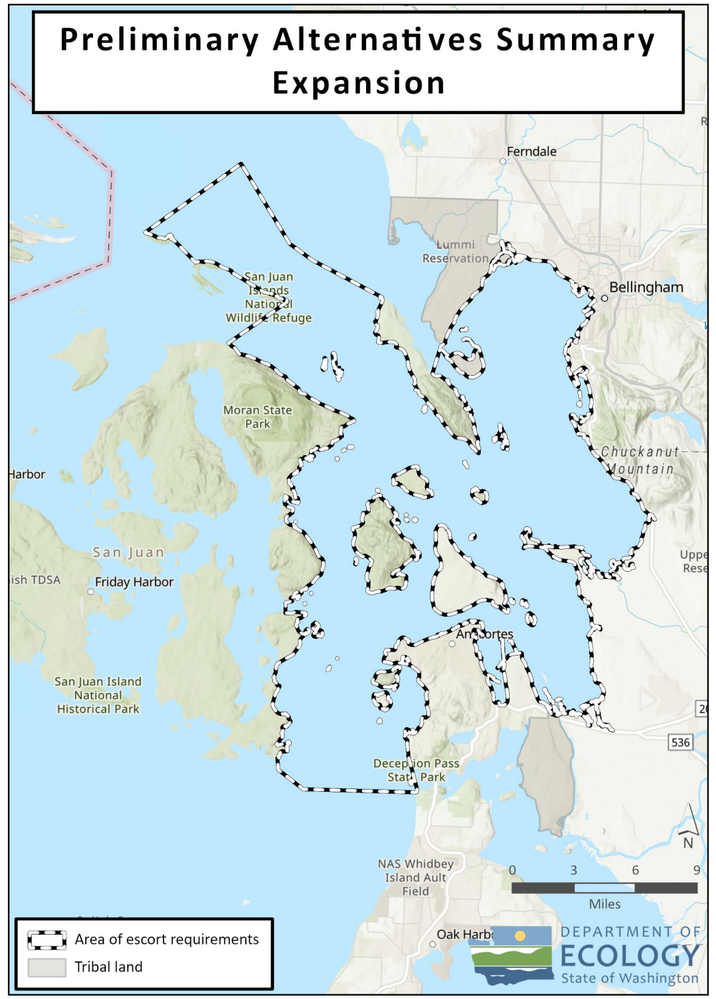
Proposal #1 : Alternative B + mitigation measures

- All functional and operational requirements
- Escorts in Rosario Strait and connected waterways to the east



Proposal #2 : Alternative C + mitigation measures

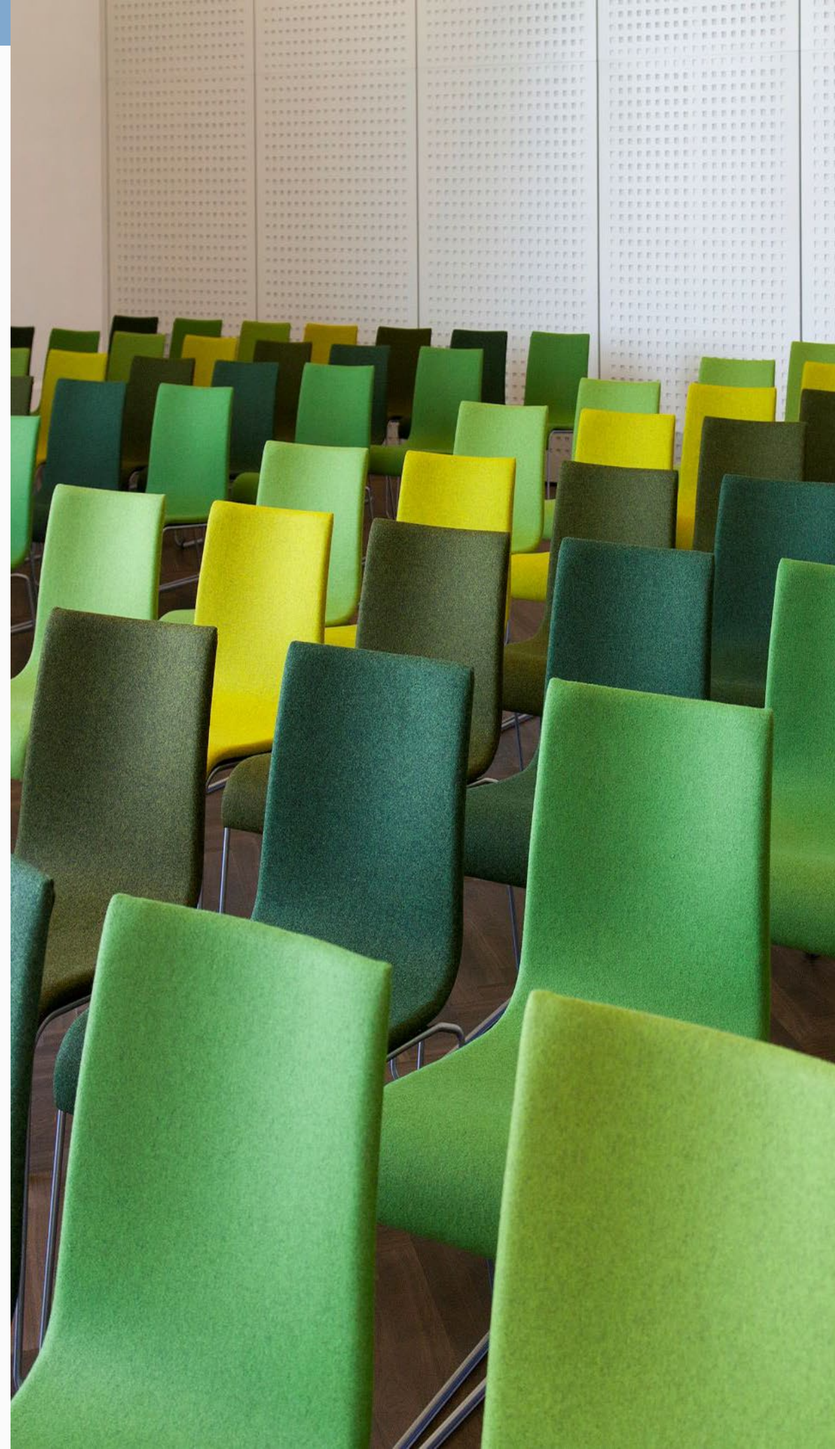
- All functional and operational requirements
- Escorts in Rosario Strait and connected waterways to the east
- Escorts in expansion area



Next Step: OTSC to develop a rule recommendation for the Board

OTSC and BPC Meeting Timeline

Date (2025)	What	Objective
February 13	OTSC Meeting	Workshop 11: Recommend proposed rule
February 20	BPC Meeting	Update on rule development
March 6	OTSC Meeting	Recommend proposed rule
March 20	BPC Meeting	Vote on proposed rule
June	BPC Meeting	BPC briefing before CR-102 filing



Final Questions or Discussion?

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