

## **Port of Grays Harbor**

### **Pilotage Report**

**March 20, 2025**

#### Pilotage Activity

There were a total of 7 arrivals in February of 2025 (4 dry bulkers, 1 liquid bulker and 2 RoRo). This equated to 20 jobs. Year to date there have been 17 vessels and a total of 25 jobs

The March schedule shows 7 arrivals scheduled so far: 3 RoRo's and another 4 dry bulkers.

#### Terminal 4 Expansion

AGP is completed in-water pile-driving by the closure of the in-water work window on February 15. This gave them a big head start on the loading superstructure. They also continue to excavate for the dump pit and rail unloading facilities.

Port Contractor Rognlin's was given a Notice to Proceed with the Port's project on March 3, 2025. This portion of the project includes additional ladder tracks and upland work. Port Contractor Quigg Brothers completed pile test probing and mobilization is expected to start in Q2 of 2025 with much of the work in Q3-Q4 of 2025. This portion of the project includes the new dock fender system and stormwater upgrades. The Port plans to open bids the final portion of the project on March 21, 2025. This portion includes the creation of wetlands on a mitigation site owned by the Port.

#### Terminal 3 Fender Rehabilitation

The Port's Terminal 3 is primarily a chip barge loading facility. However, with construction taking up a portion of Terminal 4, we wanted use Terminal 3 as a potential site for hull inspections and layberth. However, Terminal 3 has a number of the broken fender piles that need replacing and is not suitable for large vessels.

With the in water work window deadline in Grays Harbor of February 15<sup>th</sup>, the Port applied for and received an extension to our in-water work window until March 8<sup>th</sup>. Our contractor mobilized on site on February 24<sup>th</sup> and started pile removal and driving new non-treated pile on February 26<sup>th</sup>, working from the upstream portion of the wharf to the downstream portion. The new fender pile installation was completed on March 3<sup>rd</sup>. Waler re-attachment and final cleanup and demobilization was completed by March 7<sup>th</sup>. Terminal 3 is now ready to handle large vessels again.

*March 2025 Board of Pilotage Commissioners Meeting  
NWSA report notes*

**January numbers**

- Total TEU volumes are up 25.4% YTD.
- Auto units are down 32.6% YTD.
- Intermodal lifts are up 69.5% YTD.

**February numbers**

- Total TEU volumes **increased 13.7%** for the month and are **up 19.3%** YTD.
- Auto units **decreased 34.8%** for the month and are **down 33.7%** YTD.
- Intermodal lifts **increased 41%** for the month and are **up 54.2%** YTD.

**General**

- 21 anticipated so far through March
- 30 anticipated so far through March
  - Number from February report had 31 vessels – change in February number, I can dig into this in greater detail should it be of interest to commissioners.

**Gateway and Performance Outlook:** attached separately for week ending March 14.

**Tacoma/South Harbor Dredge Projects:** We have completed maintenance dredges at both TOTE and PCT as well as the “knuckle” (known internally now at NWSA/PCT as the “middle dredge”). While we anticipate going back for some minor clean up in July, we have already engaged PSP to work through the process to identify new least depths in those areas.

**Puyallup Tribe and NWSA announce partnership to develop new breakbulk terminal:** Following up on the December 2024 action to authorize execution of an MOU between the NWSA and Puyallup Tribe, March 17 was a signing ceremony to highlight the historic event for press and other key leaders. Under the terms of the MOU, the Tribe and the NWSA intend to construct a new pier adjacent to one on the East Blair Waterway and to jointly market and operate both facilities. The new pier has the working name “Puyallup Tribal Terminal.” The Tribe intends to build a new pier on approximately 22 acres of Tribal property adjacent to EB1. The NWSA will offer technical support to ensure consistency and efficiency between the piers.

**Shipbuilding Tariffs:** At the end of February, the USTR announced plans to implement a fee of \$1 million every time a Chinese-built ship calls a US port, plus additional fees based on each carrier’s net tonnage and proportion of Chinese vessels in their fleets. NWSA staff and many other stakeholders are concerned about the potential for carriers to divert additional cargo to Canadian and Mexican ports to avoid the fees, in addition to increased shipping costs being passed on to consumers. Working alongside AAPA, Seattle Commissioner Sam Cho will be in DC to testify at the public hearing on March 24. In addition, staff met with the Gov’t Affairs teams of SSA, ILWU, BNSF and UPRR in a coordinated effort to address the exclusion of Harbor Maintenance Tax on US bound cargo moving through Canadian ports.

**Port of Seattle statement summary following Tuesday Seattle Council vote on SODO housing:** “The Port of Seattle is disappointed in the Seattle City Council’s decision to move forward rushed legislation that will directly harm our city’s maritime and industrial operations, threaten thousands of union jobs, and negatively impact our region’s economic competitiveness in trade. It pushes us down a slippery slope of encroachment on industrial lands. This is a loss for the public who will pay in the future with resources, missed opportunities, and heartache... Sodo needs to be a destination for the maritime and clean energy economy, not condos. We need to execute on competing for trade and activating the clean energy transformation. We are not done fighting for that long-term vision for Seattle.”

### **Service and Operations Notes**

*No changes since February written report.*

#### **Autos**

- **Terminal 46:** Staff continues to field inquiries about the use of T-46 for auto storage. While storage capacity remains available in Tacoma, we continue to hear about the possibility of a call later this spring (now hearing possible April).

#### **Container terminal details**

##### *General*

This update covered the transition from THE Alliance to Gemini Cooperation & Premier Alliance. Premier Alliance has multiple voids in their first weeks. Gemini off to a good start: no voids first 4 weeks, all vessels tracking on time so far.

##### *T5*

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- MSC’s Chinook: No voids, 14K TEU vessels arriving from proforma ETA 13-Mar (up from average 9K TEU), Seattle will now be FPOC Seattle and include Vietnam calls
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- Swire Shipping/UWL’s Sun Chief Express: Due to ongoing delays vs. proforma, they adjusted their proforma to one week later (4-Mar to 11-Mar, fortnightly thereafter)
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### PCT

- Evergreen's ANP: Has been void nearly every other week, but weekly service on the schedule from proforma ETA 5-Mar onward
- Evergreen's ad hoc calls (HTW / CPS / OGWC): Last (?) ad hoc call for the season ETA 9-Mar

### Husky

- [Outgoing] THEA's PN3: Two more THEA voyages will call Husky, 1 more will call WUT
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## Other notes

### AD HOCS

Port Month	2022	2023	2024	2025
January	4	2	3	9
February	5	0	0	5
March	7	2	3	7
April	6	3	2	0
May	6	3	5	0
June	6	2	7	0
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August	4	3	1	0
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December	2	4	6	0
<b>Grand Total</b>	<b>53</b>	<b>33</b>	<b>36</b>	<b>21</b>

### VOIDS

#### By port month:

Port Month	2022	2023	2024	2025
January	35	24	6	8

February	36	26	7	6
March	37	26	14	16
April	29	17	4	0
May	26	19	5	0
June	33	17	7	0
July	28	17	4	0
August	30	22	3	0
September	43	12	12	0
October	36	10	8	0
November	21	8	9	0
December	32	10	13	0
<b>Grand Total</b>	<b>386</b>	<b>208</b>	<b>92</b>	<b>30</b>



# GATEWAY PERFORMANCE AND OUTLOOK



Week ending March 14, 2025

## Terminal Gate Schedule (Day Shift)

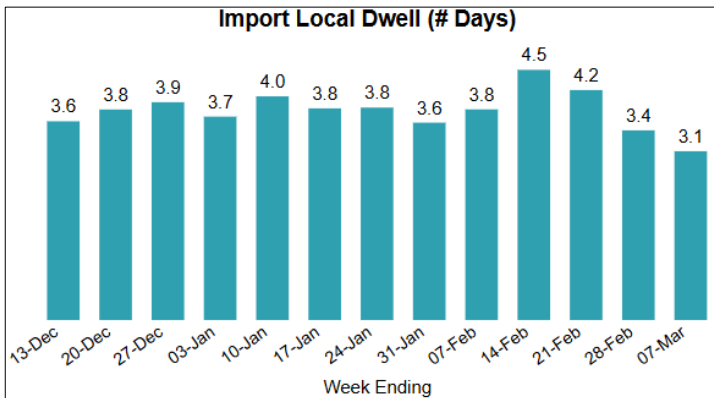
	Mon 3/17	Tue 3/18	Wed 3/19	Thurs 3/20	Fri 3/21	Sat 3/22	Sun 3/23
T5	✓	✓	✓	✓	✓	Check with SSA	Check with SSA
T18	✓	✓	✓	✓	✓		
Husky	✓	Hoot gate (0300-0700)	Hoot gate (0300-0700)	Hoot gate (0300-0700)	✓	Closed	Closed
PCT	✓	✓	Closed	✓	✓	Closed	Closed
WUT	✓	✓	✓	✓	✓	Closed	Closed
West Hylebos Yard	Closed	Closed	Closed	Closed	TRAC only	Closed	Closed

## Truck Turn Times

Average total turn times (queue + in-terminal) are provided below. Additional details on how turn times are calculated is available on the NWSA [website](#).

Week Ending	Husky Total Turn Time	PCT Total Turn Time	WUT Total Turn Time	T5 Total Turn Time	T18 Total Turn Time
7-Feb	99 min	53 min	75 min	62 min	53 min
14-Feb	87 min	63 min	109 min	70 min	47 min
21-Feb	80 min	56 min	83 min	65 min	59 min
28-Feb	132 min	49 min	110 min	75 min	58 min
7-Mar	113 min	47 min	99 min	73 min	48 min

## Import Local Dwell Time



This chart shows the average number of days local imports have dwelled on terminal by week.

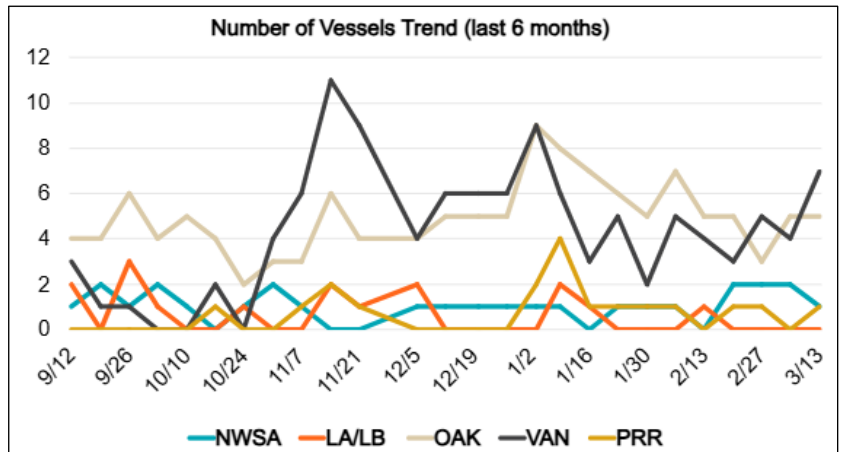
# GATEWAY PERFORMANCE AND OUTLOOK



Week ending March 14, 2025

## West Coast Container Vessels Waiting for a Berth

Port	At Anchor / Drifting as of 3/13/25
NWSA	1
LA/LB	0
Oakland	5
Vancouver	7
Prince Rupert	1



## NWSA Container Vessels Waiting for a Berth

There are no vessels waiting to berth as of March 13. For a complete list of arriving vessels see pages 6-7, or visit our online [vessel schedule](#) for the most current info.

Vessel	Terminal	Service	Current Location	ETB
YM Trillion	Husky	PN3	Drifting	Mar-19

## Scheduled Vessel Arrival & Estimated Vessel Lifts

Regular and ad hoc calls are counted as the number of vessel arrivals per week. Vessels whose berth stay overlaps into the following week are not counted in the following week's number of calls.

Terminal	March 15 – March 21		March 22 – March 28		March 29 – April 4	
	Regular Calls	Ad Hoc	Regular Calls	Ad Hoc	Regular Calls	Ad Hoc
Husky – Tacoma	2	0	2	0	3	0
WUT – Tacoma	3	0	3	0	0	0
PCT – Tacoma	1	0	2	0	0	0
T18 – Seattle	3	0	2	2	3	0
T5 – Seattle	3	0	4	0	3	0
<b>Total Vessel Calls</b>	<b>12</b>		<b>15</b>		<b>9</b>	
<b>Total Vessel Lifts</b>	<b>35,843</b>		<b>33,264</b>		<b>26,295</b>	



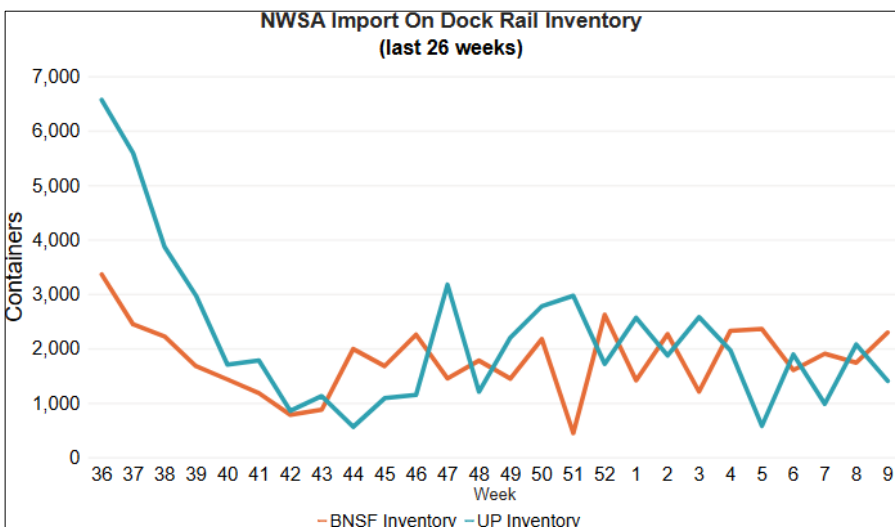
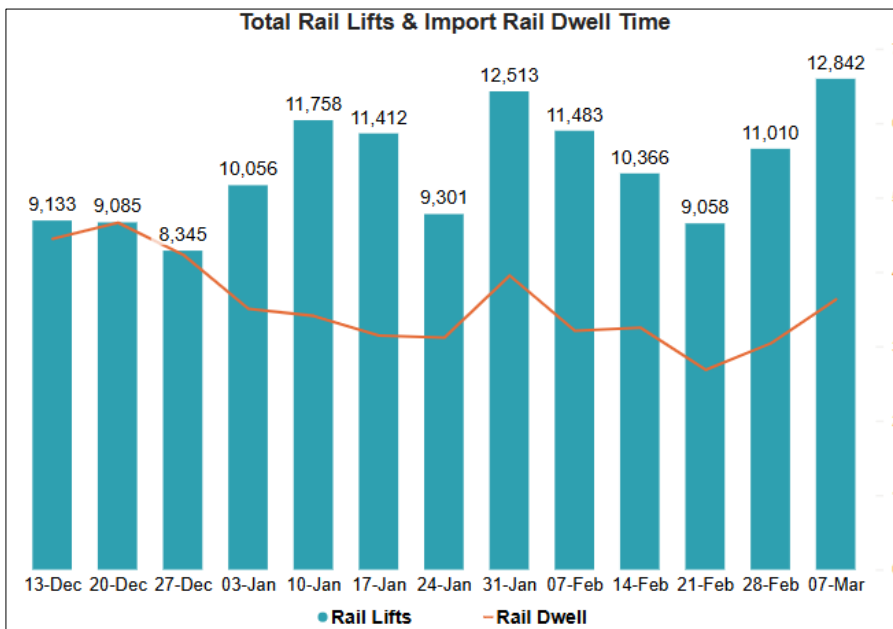
# GATEWAY PERFORMANCE AND OUTLOOK



Week ending March 14, 2025

## International Intermodal Service

These charts show the total number of rail lifts for all on dock railyards by week, average dwell time from vessel discharge to rail loading for import on dock cargo, and total import on dock inventory by railroad. Import rail dwell at on dock rail yards has **averaged 3.3 days** in the last 6 weeks.



# GATEWAY PERFORMANCE AND OUTLOOK

Week ending March 14, 2025



## Chassis Resources

- [Chassis Start Stop Locations](#) for The Northwest Seaport Alliance can be found on our website.
- If you have questions or would like further information on chassis in the PNW, please contact operators directly:
  - TRAC Intermodal: Lucy Alvaro, Regional Equipment Manager, Western Region [lalvaro@tracintermodal.com](mailto:lalvaro@tracintermodal.com)
  - DCLI: Amy Hume, General Manager, Logistics West [amy.hume@dcli.com](mailto:amy.hume@dcli.com)
  - FlexiVan/AIM: Susan Duran, Director, Western Region [sduran@flexivan.com](mailto:sduran@flexivan.com)
  - Milestone: John Kiss, Director, Regional Sales [john.kiss@milecorp.com](mailto:john.kiss@milecorp.com)

## Resources

**Rotation Schedule:**  
[Rotation Schedule.pdf](#)

**Off Dock CY Space:**  
[Off-dock Container Yard Storage](#)

**Available Warehouse Capacity (Updated 3/13):**  
[Available Warehouse & Transload Capacity - March.pdf](#)

**Drayage Provider Contacts:**  
[Drayage Provider Contacts.pdf](#)

**Ports of Call Matrix:**  
[Ports of Call Matrix.pdf](#)

**Marine Terminal Operator Contacts:**  
[Marine Terminal Operator Contacts.pdf](#)

## FOR MORE INFORMATION, PLEASE CONTACT OUR BUSINESS DEVELOPMENT TEAM

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### John Tullis

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### Jordan Hash

253.428.8659  
[jhash@nwseaportalliance.com](mailto:jhash@nwseaportalliance.com)

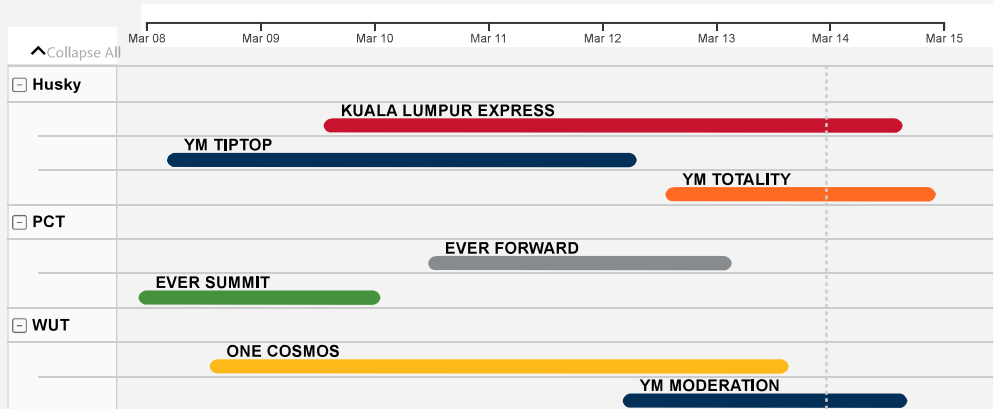
### Jeff Brubach

253.592.6211  
[jbrubach@nwseaportalliance.com](mailto:jbrubach@nwseaportalliance.com)

### Louis Terdan

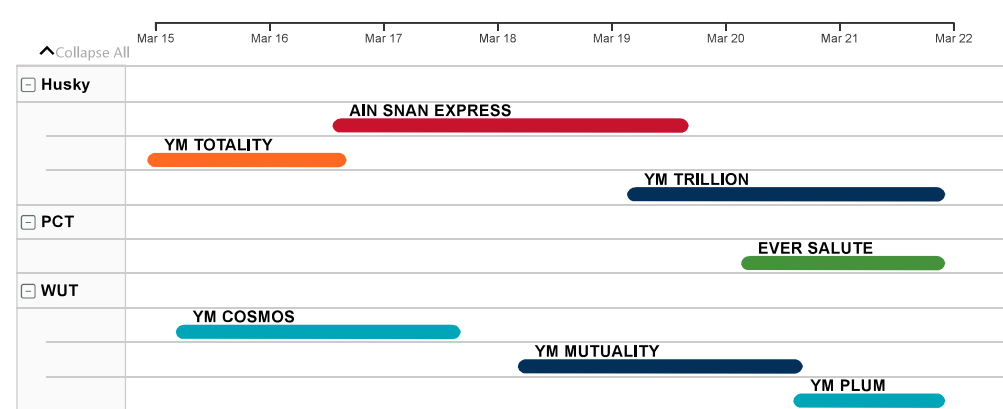
253.888.4785  
[lterdan@nwseaportalliance.com](mailto:lterdan@nwseaportalliance.com)

## Current Week



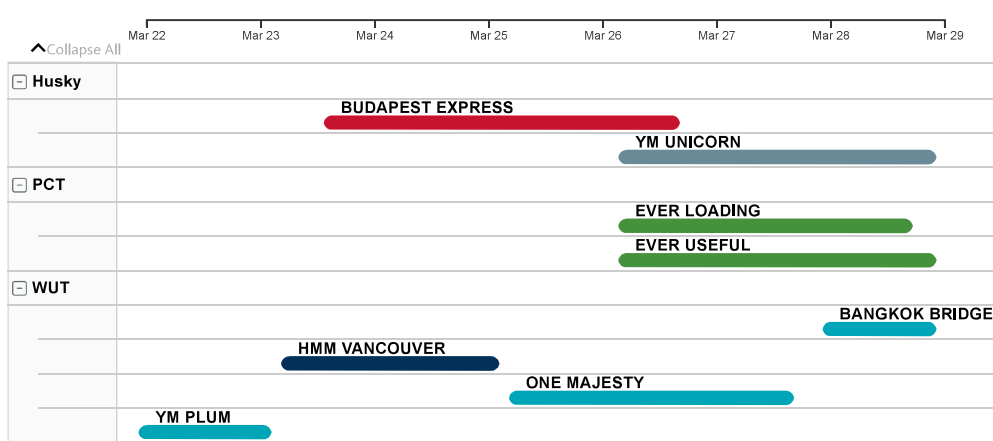
Service ● Ad Hoc ● ANP ● PN2 ● PN3 ● PN4 ● WC4/TP5

## Next Week



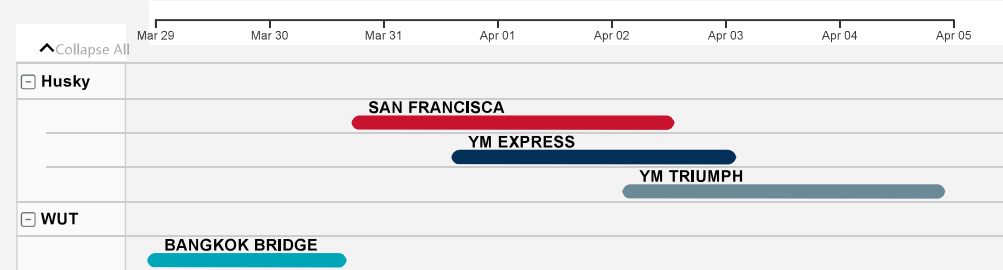
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## Week 3



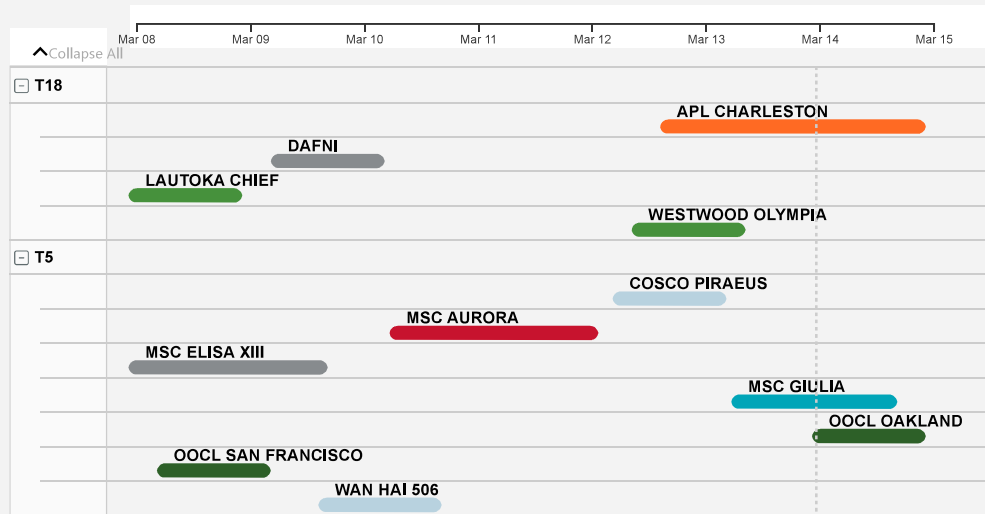
Service ● ANP ● FP2 ● PN1 ● PN3 ● WC4/TP5

## Week 4



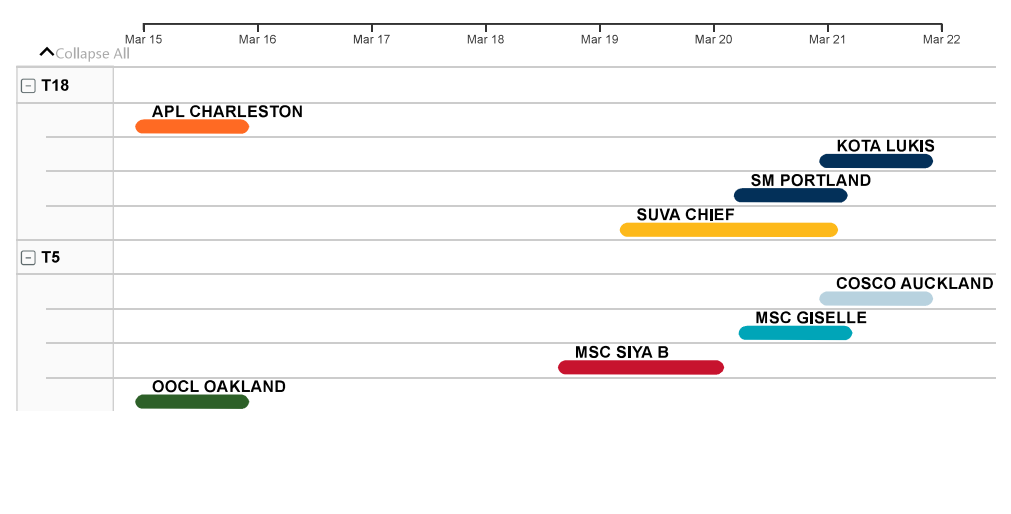
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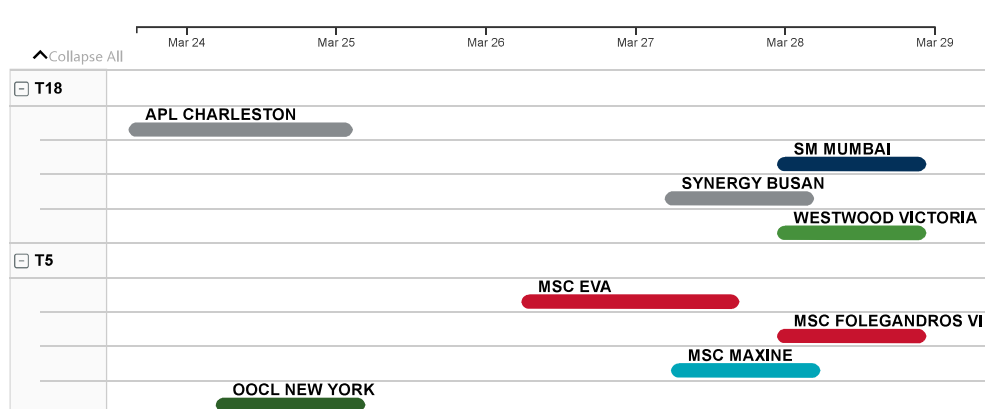
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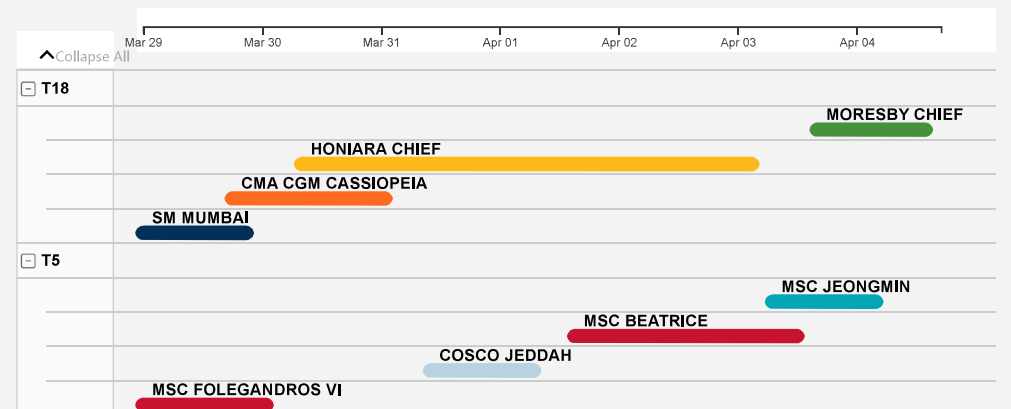
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## Week 4



Service ● Chinook ● CLX ● CPNW ● CPV ● EB Service ● PNS ● Sun Chief Express

### **December 2024 numbers**

- Total TEU volumes increased 15.8% for the month and ended up 12.3% for the year.
- Breakbulk metric tons volumes ended down 11.2% YTD.
- Auto units decreased 24.7% for the month and ended down 0.3% for the year.
- Intermodal lifts increased 12.5% for the month and ended up 19.7% for the year.

### **January numbers**

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\*\*\* waiting on February numbers\*\*\*

### **General**

- 21 anticipated so far through March
  - Evergreen's HTW/CPS/OGWC driving up ad hoc count, plus several in Seattle across multiple carriers.
- 31 anticipated so far through March
  - Big jump in number of voids across many carriers due to alliance changes, timing of Lunar New Year voids, and delayed vessels sliding to subsequent weeks.

**MSC Update on Suspension Planned Mustang Service:** MSC announced that the existing transpacific service calling Terminal 5 (Chinook) will continue, shifting to Seattle as a first port of call. The previously announced Mustang service has been suspended due to market conditions. We view this as a net positive change. Vessel size will not be limited as the Chinook will not call at Portland (the Mustang was scheduled to call Portland). Additionally, the Chinook calls Vietnam which will add capacity to this market. We are also expecting stronger IPI rail volume from this service.

### **Service and Operations Notes**

#### **Autos**

- **2024:** volumes were 337,749 units, down 0.3% for the year.
- **Terminal 46:** Staff has received numerous inquiries about the use of T-46 for auto storage in response to proposed and imposed US tariffs on foreign auto imports. Storage capacity is currently available in Tacoma, and we anticipate that we could see T-46 come into use the latter half of March.

## Container terminal details

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### **VOIDS**

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# PUGET SOUND PILOTAGE DISTRICT ACTIVITY REPORT

**Feb-2025**

The Board of Pilotage Commissioners (BPC) requests the following information be provided to the BPC staff **no later than two working days prior to a BPC meeting** to give Commissioners ample time to review and prepare possible questions regarding the information provided.

<b>Activity</b>									
Total pilotage assignments:	481			Cancellations:	17				
Total ship moves:	464	Cont'r:	151	Tanker:	162	Genl/Bulk:	95	Other:	56
Assignments delayed due to unavailable rested pilot:	8			Total delay time:	12.5 hours				
Assignments delayed for efficiency reasons:	12			Total delay time:	18.5 hours				
Billable delays by customers:	48			Total delay time:	122				
Order time changes by customers:	131								
2 pilot jobs:	32	Reason:	PSP GUIDELINES FOR RESTRICTED WATERWAYS						
Day of week & date of highest number of assignments:	SAT, 2/8/25								27
Day of week & date of lowest number of assignments:	FRI, 2/14/25								8
Total number of pilot repositions:	76	Upgrade trips	8		YTD	28			
3 consecutive night assignments:	24	YTD	55						

<b>Callback Days/Comp Days</b>					
	Starting Total	Call Backs (+)	Used (-)	Burned (-)	Ending Total
Licensed	2608	21	61		2568
Unlicensed	10			10	0
<b>Total</b>	<b>2618</b>				<b>2568</b>

**On watch assignments 456      Call back assignments 25      CBJ ratio 5.20%**

**Pilots Out of Regular Dispatch Rotation (pilot not available for dispatch during "regular" rotation)**

**A. Training & Continuing Education Programs**

Start Dt	End Dt	City	Facility	Program Description	Pilot Attendees		
13-Feb	14-Feb	Seattle	PMI	Azipod Training Facilitator	SCR(2on*)		
13-Feb	13-Feb	Seattle	PMI	Azipod Training	MEL, MIL*, SEA*, SES*		
14-Feb	14-Feb	Seattle	PMI	Azipod Training	BEN, GRK*, KEP, ROU		
1-Feb	28-Feb			Upgrade Assignments On Duty	FLE*, MAN*, MIL*, STA*, VEL*		
1-Feb	28-Feb			Upgrade Assignments Off Duty	MAM, STA, VEL		
					* On Watch	Off Watch	** paired to assign.
					11	7	

**B. Board, Committee & Key Government Meetings (BPC, PSP, USCG, USACE, Port & similar)**

Start Dt	End Dt	City	Group	Meeting Description	Pilot Attendees
1-Feb	1-Feb	Seattle	PSP	Outreach	GRK, ROU
1-Feb	2-Feb	Seattle	PSP	Ops Pilot	KEP(2on*)
3-Feb	16-Feb	Seattle	PSP	Ops Pilot	MYE(2on*, 12off)
4-Feb	4-Feb	Seattle	BPC	Pilots Safety Committee	ANA*, SCR*
6-Feb	6-Feb	Seattle	BPC	Exam Prep	BEN*, KNU, MOO
6-Feb	6-Feb	Olympia	PSP	Transportation Commission	HAM*
10-Feb	10-Feb	Seattle	PSP	BOD Executive session	GRK, HAM*, KEP*, MCG, MIL*, MYE*
10-Feb	10-Feb	Tacoma	PSP	Safe Practices	COL*
11-Feb	11-Feb	Marysville	PSP	Outreach	BOZ*



Start Dt	End Dt	City	Group	Meeting Description	Pilot Attendees
11-Feb	11-Feb	Seattle	PSP	Training Committee	BOU*, COL*, MAN*, SCR*
11-Feb	11-Feb	Tacoma	PSP	Outreach	MEL
11-Feb	11-Feb	Seattle	PSP	Rate Committee	GRK, KLA*, KNU, MCG
12-Feb	12-Feb	Port Angeles	PSP	Pilot Station site visit	MCG, MYE*
13-Feb	13-Feb	Seattle	PSP	Rate Committee	MCG, KLA*
13-Feb	13-Feb	Seattle	BPC	OTSC	BOU*
17-Feb	28-Feb	Seattle	PSP	Ops Pilot	MIL(2on*, 10off)
18-Feb	18-Feb	Seattle	PSP	President	GRK*
19-Feb	19-Feb	Seattle	BPC	TEC	BOZ, KNU
19-Feb	19-Feb	Seattle	PSP	BOD Agenda	GRK*, HAM
19-Feb	19-Feb	Seattle	BPC	BPC Prep	GRK*, HAM, KNU
20-Feb	20-Feb	Seattle	BPC	BPC	KNU
20-Feb	20-Feb	Seattle	PSP	Outreach, Seattle YC	BEN*
20-Feb	20-Feb	Seattle	PSP	Outreach, Seattle DEIB	BEN*, BOZ, HAM
21-Feb	21-Feb	Seattle	PSP	President	GRK*
21-Feb	21-Feb	Seattle	PSP	Rate Committee	GRK*, KLA**, KNU, MCG
22-Feb	23-Feb	Vancouver,WA	PSP	WC Pilot Conference	GRK(2on*), HAM(2off), KLA(2on*), (1on*, 1off)
27-Feb	27-Feb	Seattle	PSP	BOD	GRK, HAM, KEP*, MCG*, MIL*, MYE
28-Feb	28-Feb	Bainbridge Isl	PSP	Outreach, PT Madison YC	MAN
28-Feb	28-Feb	Seattle	PSP	Outreach	MCG*, VON
28-Feb	28-Feb	Seattle	PSP	NWSA	BOU, COL, STA
					* On Watch
					Off Watch
					** paired to assign.
					40
					55
					1

**Safety/Regulatory**

**Outreach**

**Administrative**

**C. Other (i.e. injury, not-fit-for-duty status, COVID risk)**

Start Dt	End Dt	REASON	PILOT
1-Feb	28-Feb	NFFD	MOO
18-Feb	28-Feb	NFFD	FLE

Trailing 12 months revenue assignments

7,438

Call back job ratio during the last 12 months (Mar 2024-Feb 2025) 10.89%

# Puget Sound District Activity Report Dashboard

2025 February

Last modified  
03/12/2025

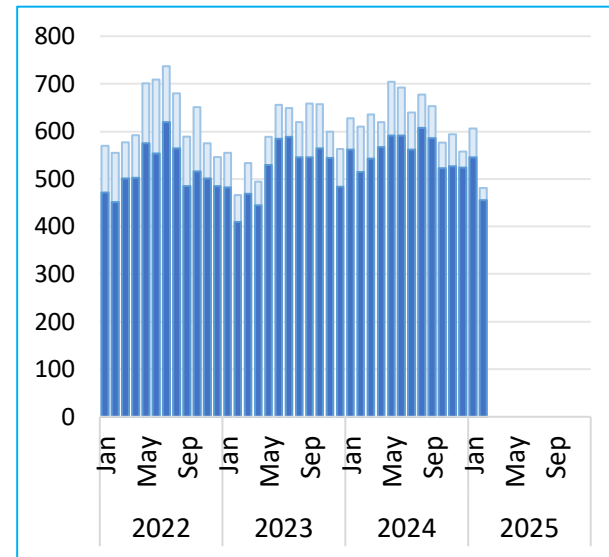
Licensed Pilots  
Including President  
**56**

No changes in February.

PS District  
Trainees  
**6**

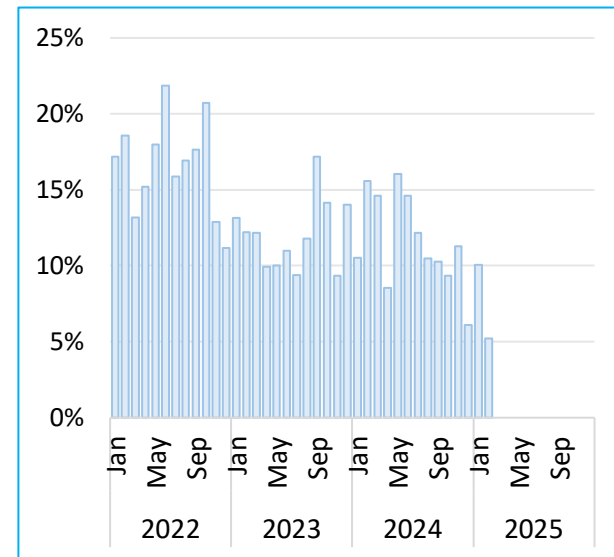
No changes in February.

Monthly Total  
Assignment Count  
**481**

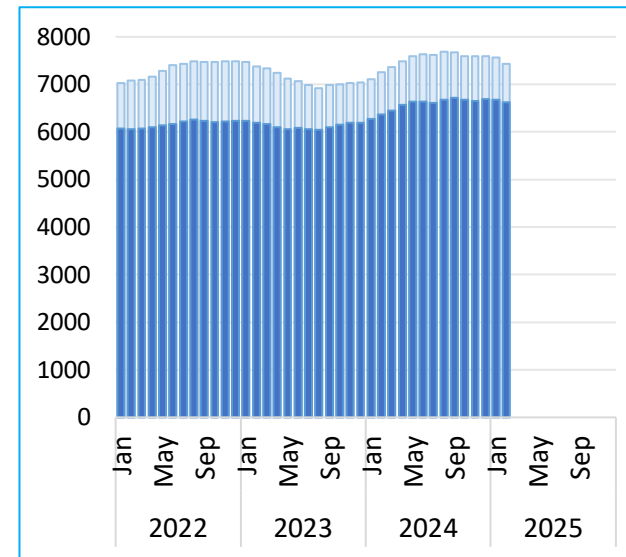


456 On-Watch (dk blue), 25 Off-Watch (lt blue)

Monthly Off-Watch  
Assignment Percentage  
**5.2%**

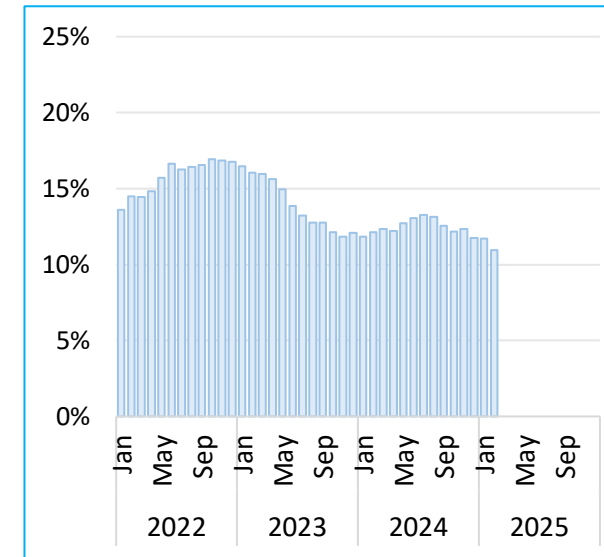


Trailing 12 Total  
Assignment Count  
**7438**



6622 On-Watch (dk blue), 816 Off-Watch (lt blue)

Trailing 12 Off-Watch  
Assignment Percentage  
**11.0%**



Licensed Pilots w/o Pres **56**  
Pilots NFFD whole month **1**  
Available Pilots **55**

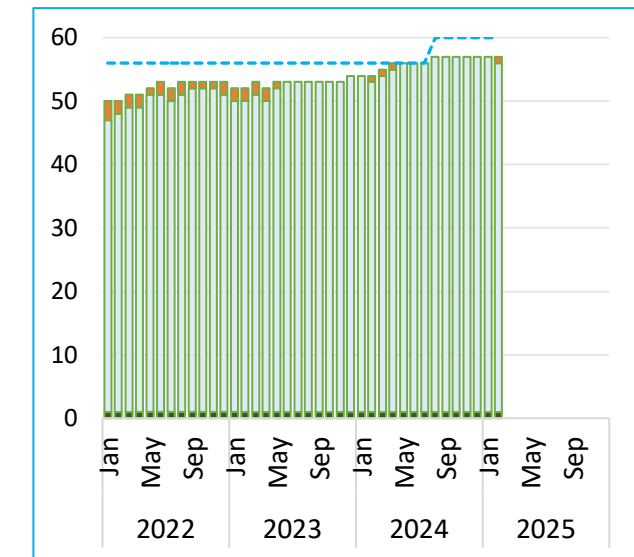
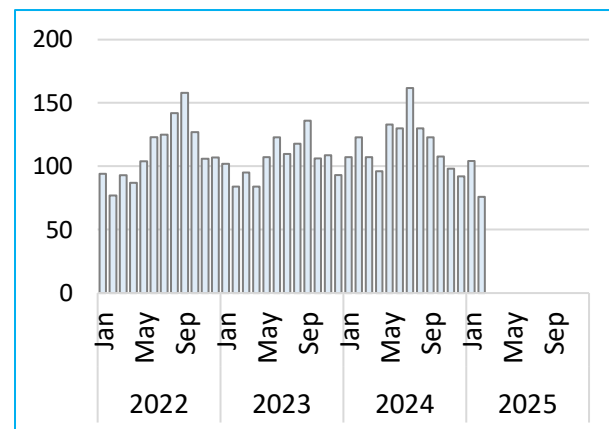
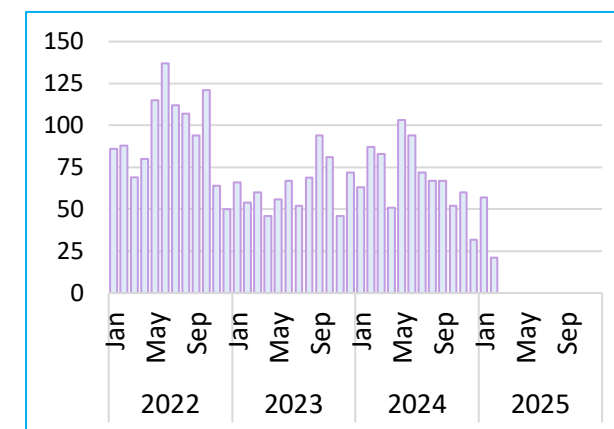


chart also includes president (1 pilot)

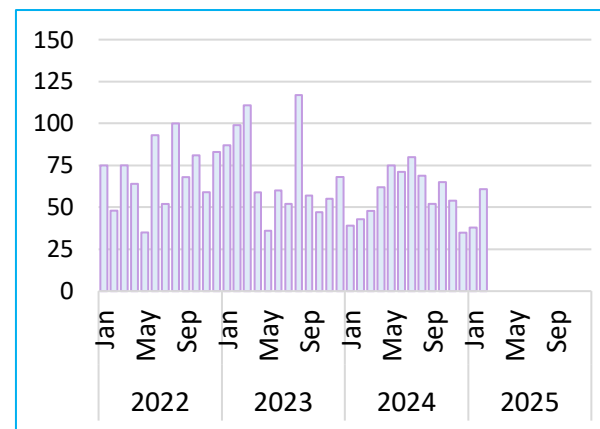
Repositions  
**76**



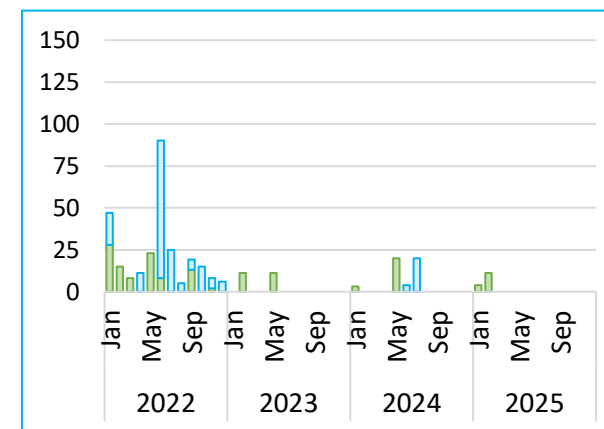
Comp Days Earned  
(Callbacks)  
**21**



Comp Days Used  
(Licensed Pilots)  
**61**

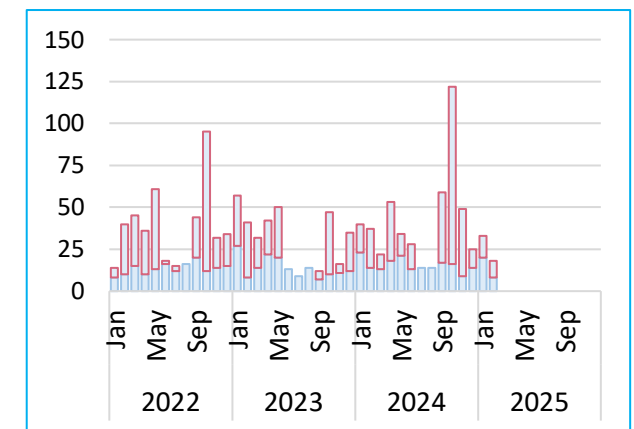


COVID Days\* **0**  
NFFD Days\* **11**



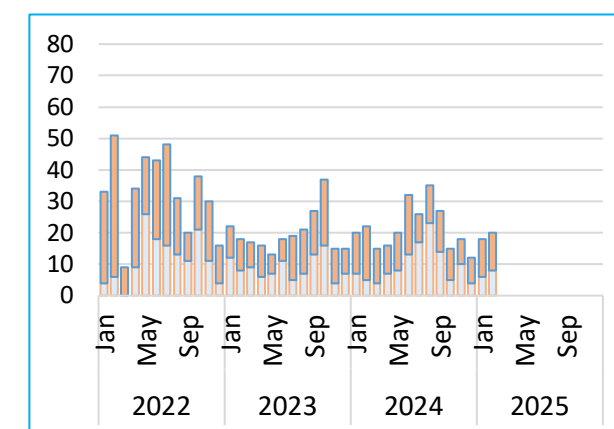
count of NFFD & Covid days if  
pilot(s) not NFFD whole month

Training Days **10**  
Upgrade Trips **8**



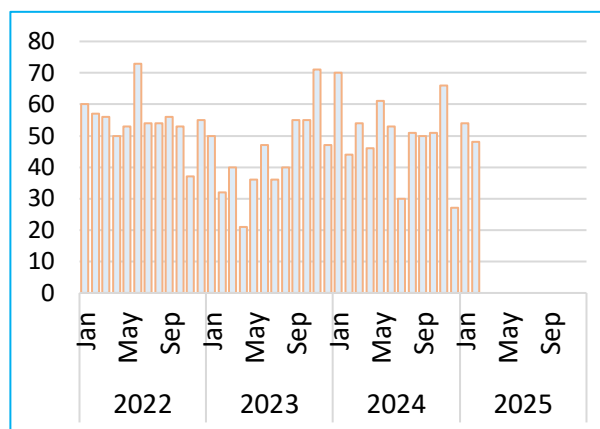
training days (red) stacked  
on upgrade trips (blue)

Pilot Delays (Count)  
combined total  
**20**

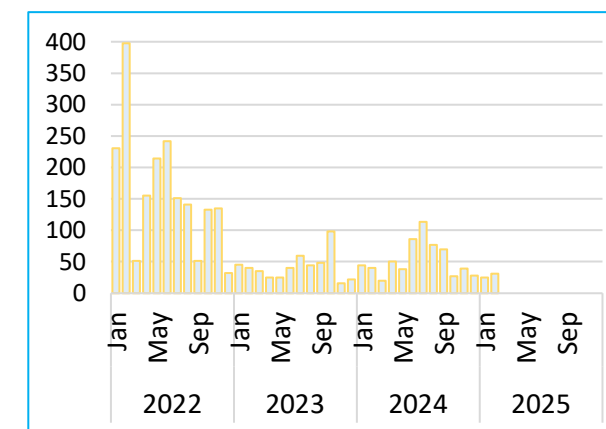


efficiency delay counts stacked on top  
of pilot shortage delay counts on bottom

Billable Delays (Count)  
by Customers  
**48**

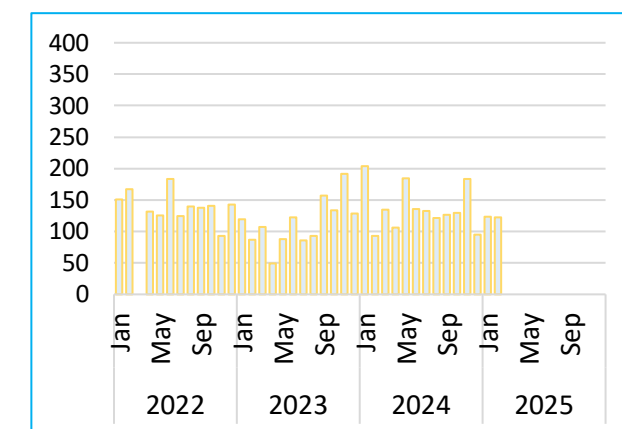


Pilot Delay Hours  
(Pilot Shortage & Efficiency)  
**31 hrs**



total pilot delay hours (not separated into  
efficiency & pilot shortage components)

Billable Delay Hours  
by Customers  
**122 hrs**





STATE OF WASHINGTON  
**BOARD OF PILOTAGE COMMISSIONERS**

2901 Third Avenue, Suite 500 | Seattle, Washington 98121 | (206) 515-3904 | [www.pilotage.wa.gov](http://www.pilotage.wa.gov)

**Meeting Minutes – Oil Transportation Safety Committee (OTSC)**

January 9, 2025, 10:00am – 12:00pm

Via MS Teams

**Attendees:**

Jaimie Bever (Chair/BPC), Adam Byrd (Ecology SME), Haley Kennard (Ecology SME), Angela Zeigenfuse (Ecology SME), Megan Hillyard (Ecology SME), JD Ross Leahy (Ecology SME), Sara Thompson (Ecology SME), Jason Hamilton (Commissioner/BPC), Blair Bouma, (Pilot/PSP), Jeff Slesinger (Tug Industry/Delphi Maritime), Brian Porter (Tribal Government/Swinomish), Clyde Halstead (Tribal Government Alternate/Swinomish), Tim Johnson (Oil Industry Alternate/WSPA), Lillie Wightman (Tug Industry Alternate/AWO), Jim Peschel (Tug Industry Alternate/Vane Brothers), Fred Felleman (Environment/Friends of the Earth), Rein Attemann (Environment Alternate/WEC), Allen Posewitz (Ecology SME), Brian Kirk (Ecology), Sheri Tonn (Ex Officio/BPC)

**1. Welcome & Meeting Minutes**

Jaimie Bever (OTSC Chair/BPC) welcomed everyone to the meeting and introduced the team. The group reviewed and finalized the minutes from the November 14 meeting.

**2. Meeting Objectives**

Jaimie began the presentation by clarifying that the meeting was exclusively for OTSC members. It was a standalone session, separate from the regular workshop series, to give the OTSC an opportunity to learn more about the status of the rulemaking process and to serve as a check-in with the team ahead of the February workshop series.

Since the last workshop series in October, there's been a lot of ongoing work and discussions, particularly around the findings from the Environmental Impact and the Preliminary Economic Analyses. The slide showed a list of meeting objectives:

- Review BPC votes to date as a reminder of how the OTSC arrived at this point and how those decisions shaped the analyses conducted to help inform the potential rule language.
- Look at two preliminary inputs to the rule language. Specifically, the team will be sharing insights from the Preliminary Economic Review and the draft Environmental Impact Statement. Jaimie noted that the findings being shared today are still preliminary, so they might change before being included in the official reports that will be part of the proposal filing packet in late Spring. Once those reports are published, the OTSC will have the chance to review the results in detail and provide comments during the formal public comment period that follows.
- After that, the focus will be on the potential rule language that incorporates the findings from these inputs.

- Finally, the team will go over the next steps and discuss whether there's anything else the OTSC needs to prepare for finalizing a recommendation on rule language to the BPC at the next meeting.

### 3. OTSC Decision Process

This slide offered a reminder to the OTSC on the decision process for making a Board recommendation. In February, the team will be holding the final workshop series, and this one will focus specifically on the draft rule language. They will also provide a high-level summary of the inputs that influenced the decision. After this workshop, the rule team has about one month to update the language based on feedback from stakeholders, Tribal governments, and the OTSC. The OTSC will be expected to provide a recommendation to the Board before they vote on March 20. This recommendation will be on the proposed rule language, which will be filed in the State Register in late Spring. The team will also make sure to capture both majority and dissenting opinions in the recommendation document. This will provide the BPC with a well-rounded view of all perspectives before making the final decision.

### 4. Ground Rules

To support the large amount of info to cover at the meeting, the team proposed a few ground rules for the workshop:

- **Respectful Dialogue:** speak courteously, focus on ideas, not individuals;
- **One Voice at a Time:** Allow everyone to finish before responding;
- **Share Your Perspective:** Represent **your own** expertise, views, and knowledge;
- **Agree to Disagree:** Acknowledge different opinions respectfully;
- **Focus on Solutions:** Aim for constructive outcomes and actionable steps; and
- **Respect Time Limits and Agenda:** Aim to keep comments on topic and concise. Allow space for everyone to contribute.

The team planned to use a Round Robin approach to gather feedback on specific items. Those are highlighted throughout the presentation.

Jaimie then asked if there were any questions, additions, or modifications to the ground rules. There were none. She also asked if anyone anticipated having trouble sticking to the ground rules. Again, there were none.

### 5. BPC Vote: Alternatives on Escort Zones

The discussion began by reviewing the BPC votes to date. Jaimie started with a familiar slide that included a table and some visuals that lay out the four rule alternatives the BPC voted to evaluate. These alternatives consider different geographic zones and the functional and operational requirements that target vessels would need to follow. Each alternative represents a potential direction for the draft rule language. The BPC's goal in evaluating these alternatives is to understand not only their environmental impacts but also how they fit within other regulatory frameworks—like the associated economic costs and benefits.

The first row in the table specifies WHERE the tug escort requirements would apply to target vessels. The second row specifies whether functional and operational requirements would be applied. As a reminder, the BPC voted to include 3 functional and operation requirements:

- A pre-escort conference
- Tugs escorting target vessels much have a minimum of 3,000 horsepower
- Tugs escorting target vessels much have twin screw propulsion system or better.

**Alternative A is the No Action**

**Alternative.** It maintains both the geographic scope of tug escort requirements for target vessels, and the functional and operational requirements included in ESHB 1578.

**Alternative B is the Addition of Functional and Operational Requirements Only.**

It maintains the geographic scope of tug escort requirements for target vessels and ADDS the new proposed functional and operational requirements.

**Alternative C is the Expansion Option.** It maintains the 2020 requirements for target vessels and expands the area they are required north along the San Juan Islands to Patos Island. The expansion area is noted by the red arrow. It also adds the new proposed functional and operational requirements.

**Alternative D is the Removal Option.**

It removes all tug escort requirements for the target vessels. Tug escort requirements for tankers over 40,000 DWT remain unchanged.


	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

**6. BPC Vote: Elements of the Environment**

The slide lists all the elements of the environment that the BPC voted to include in the environmental impact assessment. The primary elements are marked with an asterisk

and include, air quality and greenhouse gas emissions, plants and animals (including SRKWs), environmental health as it relates to oil spills, environmental health as it relates to underwater noise, Tribal natural and cultural resources, and vessel traffic.

The non-priority elements include water quality, energy and natural resources, aesthetics, light, and glare, and recreation. We'll provide a high-level overview of our significance determination findings for all of the elements later in the presentation.

**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
Historic and Cultural Resources (other, non-tribal)	No
*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

**7. BPC Vote: Functional and Operations Requirements to Evaluate in Rule Alternatives**

The Board also voted to consider functional and operational requirements for tugs escorting covered vessels in this rulemaking in July. This vote was informed by a few OTSC meetings held prior to July and largely based on subject matter expertise. During those meetings, the group discussed various functional and operational requirements that could potentially be part of the draft rule language. Ultimately, the OTSC narrowed it down to two functional requirements for escort tugs: a minimum of 3,000 horsepower and twin-screw propulsion. The group also identified one operational requirement: conducting a pre-escort conference before beginning an escort transit.

Jaimie then handed the presentation over to Sara Thompson (Ecology SME).

## 8. Transition: Rule Language Development

Sara stated that the info provided in the first half was a great overview to bring everyone to the same starting place. In this section the focus will be on:

- Review draft rule language based on the BPC vote input
- Review inputs to the draft rule language from the Preliminary Economic and Environmental review
- Review updated rule language informed by these inputs

## 9. Potential Rule Language Based on Vote Input

Sara then presented potential rule language based on input from the BPC votes to date. WAC 363 – 116 – 600 would be a new section in the WAC after 363-116-500 Tug escort requirements for oil tankers. Subsection 1 Spells out that this new section does not apply to:

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

Subsection 2 Describes the boundaries of the geographic area of the selected alternative. It also describes the twin screw and 3000 hp requirement and the applicable vessels (oil tankers between 5 – 40,000 DWT, ATB and barges greater than 5000 DWT)

### Potential rule language based on vote input



#### 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 a minimum of twin-screw propulsion and 3,000 horsepower:
  - 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.

## 10. Potential Rule Language Based on Vote Input

The next slide continues the potential rule language based on input from the BPC votes to date. Subsection 3 includes the pre-escort requirement language. Sara mentioned that homework between this OTSC meeting, and the next one will be to review and provide any recommended edits to this pre-escort conference text (re-ordering, clarifying).

## Potential rule language based on vote input



(3) Before commencing an escort required in WAC 363 – 116 – 600, the escorted vessel officer in charge shall hold a pre-escort conference to confer with the escort vessel officer in charge and the pilot (if applicable) to discuss and agree upon the operational details of the transit. The pre-escort conference must be recorded in the logbooks of the participating vessels and must include:

- a) location and approximate time of the escorted transit beginning and end;
- b) anticipated route and destination;
- c) anticipated speeds along the transit;
- d) primary and secondary means of communication (i.e., VHF channels);
- e) anticipated weather and state of tides, currents, sea-state and anticipated traffic;
- f) operational status of each vessel and their equipment including any limitations such as speed;
- g) propulsion type and maximum direct bollard pull of the escort tug;
- h) safe working load of the deck fittings on the escorted vessel;
- i) availability of appropriate crewmembers and their roles when responding to an emergency;
- j) relative position, direction of travel and tethering locations of the escort tug(s) while on transit;
- k) method of connection of the escort tug to the tank vessel in an emergency or if tethering (i.e., tugs line, pennant, messenger lines etc.);
- l) Whether any training or escort exercise will be performed during the transit; and
- m) Any other items to ensure that the escort transit is conducted in such a way that in the event of a failure or emergency the tank vessel can be kept under control within the limits of the available channel.

10

### 11. Transition: Insights from Preliminary Economic Review – Cost of 3,000 Horsepower Requirement

Sara then turned the discussion to looking at insights from the economic review. The first insight related to the proposed requirement to use a 3000 hp tug to escort the vessels under this rule.

### 12. 3,000 Horsepower Requirement – Original Rationale

The original rationale for the 3000 hp tug was that:

- Horsepower is a measure of tug power and high horsepower is desirable in an escort tug for tank vessels
- In Massachusetts, tugs are required to have at least 4,000 hp.
- There are at least 13 tugs in this region with hp 4000 and 7200 currently conducting the >40,000 DWT escorts in the region

The BPC voted to have the rule team evaluate a 3000 hp requirement for this rule based on the OTSC's recommendation.

### 13. Cost of 3,000 Horsepower Tug Requirement

Based on the OTSC recommendation and the BPC vote, the rule team assessed the economic impact of applying the 3000 hp tug requirement to all of the vessels escorted under this rule. The economic analysis indicated that it may cost \$7,000 more to hire a 3,000 or greater hp tug than to hire a 2,000 or greater hp tug. Some industry representatives also raised concerns about the additional cost to use a 3000 hp rather than a 2000 hp tug. Cost is an important consideration when choosing a rulemaking alternative. RCW 34.05.228 requires selection of an alternative that is the least burdensome to those required to comply with it provided it meets the goals and objectives of the authorizing statute.

### 14. Rationale for Proposed 3,000 Horsepower Tug Requirement for Vessels 18k-40k DWT

The rule team explored options to reduce the cost of this hp requirement while still maintaining the desired level of environmental protection and reassurance that the escort tugs would have sufficient power to successfully intervene to prevent a drift ground and subsequent spill.

The rule team proposed setting the 3000 hp tug requirement for escorted vessels between 18,000 – 40,000 DWT instead of for all target vessels escorted under this rule. The team believes this



amendment aligns with current industry practice and is a less burdensome option to meet the goal of this rulemaking.

The team also reviewed AIS history and found that 11 target vessels may have used 2000 hp tugs in the first year of the Rosario and waters east escort requirement. Each of these 11 vessels was under 18,000 DWT. They also met with the OTSC pilot member to better understand the use and capability of 2000 hp tug for escorts. The concerns voiced in that conversation were similar to the concerns previously voiced by the OTSC about the capability of 2000 hp tugs to control larger ATBs and tankers in an emergency event.

The team's conclusion was that requiring a 3000 hp tug to escort vessels over 18,000 DWT aligns with current observed escort practices and is a less burdensome option to meet the goal of this rulemaking.

Jaimie then announced that she would call out the representatives for their comments about this proposal.

*Blair Bouma (Pilot/Puget Sound Pilots) responded that he supported the proposed change.*

*Clyde Halstead (Tribal Government Alternate/Swinomish) did not wish to take a position, deferring to those with greater knowledge of tug horsepower and requirements.*

*Fred Felleman (Environment/Friends of the Earth) wondered if the proposal was consistent with Massachusetts requirements. Sara responded that their floor is 4,000 hp but noted that they are in general fairly different from Washington State's. Fred then asked for the rationale for using something less than Massachusetts. Sara responded that it was an incremental progress concept in that the 40,000 and greater deadweight ton tankers have that 5% of the deadweight ton of the escorted vessel requirement. When talking about horsepower, it was with an awareness that the 40,000 deadweight tankers could use a 2000 horsepower tug all the way up to the 60,000 deadweight tankers, which is where that 5% brings them to a 3000-horsepower tug. She believed the absence of any direct studies on their relationship between specific horsepower and the ability to see a vessel and emergency event, this was where they landed. Fred then asked for information regarding their rulemaking process for the current requirements in Massachusetts.*

*Jeff Slesinger (Tug Industry/Delphi Maritime) agreed with pre-Escort conference list but suggested the addition of another line item for safety of personnel as something that would be discussed. To add context on the Massachusetts law, it was the result of a tugboat that caught on fire and got disabled which resulted in the oil barge running aground. So, they came up with this rule, but this was several years ago and at that point in time the predominant tug in that area was not a Z Drive or Voith tractor tug. It was a conventional tug. They likely had a bunch of those types of tugs doing work in the area. He didn't know if the team would be able to find any great scientific data to support that. It was more in the context of what was available and historically the type of equipment they were using at the time of that incident, which was different than what is operating in Puget Sound right now.*

*Tim Johnson (Oil Industry Alternate/WSPA) supported the rationale.*

*Jason Hamilton (BPC) supported the proposal as well.*

*Rein Attemann (Environment Alternate/WEC) per the Team Chat function questioned the additional cost of \$7,000 per tug per escort and what was the total number of 3000 hp tugs operating in the Salish Sea.*



*Allen Posewitz (Ecology SME) stated that the economics team was looking at the published price sheets that the operators have provided. He added that Centerline Logistics operates those tugs that are 3000 hp and below. And so, the economics team was comparing their price sheets to the operators of the bigger tugs. He confirmed that it is per escort job, but likely the high-end of the range. Regarding Rein's second question, Sara responded that there were some places to find that information and one of them was the trend synopsis which presented the tugs that escorted in the first year of the Rosario and Waters East implementation and their dead weight tonnage. She also pointed to the BPC Annual Report, which includes the dead weight tons of all of the tugs that are escorting those 40,000 greater tankers.*

*Fred Felleman (Environment/Friends of the Earth) stated that the absolute number was important to know, but relative to what it costs to escort, it was important to understand incremental expense. He asked for the rate for this duration of escort. Sara responded that the ballpark figure was \$10k-\$25k. Allen added that the rate sheets from Crowley and Foss showed an escort from up to either Anacortes, Cherry Point, or Ferndale. They're typically in the \$25,000 range and so. In Centerline's price sheets for all N Puget Sound were \$20,000 per escort. Fred replied that if the pilots were okay with the proposal, then he was okay with it.*

## **15. Transition: Insights from Preliminary Economic Review – Rule Benefits and Costs**

Sara continued on with the next section, which continued with the input from the economic review. She wanted to share a list of the benefits of tug escorts being considered in the analysis. These included the protection of the Southern Resident Killer Whales, and they are looking at that quantitatively based on the concept of willingness to pay.

## **16. Benefits of Tug Escorts**

Sara then showed a list of the benefits of tug escorts that are considering in the analysis.

These include:

- Protection of Southern Resident Killer Whales (SRKW) – quantitative based on the concept of willingness to pay
- Protection of Natural and socioeconomic resources –quantitative input from on an Earth Economics study as well as qualitative input. They consider benefits to:
- Commercial Fishing
- Aquaculture
- Tourist Spending, Wages, and Local Tax Revenue
- Property Values and Taxes
- Recreational Use Value
- Ecosystem Services
- Preservation of Tribal Resources (qualitative)
- Avoidance of Spill costs, including cleanup costs - quantitative

Under the Administrative Procedures Act, the quantitative and qualitative benefits receive equal consideration.

She then paused for any input - Any benefits missing – either qualitative or quantitative? Jaimie then went around to each representative.

*Blair Bouma (Pilot/Puget Sound Pilots) believed that the list covered everything in regard to a catastrophic event.*

*Clyde Halstead (Tribal Government Alternate/Swinomish) believed the last covered the topic well.*

*Fred Felleman (Environment/Friends of the Earth) asked about the geographic extent to which oil spill impact would be considered in an estuary environment. Allen Posewitz responded that Earth Economics modeled a catastrophic spill at the Boundary Pass, Haro Strait Junction, using a 24,000-barrel spill with no cleanup effort. He added that while the data was very difficult to quantitate, they did a thorough job. The team, for their comparison, was looking at their high value estimates. They modeled it specifically for this area, which is one of the reasons the team used the study.*

*Jeff Slesinger (Tug Industry/Delphi Maritime) wondered about including the cost of repairing a grounded tanker because that would be a benefit of a tug escort. His reluctance was that it may skew the figures quite a bit because there could be tens of millions of dollars to repair a tanker that's been grounded. Allen responded that Jeff's point had been raised internally and that he has not run the numbers yet.*

*Tim Johnson (Oil Industry Alternate/WSPA) had no additional questions or comments.*

*Jason Hamilton (BPC) responded that on the qualitative side, depending on the dispersion, if it got into Canada, it could have an impact on international relations.*

*Jaimie checked with Sheri Tonn (Ex-officio/BPC) who had no comments at that time.*

*Fred Felleman (Environment/Friends of the Earth) commented that the question that was raised about the cost of repairing a vessel that grounded was part of the expense of not having adequate protection and he didn't hear whether or not that was going to be considered. Allen responded that it was going to be considered and that this would be the category.*

## **17. Costs of Tug Escorts**

Sara introduced the list of the costs of tug escorts that are being considered in the analysis.

- Pre-escort conference
- Twin Screw requirement
- 3000 hp tugs for vessels over 18,000 DWT
- Cost of current escort requirements
- Additional escorting in the expansion area

There was another opportunity for input: Anything missing – either qualitative or quantitative?

*Blair Bouma (Pilot/Puget Sound Pilots) believed that the list covered everything.*

*Clyde Halstead (Tribal Government Alternate/Swinomish) noted that the additional escorting in expansion area bullet points seemed broad. He wondered if that included things like increased vessel traffic, increased risk to travel gear, vessel noise, etc. Sara responded that the items Clyde mentioned were going to come up a little bit more in the environmental slides. Although they were connected with this topic, the team was differentiating the cost of the escort time in the expansion area to the north versus the cost from the escort rate sheets for the entire existing Alternatives A, B and C area. She added that the slide was mostly about geographic area and the cost for hiring a tug in that area. Allen Posewitz added that the EIS will be an input for the economic analysis. So, yes, there will be a qualitative cost of the expansion, which will include the negative impacts. Per Clyde, the benefits included many of*

*those additional items and if those are compared to the cost, but they don't include all of those additional things, which seems like there is a disconnect. Allen clarified that there should be some symmetry between the negative impacts that might result from the expansion. Clyde agreed.*

*Jeff Slesinger (Tug Industry/Delphi Maritime) couldn't tell whether there was an assumption that the existing fleet was sufficient to cover the additional escorts, or whether the costs of new construction were incorporated. He wondered, if the data was using the existing fleet, did it factor in the economic consequences of delays. He added that anecdotally, there aren't enough tugs here in Puget Sound to cover everything on a timely basis. So, there are delays for ships coming in, delays for tugs being on the job. And that has a lot of downstream costs to it. Sara responded that they were not looking at new construction and that it would be interesting if there was any data. The team wasn't able to find anything to point to about the delays and the lack of tug availability, but if there was anything like that, the team would be interested in seeing it.*

*Tim Johnson (Oil Industry Alternate/WSPA) thought it was interesting about the cost of delays for a lack of escorts available. He was not aware of any concrete information to share with the rule team and OTSC but might be something to take back to WSPA.*

*Jason Hamilton (BPC) had no additional questions or comments.*

*Fred Felleman (Environment/Friends of the Earth) Observed after looking at the San Juan County report, that the spill trajectory goes halfway out on the Strait of Juan de Fuca, though not a complete estimate. Regarding the adequacy of the number of tugs, he mentioned that the same sort of rationale was being used with the reducing of crew size on ATBs in the legislative discussions in the Coast Guard reauthorization. The rationale being, there was not enough crew to be able to staff all the ATBs, and as far as he was concerned, this should be no different than with the ferry service. If you don't have the capacity, you don't leave the dock. And so, don't reduce safety because of lack of capacity. It seemed to Fred to be a basic obligation to get the crew trained up and have the adequate number of vessels to do the job.*

*Blair replied that, in general, industry meets the demand of customers. Otherwise, there was no reason to go into business. He believes it's important to set a standard that needs to be met and then one way or another, industry will figure out how to make a profit from that. Maybe the costs will be higher. He thought it was a mistake to set regulations based on current fleet size or conditions. The first two real escort tugs in this region were funded by one of the oil companies. And that's just how. Paralleling with what Fred said, set the regulation that is the right regulation. Then through one way or another the need will get met, even if delayed a bit.*

*Jeff clarified that the ATB issue at the Coast Guard has more to do with allowing automation in the engine room rather than requiring a watch standard down there all the time. It would be erroneous to make the conclusion that any ATB or any vessel for that matter is leaving the leaving the dock without a safe number of personnel. Fred replied that the logic that's being used in the Coast Guard reauthorization is that unless they do automate, they will not have enough crew. He believes the considerations of the OTSC, to reduce the horsepower requirements for the smaller tank vessels, is a direct reflection of the group's consideration of both the safety and the availability of vessels.*

## **18. Transition: Insights from Preliminary Environmental Review**

Sara introduced the next section, which included insights from the environmental review.




## **19. EIS: Preliminary Approach to Significance Determinations (Priority Elements)**

Sara explained that the slide showed the Significance Determinations for the priority EIS elements.













The EIS elements were in the first column and the Alternatives were across the top. Alternative A included the impacts associated with the current levels of escort tug traffic that would continue if no change is made. Determinations of significance were shown in Red and have an icon next to them indicating which elements contributed to the significance determination. Tug icons were for vessel traffic, the sound icon was for underwater noise, and the drop icon was for oil pollution.

- Vessel Traffic Element– No for all alternatives
- Oil Pollution Element: Yes for Alternative D because of increased oil spill risk under Removal option
- Tribal Resources element: Alternatives A-C: Yes because of vessel traffic impacts, Alternative D: Yes because of increase in oil spill risk
- Plants and Animals element: Alternatives A – C: Yes because of underwater noise levels, Alternative D: Yes because of increase in oil spill risk
- Underwater Noise element : Yes for Alternatives A – C because there were multiple locations where escort tug activity caused increases in noise levels above the 120 dB threshold.
- Air Quality element : – No for all alternatives
- EJ element : Awaiting findings

**EIS: Preliminary Approach to Significance Determinations (Priority Elements)**

 Vessel Traffic  
 Underwater Noise  
 Oil Pollution

DEPARTMENT OF ECOLOGY  
State of Washington

Priority Element	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	TBD	TBD	TBD	TBD




19

## 20. EIS: Preliminary Approach to Significance Determinations (Non-Priority Elements)



She then introduced the Significance Determinations for the non-priority EIS elements.

- Water Quality and Recreation elements received significance determinations for Alternative D due to the increase in oil spill risk
- No significant impacts were identified to visual resources and energy and natural resources under any Alternative.

**EIS: Preliminary Approach to Significance Determinations (Non-Priority Elements)**

 Vessel Traffic  
 Underwater Noise  
 Oil Pollution

DEPARTMENT OF ECOLOGY  
State of Washington

Priority Element	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

20

## 21. EIS: Significance Findings

The next slide contained the same information as the previous 2 slides but in a different format. This format helps show that at a high level, all alternatives have an impact to tribal resources and plants and animals. In developing this rule, consideration is needed on the tradeoff between the underwater noise impact for Alternatives A, B, and C and the oil pollution, water quality, and recreational impact in Alternative D.

EIS: Significance Findings		
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	

*Fred Felleman (Environment/Friends of the Earth) shared that things deemed significant could have significant benefits as well as significant impacts. The reduction of oil spills could be positive. And the impacts associated with expanded safety could be positive. He would suggest that if qualifying those as impacts, just list them as negative impacts and point out that some of this might have an upside. Regarding the underwater noise analysis, for evaluating oil spill risk he urged the use of probability by consequence. The data that were used in the acoustic analysis, summarized occurrence of killer whales over a two-decade period, which does not reflect the increasing diminution of the presence of the whales. The San Juans in general and Rosario Strait have always been a secondary at best, place where the whales occur southbound on occasion. He takes issue that the data does not reflect the probability of occurrence that the whales had to be there when the noise is being made and in addition the whales had to be oriented to the noise in such a way to be impacted by it. He has submitted comments and has not received any feedback. Haley Kennard (Ecology/BPC) responded that the approach taken was conservative and that the receptor locations were selected based on the distribution of sensitive habitat for a variety of marine mammal species, certainly Southern Resident Killer Whales are an important component of that, but they're not the only species being considered here. She added that they have noted his comments. She added that the threshold being used for underwater noise was really about the increase in the sort of harmful noise, the noise over that 120-decibel behavioral threshold, that NIMS has published as their recommended methodology. Fred appreciated the clarification. He then asked if there was a way to add a category. He believes that Yes or No is too black and white. Perhaps a high, medium and low. Haley understood his point that this was obviously a simplification. It's a condensing of a lot of information. She reminded everyone that the technical report received from Jasco was 69 pages alone. It wasn't like the EIS will just say yes or no. There are tables that describe the number of minutes per week over that threshold across the various alternatives. There are tables that describe the average noise for each of the alternatives. And there are also tables that outline the sonified area, which is like the area where there would be reception of over 120 decibels. So yes, she agreed with Fred that this was an oversimplification, but only because it was a small part of today's workshop. Fred then stated that if this sort of graphic was put in the EIS, it would be misleading and the point about the JASCO study is it's also misleading in the amount of likelihood of encounter. He said he would let this go, but that he believes it's an unfair comparison. Sara said it was a helpful concept to keep in mind and that Haley was creating the EIS 1 pages that have a little bit more detail, but she believed the group should be going beyond the yes or no and looking into some of that additional detail being provided by*

the team.

*Blair Bouma (Pilot/Puget Sound Pilots) Regarding visual resources on slide 20, he believed that was definitely impacted by an oil spill. The oil spill itself and the consequences of the oil spill have a major visual impact. Haley responded that they could look at that one in a little more detail. She thought the significance threshold listed was a long term or permanent change to the visual character. It's not that there would be no impact, but if it reaches that significance threshold they said no, but certainly open to continuing to discuss that.*

*Clyde Halstead (Tribal Government Alternate/Swinomish) asked if it was correct that Alternatives B, C, and D were as compared against Alternative A. Haley responded yes, Alternative A was the no action alternative, but as everyone knows, it's not a no action alternative the way a project environmental impact statement would be because it doesn't mean no tugs. It means continuing with the current requirements, with no changes.*

*Tim Johnson (Oil Industry Alternate/WSPA) was wondering if the group would have an opportunity to review the significance determinations before OTSC members need to vote on proposed language. Jaimie responded that this step would be the one pagers. Tim acknowledged that those were received and asked what the technical analysis looked like for the different priority elements. He remembered that some of them hadn't been to a point of assessing areas of potential impacts and or identifying mitigation measures and that felt like those were important objectives of the technical analysis. Sara answered that that was the kind of information that that they are planning to provide before the next OTSC meeting. Haley added that for the one pagers, they are planning to include more information than shared at the November workshop organized by alternative and will include some information about the significance threshold that was used for the determination. And then they'll also be including a summary of the mitigation discussed in the EIS. Some of that is mitigation that like could go into rule language and a lot of it is voluntary mitigation to recommend for groups like Puget Sound Harbor Safety Committee to take up as may be a potential standard of care.*

## **22. Updated Draft Rule Language and Next Steps**

Sara then shifted the group to looking at updated rule language and next steps

## **23. Potential Rule Language Based on Vote Input**

The slide showed how the rule language could look with the 3000 hp requirement applied to vessels 18,000 – 40,000 DWT. She pointed to the strikethrough in the 3000 hp text under subsection (2) and the new green text under subsection (3) Vessels between 5,000 and 18,000 DWT must use an escort tug of 2000 hp to meet the escort requirements in WAC 363 – 116 – 600(2). (4) stating that Vessels over 18,000 DWT must use an escort tug with a minimum of 3000 hp to meet the escort requirements in WAC 363 – 116 – 600(2).

## Potential rule language based on vote input

### 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 a minimum of twin-screw propulsion and 3,000 horsepower:
  - 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) Vessels between 5,000 and 18,000 DWT must use an escort tug with a minimum of 2,000 horsepower to meet the escort requirements in WAC 363 – 116 – 600(2).
- (4) Vessels over 18,000 DWT must use an escort tug with a minimum of 3,000 horsepower to meet the escort requirements in WAC 363 – 116 – 600(2).

## 24. OTSC and BPC Meeting Timeline

Jaimie walked the group through the OTSC and BPC meeting timeline. She reported that workshop series 11 for the OTSC was coming up on the Feb 13, and as discussed, this will be an important meeting narrowing down the BPC recommendation for the rule language. OTSC members should already have a hold on their calendars for that meeting. And then following the OTSC meeting, the Board will have their regular public meeting on February 20, receiving an OTSC update. Then there is a proposed a tentative OTSC meeting for March 6. Jaimie will send a calendar hold for that because the team plans to keep that meeting as one final chance for the group to come together and talk about the recommendation. Then the Board will vote or will be asked to vote on March 20 for the proposed rule. Sometime in June, the Board will receive a briefing and the CR102 which is the notice of public hearing, will be filed.

Megan Hillyard provided a timeline for the rest of the rule development phase. When they file the CR102, there's about 60 days for our public comment period. And during that time, the team will also hold public hearings. The public comment period will likely close in August. And then there will be a chance to review all of the comments, draft a concise explanatory statement, and conduct the final regulatory analysis to prepare for adoption.

### OTSC and BPC Meeting Timeline

Date (2025)	What	Objective
January 9	OTSC Meeting	Update on rule development
February 13	OTSC Meeting	Workshop 11: Recommend proposed rule
February 20	BPC Meeting	Update on rule development
March 6 (tentative)	OTSC Meeting	Tentative: Recommend proposed rule
March 20	BPC Meeting	Vote on proposed rule
June 5	BPC Meeting	BPC briefing before CR-102 filing



## 25. Next Steps

Jaimie reviewed the next steps. The OTSC will review the draft rule language from this presentation, and in particular the pre-escort conference language. They were instructed to provide thoughts to the rule team by e-mail before February 1. After the meeting, Jaimie will send an e-mail to the OTSC with an updated slide deck and also the pre-escort conference language list to review the order of events and also to help provide some opportunities for plain talk or simplified language. Then the rule team

will provide the summary information from the economic analysis and the environmental review in the form of the one-page sheets prior to the February 13 OTSC meeting. In addition, Hailey Kennard will be hosting EIS office hours for both Tribes and OTSC members on February 3 from 1:30 to 2:30 and February 6 from 10:30 to 11:30 for anyone who has questions or would like to talk through EIS related issues. The links for those drop-in sessions will be included in the e-mail that contains the EIS one-page summaries, which will be sent out towards the end of January. The OTSC will then finalize the proposed rule language and recommendations to the Board during the February 13 OTSC meeting. They will also have the March 6 meeting mentioned earlier to review any feedback from the Board meeting or any other tweaks to the language that need review.

## **26. Final Questions or Discussion**

*Fred Felleman (Environment/Friends of the Earth) lent his support for the comment that was made about the pre-escort conference, including safety crew.*

*Blair Bouma (Pilot/Puget Sound Pilots) asked for clarification about when the 4 Alternatives were locked down adding that there may be a way that some of the other decisions are affected by which of those choices were settled on. Jaimie responded that those were the four alternatives that were chosen and went through the assessment process and now they are considering the results of those assessments. The idea would be to narrow down to one of those for the rule language proposal at the February 13 OTSC meeting.*

*Fred had two questions. One, it wasn't clear in the previous conversation how many tugs are under the 3000 hp range. Sara responded that they know of two tugs that were conducting escorts that were under 3000 and they were identified through the AIS history review of the jobs. Those two tugs did provide the quote from the slides where they thought that 11 target vessels may have employed one of those two tugs in the first year of the Rosario Waters East implementation, and both of those tugs are owned by Centerline Logistics. The number they don't have is how many are above 3,000 hp. The BPC annual report lists them, and they are all between 4,000 and 7,000 hp. Fred's second question, regarding the pre-escort conference, was whether the decision was to tether, wondering if there were any a priority criteria like size of vessel, portion of the waterway, type of vessel. Jaimie answered that it had been discussed previously at the OTSC and that it was determined to recommend to the Board that it should be discussed during the pre-escort conference, but that to try to put some kind of regulation on it was not practical. Fred suggested a recommendation for a standard of care. Blair thought it would be helpful to explain the current system. For the over 40k tankers, most of the more granular things like weather to tether or not are in the harbor safety plan. The group has discussed, I think some in the open meetings, but also with the staff, that the process of this rulemaking would lead to prompting additions to the harbor safety plan that would cover these vessels. The over 40,000 recommendations are in the Harbor Safety Plan so it's envisioned that after the rulemaking, there would be a campaign to update the Harbor Safety Plan. Fred appreciated the response. He then asked the team to provide a calendar to the OTSC of the upcoming events.*

*Fred had one final comment regarding issues that were determined to be significant in the negative fashion and then proposed mitigation. He asked if there would be a further determination whether the mitigation was adequate. Haley responded that the way that a discussion of an alternative in an environmental impact statement is typically structured after describing the affected environment is you have a summary of impacts without any sort of discussion of what rises to the level of significant or not. Then you discuss your proposed mitigation and after that. Looking at both the discussion of impacts and the proposed mitigation, as well as the significance threshold that you've already set, you talk about whether the impacts rise to the level of significance that you have decided to use for the assessment. She added that mitigation was kind of an interesting one for this because the scope of the RCW is relatively narrow. Some of it will be taken up by the Harbor Safety Committee or existing in other spaces or like*



*we're referencing for plants and animals, for example, the suite of Southern Resident Killer Whale protections that are already in place. Fred added, for example, for the underwater noise he believed he heard that the returning tug, if it's not escorting, would come back slower because they didn't want to burn the fuel there was no rush. Therefore, the calculation of the overall noise would be less going back as it is coming in, that sometimes you can run on one prop. Haley responded that to answer his question, yes, mitigation was involved in the significance determination and that they are still working through what do when something is a voluntary mitigation. However, they can't require them to participate. They have had some suggestions about big scale long term transitions to electric tugs or hybrid engine tugs. Certainly, Ecology can't require industry do that, but it would be a good idea for them. Long term consideration is not a mitigation that has an immediate impact. Fred agreed which was why he was bringing up making recommendations that would be harbor safety plan kind of things, assuming that there will be some benefits to extending these tug escorts that. He wondered if it couldn't it be something that they could discuss given now that the team has shown these thresholds could be exceeded. Sara responded that mitigation recommendations was a topic of discussion for the next meeting. Fred thanked her.*

Jaimie then adjourned the meeting.



STATE OF WASHINGTON  
**BOARD OF PILOTAGE COMMISSIONERS**

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**Meeting Minutes – Oil Transportation Safety Committee (OTSC)**

February 13, 2025, 10:00am – 12:00pm

Via MS Teams

**Attendees:**

Jaimie Bever (Chair/BPC), Adam Byrd (Ecology SME), Haley Kennard (Ecology SME), Angela Zeigenfuse (Ecology Alternate/BPC) Megan Hillyard (Ecology Alternate/BPC), JD Ross Leahy (Ecology SME), Jason Hamilton (Commissioner/BPC), Blair Bouma, (Pilot/PSP), Jeff Slesinger (Tug Industry/Delphi Maritime), Clyde Halstead (Tribal Government Alternate/Swinomish), Antonio Machado (Oil Industry/WSPA), Genaro Villegas (Advisory/USCG), Peter Schrappen (Tug Industry Alternate/AWO), Lillie Wightman (Tug Industry Alternate/AWO), Joel Morton (Tug Industry Alternate/Crowley), Jim Peschel (Tug Industry Alternate/Vane Brothers), Fred Felleman (Environment/Friends of the Earth), Rein Attemann (Environment Alternate/WEC), Allen Posewitz (Ecology SME)

**1. Welcome & Meeting Minutes**

Jaimie Bever (OTSC Chair/BPC) welcomed everyone to the meeting. She mentioned that the group would have both the 1/9 and 2/13 meetings for review at the March 6 meeting. She then introduced Megan Hillyard, Rule Coordinator for this rulemaking.

**2. Meeting Objectives**

Megan began the presentation by reviewing the objectives for the meeting.

**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
- ✓ Draft of a recommendation for the BPC

### 3. Introductions and Overview

Megan moved on to the next slide.

### 4. OTSC Decision Process

Megan explained that members should already be familiar with their role on the OTSC and the committee's authority, and the decision process, but the team felt it was necessary at this time to reiterate these important points. First it's important to remember that the OTSC serves as an advisory committee only to the Board. While they have a key role in evaluating the alternatives and providing input, they are not responsible for making policy decisions. That authority rests with the Board alone. The OTSC is responsible for providing a well-informed recommendation that's based on discussions and analysis. When it comes time to vote, only OTSC members or their chosen alternates if they are not present will vote and the goal is to develop a recommendation that reflects the group's collective expertise and judgement. If there are differing perspectives, they'll document both the majority opinion and any dissenting views in the recommendation document. This ensures that the Board has a full understanding of the key considerations behind the recommendation.

She also wanted to remind everyone that they are currently in the rule development phase of this rule making process. This means that any comments or questions that are raised during this time are considered informal feedback. And that's not to say that it's less important than the formal comments because it does help the rulemaking agencies shape a proposed rule that reflects key perspectives and priorities. However, the workshop series in this rule development process highlighted early identification of issues allowing for adjustments before the rule is formally proposed. Once the proposed rule is published, the formal comment period officially begins, and at that stage the team will be obligated to respond to all comments and questions submitted. The focus now is really on finalizing the details of these rule updates, ensuring that all aspects of the update and the language are well defined and ready for formal presentation in the summer.

### 5. Ground Rules

Megan then reviewed the ground rules for the meeting which included speaking respectfully and focusing on ideas, not individuals. Remembering to give one voice at a time, so it's important that everyone has the space and time to finish before jumping in. Staying on mute when not speaking to avoid any distractions or background noise. Everyone is there to share their own experience and perspectives, and just agree to disagree. Respecting different opinions is key, especially during this decision-making process. The goal is to always focus on solutions. So, aim for constructive outcomes and actionable steps. And then last but not least, respect time limits and the agenda. Please try and keep comments on topic and concise so everyone has a chance to contribute.

Megan paused for questions. There were none so she moved on to the next slide.

### 6. Alternatives Under Consideration

Each alternative considers different geographic zones and functional and operational requirements, which are abbreviated as FORs.

#### Alternative A is the No Action

**Alternative.** It maintains both the geographic scope of tug escort requirements for target vessels, and the functional and operational requirements included in

ESHB 1578.

	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

**Alternative B is the Addition of Functional and Operational Requirements Only.** It maintains

the geographic scope of tug escort requirements for target vessels and ADDS the new proposed functional and operational requirements.

**Alternative C is the Expansion Option.** It maintains the 2020 requirements for target vessels and expands the area they are required north along the San Juan Islands to Patos Island. The expansion area is noted by the red arrow. It also adds the new proposed functional and operational requirements.

**Alternative D is the Removal Option.** It removes all tug escort requirements for the target vessels. Tug escort requirements for tankers over 40,000 DWT remain unchanged.

Megan then handed the presentation over to Haley Kennard (Ecology SME) to walk the group through the environmental findings from the EIS process.

## 7. Staff Presentation – Environmental Findings

Haley began by explaining that in the interest of time today, she was planning to move through some of these slides quickly because they cover information that the OTSC should have received in the EIS summaries and in the previous workshops. She asked that members raise a hand if they'd like her to stop at any time to cover topics in a bit more detail.



## 8. Determination of Significance (WAC 197-11-794)












Haley explained that the information on the slide was from the WAC. For reference, significance determinations are for the elements where the team found a reasonable likelihood of more than a moderate adverse impact on Environmental Quality. Significance determinations involve context and intensity. They're not a formula or a statistical test. And they can vary with the physical setting. Importantly, the severity and the likelihood of occurrence should be weighed so that an impact can be significant even if the likelihood is low, but the resulting environmental impact could be severe. Haley added that this was particularly useful for this rule making process and for this EIS, both for thinking about oil spills, which are low probability, high consequence events, but also for thinking about potential impacts to critically endangered species like Southern Resident Killer Whales.

## 9. EIS: Preliminary Significance Determinations

The next slide shows the significance determinations for the priority EIS elements, as identified as a priority by the BPC. The elements comprise the first column and the alternatives are across the top. Just a reminder, that Alternative A (No Action) means continuing with the current levels of escort tug traffic and the current regulatory structure, so no change from what we see today. The Determinations of Significance are shown in red, and they have an icon next to them that indicates which element contributed to the finding.

**EIS: Preliminary Significance Determinations**

-  Vessel Traffic
-  Underwater Noise
-  Oil Pollution

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

For vessel traffic, there's a finding of no significant impact for all alternatives. For oil pollution, there is a yes finding for alternative D because of the increased oil spill risk under the removal option. For Tribal Resources for Alternatives A through C, the team found a significant impact because of the impacts of vessel traffic on treaty fishing. And for Alternative D they found a significant impact

because of the increase in oil spill risk.

## 10. EIS: Preliminary Significance Determinations Cont'd

For plants and animals, for alternatives A through C, we found a significant impact because of underwater noise levels. And for Alternative D, a yes because of the increase in oil spill risk under the removal option for underwater noise. They found a significant impact for alternatives A through C because of significant increases in the time when harmful levels of underwater noise would be present. For air quality, they did not find a significant impact for any alternative. And for environmental justice, this mirrors the tribal resources determination because in addition to being sovereign governments, tribes are also in many cases, environmental justice communities.

**EIS: Preliminary Significance Determinations Cont'd**

-  Vessel Traffic
-  Underwater Noise
-  Oil Pollution

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

## 11. Significance Findings

The next slide talks about the organization of the next section.

**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

## 12. Tribal Resources Significance Finding (Alternatives A-C)

Haley next presented the tribal resource significance findings, which as she mentioned, were due to the impacts of vessel traffic on Treaty fishing under the current levels of traffic.

## 13. Vessel Traffic Impacts on Swinomish Treaty Fishing

The next slide provided some examples from a statement that the Swinomish Tribe shared with the team. Haley pointed out that both in this document as well as input received from tribes, incidents with tugs were described specifically.



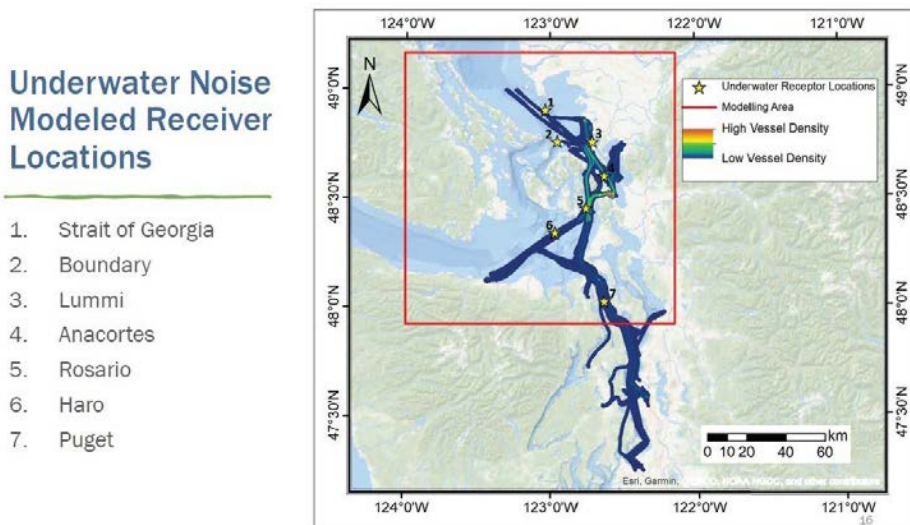
**14. Tribal Resources & Environmental Justice (Alternatives A-C)**

As mentioned, the Environmental Justice finding is because of disproportionate impacts to Tribes. That is reflected in the significance findings.

**15. Underwater Noise Significance Findings (Alternatives A-C)**

And for underwater noise, there is a significance finding because of the increase in time over 120 decibels at the Rosario location in the summer. In the wintertime and at the Lummi and Anacortes locations in the wintertime. Haley mentioned that there is a map on the next slide and the numbers might be a little hard to see, but it's receptor locations 3-4 and five and that's sort of near where that green triangle is that's showing higher levels of noise.

**16. Underwater Noise Modeled Receiver Locations**



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

Continuing on with underwater noise alternatives B&C, they saw very little change in the modeling from Alternative A. So, there's also a significance finding there.

They have the same significant threshold for marine mammals as they had for underwater noise, so looking for that increase of over 10% in harmful levels of underwater noise.



There's also a significant finding for plants and animals for alternatives A through C.

Haley then talked a little bit about the oil pollution results. Oil pollution risk increases significantly under the removal alternative, by 11.84%. Compared to Alternative A for the entire EIS study area and within just the rulemaking area, the increase is about 90.5%, although the absolute numbers are small. And while oil spill events are rare, the potential environmental consequences, if they do occur, are severe. So, because of that, there are impacts to five additional elements, tribal resources, environmental justice plants and animals, water quality and recreation.

**18. Underwater Noise Finding Affects (Alternatives A-C)**

So, there's also a significant finding for plants and animals for alternatives A through C.

Element of the Environment	Relevant Significance Thresholds
Plants and Animals	<p>More than a moderate increase in adverse impacts to:</p> <ul style="list-style-type: none"> <li>special-status species</li> <li>degradation of sensitive ecological areas</li> <li>Impacts expected to affect the viability of a population or ecosystem</li> </ul> <p>Marine mammals: increase of at least 10% in noise levels above the NMFS behavioral disturbance threshold.</p>

**19. Oil Pollution Significance Finding (Alternative D)**

Oil pollution risk increases significantly under the removal alternative 11.84%. Compared to Alternative A for the entire EIS study area and within just the rulemaking area, the increase is about 90.5%, although the absolute numbers are small. And while oil spill events are rare, the potential environmental consequences, if they do occur, are severe.

**20. Oil Pollution Affects (Alternative D)**

So, because of that, there are impacts to five additional elements, tribal resources, environmental justice plants and animals, water quality and recreation. Haley explained that the slide summarizes the same information as the first slide presented by alternative rather than by element of the environment.

Element	Relevant Significance Threshold
Tribal Resources	<p>Adverse impacts to</p> <ul style="list-style-type: none"> <li>Wildlife or habitats of cultural significance</li> <li>Tribes' water-dependent activities (water quality)</li> <li>Coastal cultural resources</li> <li>Treaty fishing (access, operation, quality)</li> </ul>
Environmental Justice	Disproportionate adverse impact to populations of color, low-income populations, and/or Tribes
Plants and Animals	<p>More than a moderate increase in adverse impacts to</p> <ul style="list-style-type: none"> <li>special-status species</li> <li>degradation of sensitive ecological areas</li> <li>Impacts expected to affect the viability of a population or ecosystem</li> </ul>
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

**21. EIS: Significance Findings**

The job of the EIS is to assess and to clarify the differing environmental impacts for each alternative at a high level. All the alternatives have some significant impact to tribal resources, environmental justice and plants and animals. Alternatives A, B, and C also have a significant noise impact. And Alternative D also has the oil pollution, water quality and recreational impact.

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	

## 22. Mitigation Measures Included in the EIS

Next, Haley talked about mitigation. There are three types that are discussed in the EIS. First, mitigation captured in the rule making language. Second, existing regulations and requirements that mitigate potential impacts. And third, voluntary mitigation that ecology encourages but can't require.

## 23. Mitigation Measures Included in the EIS Cont'd

So in the rulemaking language, this is probably the most narrowly defined of the three for all alternatives. Of course, the selection of the geographic alternative and the decision to include or not include functional and operations will affect the type and the scale of impacts for tribal resources, underwater noise and plants and animals. The team is suggesting the following recommended mitigation language be included in the rule: Operators must consider opportunities to 1) coordinate with interested tribes to avoid or reduce impacts to treaty fishing and 2) participate in voluntary underwater noise reduction efforts.

### 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

## 24. Mitigation Measures Included in the EIS Cont'd

There are many other existing regulations that mitigate some of the impacts described in the EIS, which are depicted on the slide that include some impacts that that don't rise to the level of significance. This is a summary only. There are of course more, but these include things like existing vessel traffic safety requirements, existing oil pollution regulations, existing federal and state regulations that protect marine mammals, and southern resident killer whales in particular, existing water quality and vessel discharge regulations. And then plans like the Northwest Area Contingency Plan, for example, that include policies about protecting cultural resources in the event of an oil spill.



## Already Required by Other Regulations

Elements of the Environment	Mitigation Measures
All	<ul style="list-style-type: none"> <li>Existing vessel traffic safety requirements</li> <li>Existing oil pollution regulations</li> </ul>
Underwater Noise, Plants and Animals	<ul style="list-style-type: none"> <li>Existing federal and state regulations protecting SRKW and other marine mammals (e.g. reducing speed, maintaining distance)</li> </ul>
Water Quality	<ul style="list-style-type: none"> <li>Existing water quality and vessel discharge regulations</li> </ul>
Tribal Resources	<ul style="list-style-type: none"> <li>Northwest Area Contingency Plan policies and procedures for oil spill response and cultural resource protection.</li> </ul>

### 25. Mitigation Measures Included in the EIS Cont'd

And finally are the voluntary mitigation things that the team recommends operators do or continue to do. These include continued participation in Puget Sound Harbor Safety Committee Standards of Care and other industry best practices. The team also recommends that the applicable Puget Sound Harbor Safety Committee Standards of Care be extended to escorts for target vessels. To reduce underwater noise and impacts to plants and animals, the team encourages operators to continue to participate in voluntary noise reduction efforts. In addition, adopt the Be Whale Wise guidance, transition to quieter hybrid indoor electric propulsion systems when the technology and cost make this more feasible, and continued participation in voluntary environmental certification programs. To further reduce impacts to tribal resources, the team is also recommending that operators develop agreements with interested tribes to improve communication and reduce impacts to treaty fishing, and also that operators limit waiting time in the rendezvous areas with the vessel or with the target vessels as much as safe and practical, because this has been highlighted as an area of potential conflict of treaty fishing.

## Voluntary

Elements of the Environment	Mitigation Measures
All	<ul style="list-style-type: none"> <li>Continued participation in PSHSC Standards of Care and industry best practices</li> <li>Extension of applicable PSHSC Standards of Care to 5,000 – 40,000 DWT escorts</li> </ul>
Underwater Noise, Plants and Animals	<ul style="list-style-type: none"> <li>Voluntary noise reduction efforts in the EIS Study Area</li> <li>Adoption of Be Whale Wise guidance</li> <li>Transition to quieter, hybrid, and/or electric propulsion when technology and cost make this feasible.</li> </ul>
Plants and Animals	<ul style="list-style-type: none"> <li>Voluntary environmental certification programs</li> </ul>
Tribal Resources	<ul style="list-style-type: none"> <li>Encourage operators to develop agreements with interested Tribes to improve communication and reduce impacts to treaty fishing.</li> <li>Encourage operators to limit waiting time at rendezvous locations</li> </ul>

### 26. Proposed Mitigation Rule Language

The last slide Haley presented showed proposed mitigation language again for OTSC reference, which will be discussed in more detail later in the presentation. 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 measure and best practices where safe and feasible to do so.

Jaimie then asked for questions or comments from the group.

*Rein Attemann (Environment Alternate/WEC) was confused how the terminology of "operators must consider opportunities to participate in voluntary activities" pans out in terms of a decision on whether to reduce underwater noise, if it is voluntary but they must consider it. He didn't understand how that implementation would work. Haley responded that his question was a good one. The team's understanding is that most of the existing underwater noise reduction trials and programs through the ECHO program or Quiet Sound, for example, are voluntary and are designed that way. Those groups are working with the Coast Guard and have decided that a voluntary approach is best. So, this recommendation would formally, through the rule, encourage operators to participate in those if they can. So, voluntary is describing the way that those measures are set up now, not that we are suggesting that they do it on a voluntary basis. Rein then wondered about enforcement. Haley responded that participation can't be required, and that the "consider opportunities" is language recommended by the Rules Unit at Ecology.*

*Fred Felleman (Environment/Friends of the Earth) observed that the state has a zero-oil spill policy and that removing the escort requirement increases risk by about 11.8% in the overall area and some 90% where escorts are applied. The significance impact for the noise was based on the duration of time that exceedance can occur in the waterway but does not account for the presence of the whales. He then reiterated similar comments about encounters he made at the last workshop including that in the winter in Rosario Strait the whales are not present. That whales would have to be in the same place at the same time, the fact that the noise would have to exceed the whales would have to be there when that exceedance occurs and then be in proximity and orientation. For that to be a masking event is analogous to a loss of power, resulting in an oil spill. He doesn't see that similar consideration being made for this significance determination. He also didn't recall seeing the same threshold analysis being done for the other species of marine mammals. While he knows that the frequency distribution being discussed has been with killer whales, certainly these other mammals are acoustically acute.*

*Haley responded that the team discussed and took his comments from the last workshop to Ecology's SEPA experts. The team acknowledges that the SRKW are not here year-round and that they don't use the whole critical habitat area all the time. She urged the importance of acknowledging that most of the EIS study area is designated as critical habitat for Southern resident killer whales and most of the rulemaking area is designated as summer core critical Habitat. NOAA made these designations based on their best available science. The data shows significant increases in noise at three locations in the summer core habitat with a 25% increase in noise over the 120-decibel threshold at the Rosario location in the summertime. They know from the modelling that the area that would exceed 120 decibels is 80.7 square kil. in the summer, in alternative A. They can't predict exactly where within the critical habitat the whales might be, or when they might encounter noise from a tug. But the job of the EIS is to identify the potential for significant adverse impacts. Underwater noise is one of the three main stressors for Southern Resident Killer Whales and that harmful levels of underwater noise increase under this rule, making in their critical habitat. That's why there is a finding of significant impact. Fred then asked for clarification that Alternative D results in noise reduction that is not significant. Haley answered that the removal option decreases Harmful levels of underwater noise by 25% at the Rosario location in the summertime and at the other locations in the wintertime. So, it's reducing underwater noise from current levels. She also noted that it's not that tugs are the only contributor to harmful levels of noise, so they can still exist, which is noted in the EIS. But the threshold is looking at increase or maintenance of*

*that level. Fred's last question was regarding tribal impacts. He wondered if there had been an analysis of increases or decreases in frequency of interactions with fishing gear during this period of the study where the regulation has been in place. Haley responded that they have been discussing the potential for impacts with tribes, and as she mentioned, they've heard that current levels of vessel traffic were impacting treaty fishing, and that tribes were having negative interactions with tugs specifically. The team has heard from tribes that there is negative impact both before and after and that is what the finding relies on.*

*There being no other question, Jaimie moved the group on to the next topic.*

## **27. Staff Presentation – Economic Findings**

Allen Posewitz with the Rules and Accountability Section of Ecology introduced himself and began the presentation on the economic findings.

## **28. Administrative Procedures Act**

Allen explained that the rulemaking was directed by the legislature and that there were specific requirements associated with it. Whenever the legislature either mandates or authorizes a rulemaking, it is subject to some general requirements, and these can be considered the guardrails it has put on the overall process. Some key ones are specified in the Administrative Procedures Act. The first is that a cost benefit analysis will be done, and the benefits of the proposed rule must outweigh the costs and, very importantly, qualitative and quantitative measures are equally considered.

The second requirement is that at a least burdensome alternatives analysis will be done, and if the rule alternatives are assessed to meet the goals and objectives of the authorizing statute. Then among those options, the one that's least burdensome to those required to comply with, must be chosen.

## **29. Engrossed Substitute House Bill 1578 (2019)**

This process began with engrossed substitute House Bill 1578 in 2019. He then read the language from the bill, that the "intent of the legislature is 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 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.

## **30. Framework for Spill Prevention**

And as already noted, the broader context is that the legislature finds that the primary objective of the state is to achieve a zero-spill strategy to prevent any oil or hazardous substance from entering the waters of the state.

## 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."



### 31. Quantitative Oil Spill Costs

In terms of quantitative oil spill costs, typically cleanup costs and damage costs are considered because of the specific language in the authorizing statute in the scenario here where there is also the Southern Resident Killer Whale premium consideration.

### 32. Cleanup Costs

There are many factors that affect cleanup costs, which are acknowledged to be widely variable by almost all involved. They include oil type, spill location, timing, sensitive areas, affective affected liability limits and clean up strategy. For this process, the team borrowed a number from a study the state of California commissioned. They estimated a \$29,539 per barrel cleanup cost. Updating that for inflation results in \$36,000. And the author noted, importantly, that this reflects recent higher public expectations for cleanup standards. The cost was for medium persistent oil and using high end cost of the four categories that they considered.

### 33. Damage Costs

Oil spills, of course, can damage lots of things, including lost tourism, fishing revenues, including tribal recreation and commerce. For this number the team used Earth Economics study modeled to 24,000 barrels spill of heavy fuel oil. They assessed quantitatively 5 impact categories, including property values, tourism and ecosystem services. Taking their high-end number of \$243,000,000 in damage cost, converting that to per barrel, and updating it to 2024 dollars, the result is \$12,500 and \$78 per barrel and damage costs.

### 34. Total Costs Per Barrel



Cleanup Cost + Damage Cost = Total cost per Barrel



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

### 35. Southern Resident Killer Whales



### 36. SRKW Premium

There was a contingent valuation survey mailed in 2010 when the valuation was for conservation efforts that would move this population from endangered to recovered over the course of 50 years. Households responded. They were willing to pay roughly \$1000 / 10 years so per household, that's around 1/4 a day. This survey was mailed 8 years prior to the population of whales making global headlines. Adjusting this willingness to pay from 2014 to 2024 dollars and multiplying that value by Washington State's 3,000,000 households, we landed our 3.5-billion-dollar orca premium.

### 37. Catastrophic Spill Cost

For considering the cost of a catastrophic spill, the assumption is that a drift grounding will occur, and then it will result in a worst-case spill. Worst-case spill is defined in statute as the entire cargo and fuel capacity of the vessel. Looking at this worst-case spill, it's consistent with the requirements for emergency and contingency planning for vessel operators of the largest target vessels. So, considering a capacity of 259,000 barrels and then adding to this catastrophic cost of a drift grounding and a spill, and the \$10 million in damage estimated to the vessel results in half a billion dollars. 259,000 barrels times \$50,000 per barrel and add the orca premium is the vessel damage cost. This would be the worst-case spill and this equation, or this calculation will appear in these subsequent equations.

- 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:

$$(\$10 \text{ million} + (259,000 \text{ barrels} \times \$50,000/\text{barrel})) + \$3.5 \text{ billion} =$$

**\$16.46 billion**

\*Defined in statute, RCW 90.56.010

### 38. CBA Methods

The cost benefit analysis estimates the expected avoided spill costs by considering the probability of a drift grounding. These probability numbers come from the Spills Programs Risk Model. A drift

grounding is one specific type of incident type that escorts are well suited to addressing and while they are rare, they have potential to be catastrophic.

**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%

### 39. Method Factoring in Probability of a drift grounding

This is the recurrence interval for a drift grounding under alternatives A and B. That recurrence interval is 186 years. The current interval increases to 189 years under the expanded escorts and the removal causes the recurrence interval to be more frequent, once every 167 years. Putting it differently, the chance of getting over 20 years in the various scenarios range from 10.6%, which is the shortest lowest probability under alternative C, 10.8% under A and B, and increasing to 12% under alternative D.

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

Calculation of expected avoided oil spill cost benefit for Alternative C

$$O \times ((D + (259,000 \times C)) + SRKW) = \text{Benefit}$$

$$(1/186 - 1/189) \times ((\$10 \text{ M} + (259,000 \text{ barrels} \times \$50,000/\text{barrel})) + \$3.5 \text{ billion})$$

$$=$$

\$1.4 million /yr

### 40. Method factoring in probability of a drift grounding and probability of a spill from grounding

Running the first number adjusting for the probability of adrift grounding is for alternative C. And so again, these are the values that generate the 16.5-billion-dollar worst case spill cost and out front is the 1 / 186 - 1 / 189. That's the difference in probability created by expanding the tug escorts, and that's going to be a very small number. And when adjusting for that, multiply that probability times the worst-case spill cost that produces an expected avoided spill cost per year of \$1.4 million.



- Assumes worst case spill of 259,000 barrels.
- Possible damage costs to vessels from drift grounding is \$10 million (D.)
- Includes the difference in the odds (O) of a drift grounding occurring using the Spill Risk Model and the probability (P) of a spill from a grounding (0.73%).

Calculation of expected avoided oil spill cost benefit for Alternative C

$$(O \times D) + O \times P \times (259,000 \times C) + SRKW = \text{Benefit}$$

$$((1/186 - 1/189) \times \$10,000,000) + (1/186 - 1/189) \times 0.0073 \times ((259,000 \text{ barrels} \times \$50,000/\text{barrel}) + \$3.5 \text{ billion}) =$$

$$\mathbf{\$11,101 /yr}$$

40

#### 41. Method factoring in probability of a drift grounding and probability of a spill from grounding

Allen then presented the likelihood that a spill will result from a drift grounding and that spans 20 years over a wide area, and it should also be stressed that there are many factors that influence whether a grounding results in a spill, including speed and shoreline weather, because of the uncertainty in which the conditions might be present at the time of a grounding. Because they wanted to be sure to understand the full potential cost of a spill, the rule team decided to focus on the drift groundings, which produced that first \$1.4 million number. Now using the data collected on the likelihood of a spill and adding in that probability of .73%, this annual estimated avoided spill cost benefit falls to 11,000 per year.

- Assumes estimated median spill size of 24 barrels
- Possible damage costs to vessels from drift grounding is \$10 million (D)
- Includes the difference in the odds (O) of a drift grounding occurring using the Spill Risk Model and the probability (P) of a spill from a grounding (0.73%)

Calculation of expected avoided oil spill cost benefit for Alternative C

$$(O \times D) + O \times P \times (24 \times C) + SRKW = \text{Benefit}$$

$$((1/186 - 1/189) \times \$10,000,000) + (1/186 - 1/189) \times 0.0073 \times ((24 \text{ barrels} \times \$50,000/\text{barrel}) + \$3.5 \text{ billion}) =$$

$$\mathbf{\$3,035 /yr}$$

41

#### 42. Some quantitative cost estimates

The pre-escort requirement conference is estimated to cost roughly \$16,000 a year. The expansion of the escort area, which includes extra tug time and conference cost is estimated to cost \$850,000 a year and the cost of the current tug escort requirements is estimated at \$20 million per year based on the model number of escorts per year, and the average price of tug escorts based on price sheets from the tug operators.

#### 43. Qualitative Oil Spill Costs

Importantly, qualitative and quantitative costs have equal footing under the Administrative Procedures Act. But there are some unquantifiable impacts from oil spills, including 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 placement. Widespread community impacts would include loss of natural and cultural resources that would harm livelihoods, mental health and public health, with long term consequences for both tribal and non-tribal communities.



**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.

#### 44. CBA Summary – Alternative B – Addition of FORs

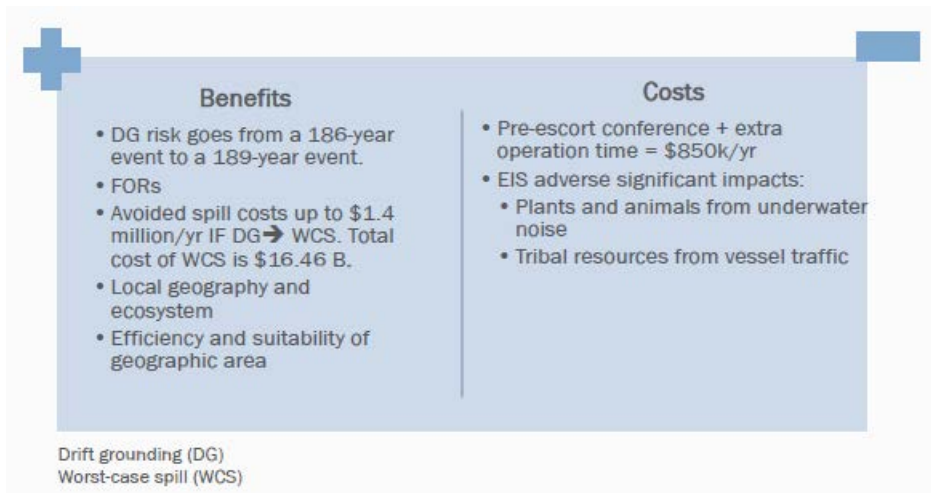
For Alternative B, there are the additional functional and operational requirements. While we have no estimate of a quantitative change in drift grounding probability, the functional and operational requirements are considered by professional opinion to increase safety and ensure adequate power and maneuverability to prevent a drift grounding on the cost side. The team estimates the pre-escort conference cost at almost \$16,000 per year. And the environmental impact statement showed very significant impacts to plants and animals from underwater noise and to travel resources from vessel traffic.

Benefits	Costs
<ul style="list-style-type: none"> <li>No quantified change from Alternative A, Drift Grounding is 186-year event.</li> <li>FORs are considered to enhance safety and ensure adequate power and maneuverability to prevent drift grounding</li> </ul>	<ul style="list-style-type: none"> <li>Pre-escort conference = \$15,851/yr</li> <li>EIS adverse significant impacts:               <ul style="list-style-type: none"> <li>Plants and animals from underwater noise</li> <li>Tribal resources from vessel traffic</li> </ul> </li> </ul>

#### 45. CBA Summary – Alternative C – Expansion

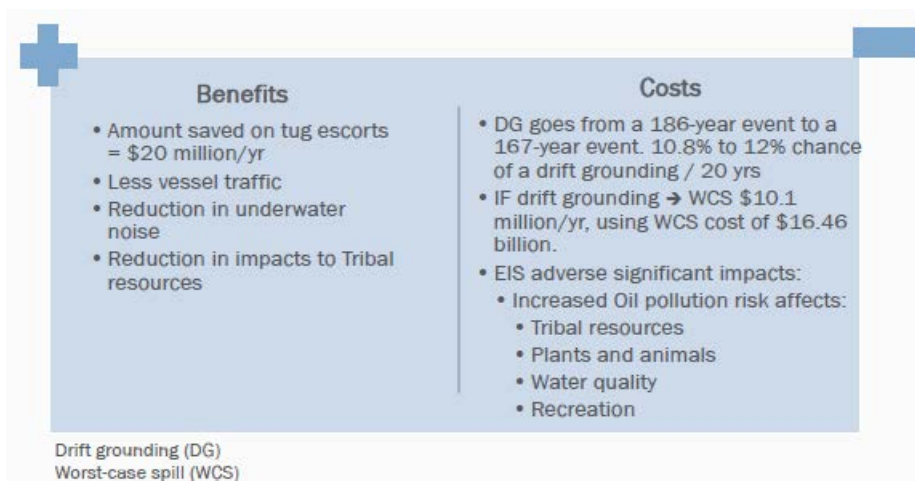
For Alternative C expansion the drift grounding risk goes from 886-year event to 189-year event. The added functional and operational requirements are assessed to improve safety, avoided spill costs of up to \$1.4 million per year, if the assumption is that a drift grounding leads to a worst-case spill. The estimated of the cost of that is nearly \$16. billion dollars. There's some pristine local geography and ecosystems in the expansion area. Susca Island State Marine Park is in the area and the fact that it's contiguous with the current requirements lends a certain efficiency for expansion of escorts in this area in terms of costs. They estimate \$850,000 per year including conference cost time and the extra tug operation time and the adverse impacts, again two plants and animals from underwater noise and to travel resources from vessel traffic as outlined in the EIS that Haley presented earlier.





#### 46. CBA Summary – Alternative D – Removal

Considering the removal option, the estimated benefit would be to save a \$20 million a year in tug escort costs, less vessel traffic, reduction in underwater noise, and reduction in impacts to travel resources. On the cost side, drift grounding goes from 186-year event to a 167-year event or from 10.8% chance to a 12% chance of drift grounding over 20 years. If a drift grounding were to result in a worst-case spill, the estimated cost would be \$10.1 million per year. Using again, the worst-case spill cost estimate of \$16.5 billion dollars. In this instance, the adverse environmental impacts are from increased oil pollution and that those were found to affect that risk was found to affect travel resources, plants and animals, water quality and recreation.



#### 47. Least-Burdensome Alternatives Analysis

Allen continued with the least burdensome alternatives analysis. A decision is required whether the identified rule option meets the goals and objectives of the authorizing statute. And if it does, then the choice is the one that is least burdensome to those that are required to comply with it.



**48. Goals and Objectives of Chapter 88.16 RCW**

In terms of the goals and objectives specifically, the team is mandated to have the rule be designed to achieve best achievable protection, which considers the additional protection provided by the measures, the technological achievability of the measures, and the cost of the measures. Again, the intent of the authorizing legislation was to reduce spill risk. There is specific direction to specify functional and operational requirements, consider geographic area for tug escort requirements, avoid or minimize additional vessel noise and reduce tribal impacts.

**49. LBA Summary**

Allen concluded with a summary slide depicting those numbers. He directed the group’s attention to the last column, because this is the location of the rulemaking team’s assessment that Alternative A, does not meet best achievable protection because it does not have the functional and operational requirements added. The removal option, D was likewise assessed to not meet best achievable protection because of the increased risk in oil spill, which leaves options B&C, the remaining contenders to be determined.

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

**50. Discussion and Questions**

*Jim Peschel (Tug Industry Alternate/Vane Brothers) questioned worst case discharge of 259,000 barrels considering that Vane Brothers barges hold 30,000 barrels. He questioned the assumption that a spill basically be a tenfold increase of what their barges hold. He referenced a previous slide regarding the median spill size, but didn't see how it was included in the equation. He added that in the spill planning world it's called the average most probable discharge, which is what's more likely to be a spill. He also commented on the SRKW premium, which seemed like a new wild card saying every citizen or every household in Washington state is willing to pay \$1000. It seemed that the team was now proposing to put that cost instead of on individuals on to industry. Allen Posewitz (Ecology SME) responded that yes, they put in high end bracket numbers for this analysis and later they'll review other calculations showing the probability of a risk and the mostly spill size. He added that Jim's point was taken, that not all vessels are the size in terms of the Southern resident killer SRKW premium and what it might be. And there's a case to be made that the number is lowballed given the change in public attention on this particular population of whales.*

*Megan Hillyard (Ecology SME) noted that the team did add a few slides to the deck that OTSC received in response to that question about having multiple methods and a range of costs that represent what a*

*potential cost of an avoided oil spill would be. And each of those methods just offers a different perspective on risk and cost to balance the uncertainty and real-world probabilities. Three of those methods incorporate a worst-case spill volume, and that's in line with Ecology's practice in rulemakings contingency planning. For example, they applied the worst-case bill standard as a guiding principle in decision making to prioritize those high impact scenarios to ensure that the regulatory policies are designed to address catastrophic events. That is primarily what decision making is driven by. And then just to touch on the SRKW premium, Megan added that the number is not necessarily a fee or a charge on businesses or consumers. It reflects how much people hypothetically value the protection of SRKWs, not what they will actually pay. Those estimates are used here to evaluate whether the regulations benefits justify its cost, as a decision-making mechanism.*

*Antonio Machado (Oil Industry/WSPA) appreciated the explanation adding based on his background as a scientist, he believes there was a gap in the data. The numbers don't consider improvements in equipment and that there are better emergency response preparedness and stockpiles. Industry focuses on a worst-case spill when any vessel has different compartments and with double-hulled vessels. He didn't understand why the data is looking at a worst-case spill-scenario as opposed to a probable outcome. Allen acknowledged that it was absolutely a high-end estimate. Antonio asked if there was an adjustment for industry efforts in the last 30 years. Allen responded yes and that he would argue it was in that last slide where the median spill size was shown that has been observed over the last 20 years and was 24 barrels.*

*Fred Felleman (Environment/Friends of the Earth) reminded the group that anticipating the cost of responding to an oil spill does not mean the spill has been cleaned up, which could result in only a 10% recovery. He added that there is more sinking oil locally which would be more expensive to clean up than the medium oil in the California study used. He asked about the additional cost estimate for the geographic expansion from Alternative B to Alternative C. Allen responded that it was to go from B to C would \$850,000 a year in extra tug time, including the pre-escort conference cost for the functional operational requirements.*

## **51. Draft Rule Language**

Sara explained that the next section summarizes the important insights just reviewed to help the group move towards selection of a proposed rule alternative.

## **52. EIS Significance Finding Summary**

She explained the first slide was summary of the EIS significant findings with a reminder that at a high level, all the alternatives had an impact on tribal resources and plants and animals. And when developing the rule language, the group must consider the underwater noise impact from alternatives A, B and C, as well as the oil pollution, water quality and recreational impact in alternative D. On the slide, the alternatives are in the rows and the cost and benefits are in the columns. As another reminder, in terms of cost, alternative A is the baseline. Alternative B cost 15,851 for the functional and operational requirements. Alternative C cost \$850,000 per year for the functional operational requirements and those expansion area escorts. And alternative D is the highest spill risk with spill cost up to \$10.1 million per year. She noted that the \$10.1 million calculation does assume that every drift grounding will result in a worst-case spill. And alternative D also has the total one-time cost of a worst-case bill remaining at \$16.46 billion.

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	

### 53. Cost Benefit Summary

When looking at benefits, alternative A was the baseline. Again, Alternative B had the benefit of the functional and operational requirements and those ensure the escorts communicate and have sufficient maneuverability and power. Alternative B has a benefit of a drift grounding reoccurrence interval of 186 years and a 10.8% chance of a drift grounding in 20 years. Alternative C has the benefit again of the functional and operational requirements. Alternative C has a decrease in spill risk with a drift, grounding reoccurrence interval of 189 years and a 10.6% chance of adrift grounding in 20 years. Alternative C could save up to 1.4 million per year in spill cost and avoid that one time cost of a worse possible spill of \$16.46 billion. The expansion area and alternative C has high escort efficiency, and it refines the RCW escort area based on the model and OTSC input to date. Alternative D has the benefit of reduced noise and vessel traffic as well as the savings of that \$20 million costs for escorts that is present in alternative A that would be removed in alternative D. So, the cost benefit analysis shows that there are benefits for spill risk reduction and assurance of tug escort capability and for alternatives B & C, the rule team believes that the benefits outweigh the costs, given the spill risk reduction intent of this rule making.

	Cost (qualitative & quantitative)	Benefit (qualitative & quantitative)
<b>B</b>	<ul style="list-style-type: none"> <li>• \$15,851 per year (FOR)</li> <li>• Underwater noise, tribal, and plants and animal impact</li> </ul>	<ul style="list-style-type: none"> <li>• FORs ensure escorts communicate and have sufficient maneuverability and power</li> <li>• Drift Grounding is <b>186-year event</b></li> <li>• <b>10.8%</b> chance of a drift grounding / 20yrs</li> </ul>
<b>C</b>	<ul style="list-style-type: none"> <li>• \$850,000 per year (FOR and expansion)</li> <li>• Underwater noise, tribal, and plants and animal impact</li> </ul>	<ul style="list-style-type: none"> <li>• Save up to <b>\$1.4 M</b> in spill costs per year. Total cost of worst possible spill is <b>\$16.46 B</b> if spill prevented by expanded escorts.</li> <li>• Drift Grounding <b>189-year event</b>. <b>10.6%</b> chance of a drift grounding/ 20yrs</li> <li>• Expansion provides high escort efficiency, refines RCW area based on model and OTSC input.</li> </ul>
<b>D</b>	<ul style="list-style-type: none"> <li>• Up to <b>\$10.1 M</b> in spill costs per year. Total cost of worst possible spill is <b>\$16.46 B</b> if spill occurred due to removal of escorts.</li> <li>• Drift Grounding <b>167-year event</b>. <b>12%</b> chance of a drift grounding / 20 yrs</li> <li>• Oil Pollution, water quality, and recreation impact</li> </ul>	<ul style="list-style-type: none"> <li>• Save <b>\$20 M</b> in escort costs (removal of Alt A escorts)</li> <li>• Reduced noise and vessel traffic.</li> </ul>

### 54. Least Burdensome Alternative Summary

Next was the summary of the findings from the Least Burdensome Alternative analysis. The Least Burdensome Alternative analysis is necessary because the adopted rule must: achieve the goals and objectives of the authorizing statute and be the least burdensome to those required to comply.

The numbers in this least burdensome alternative summary may look different from the numbers on the previous slide because in this evaluation, the 20 million escort tug costs for the baseline Alternative A requirements are included in the cost of Alternative A, B, and C rather than as a benefit of Alternative D. This is due to the nature of the least burdensome alternative analysis.

As Allen mentioned, the first test a proposed alternative must pass, is the test of whether it meets the goals and objectives of the statute. In this case, those goals and objectives are to provide preventative measures to reduce the risk of a major oil spill, taking into consideration functional and operational requirements; geographic area for tug escort requirements, and Best Achievable Protection. The statute also requires that the rule consider tribal impacts and underwater noise.

The table above attempts to capture these goals alongside the costs for each alternative. The alternatives are across the top and the costs and goals are in the first column.

In evaluation the Costs: Alternatives A, B, and C all have a compliance costs of \$20m or more. Alternative D has no cost to comply.

Moving on to the goals of the statute:

For the Goal of Spill Risk Reduction: Alt A, B, and C each enhance the goal of spill risk reduction, with Alternative C providing the greatest reduction in spill risk, expanding the reoccurrence interval to 189-years. Alt D brings the spill risk from drift grounding back to the Pre-2020 level of a 167-year event.

For the Goal of limiting impact to Tribal resources and underwater noise: Alt A, B, and C have significant impacts from underwater noise and impacts to tribal resources from vessel traffic. Alt D did not have significant impact from underwater noise but had an impact to Tribal Resources due to oil spill risk.

The Goal of meeting Best Achievable Protection is under evaluation based on the information shared. BAP must consider the protection provided by the measure, the cost, and the availability. The Functional and Operational requirements all met the BAP criteria, and these requirements are included in Alternatives B and C.

	A	B	C	D
Cost to comply	<ul style="list-style-type: none"> <li>• Status quo costs \$20 million</li> <li>• \$0 additional costs to comply</li> </ul>	<ul style="list-style-type: none"> <li>• Status quo costs \$20 million</li> <li>• \$15,851 additional cost per year to comply (FOR)</li> </ul>	<ul style="list-style-type: none"> <li>• Status quo costs \$20 million</li> <li>• \$850,000 additional cost per year to comply (FOR and expansion)</li> </ul>	<ul style="list-style-type: none"> <li>• \$0 to comply</li> </ul>
Goal: Spill risk reduction	<ul style="list-style-type: none"> <li>• Drift Grounding is 186-year event</li> <li>• 10.8% chance of a drift grounding /20yrs</li> </ul>	<ul style="list-style-type: none"> <li>• Drift Grounding is 186-year event</li> <li>• 10.8% chance of a drift grounding /20yrs</li> </ul>	<ul style="list-style-type: none"> <li>• Drift Grounding is 189-year event</li> <li>• 10.6% chance of a drift grounding /20yrs</li> </ul>	<ul style="list-style-type: none"> <li>• No spill reduction achieved. Drift Grounding is 167-year event</li> <li>• 12% chance of a drift grounding /20yrs</li> </ul>
Goal: Consider Tribal Impacts and Noise	<ul style="list-style-type: none"> <li>• Vessel noise, Tribal impacts found significant in the EIS</li> </ul>	<ul style="list-style-type: none"> <li>• Vessel noise, Tribal impacts found significant in the EIS</li> </ul>	<ul style="list-style-type: none"> <li>• Vessel noise, Tribal impacts found significant in the EIS</li> </ul>	<ul style="list-style-type: none"> <li>• Oil spill risk to Tribal Resources found significant in the EIS</li> </ul>
Goal: BAP	<ul style="list-style-type: none"> <li>• No - no FORs</li> </ul>	TBD	TBD	<ul style="list-style-type: none"> <li>• No - no spill reduction achieved</li> </ul>

## 55. Rule Components needed to draft WAC text

Next is to look at are the rule components that need to be decided upon to draft the proposed rule.

These components are the Functional and operational requirements; the geographic escort area; and the mitigation measures

## 56. Potential Rule Language

Sara then presented how the rule language could look. The rule language will likely be a new section



in WAC 363-116. The rule components mentioned in the previous slide are called out in blue highlight. The high-level overview of the potential rule language is that it could begin with information about applicability (does not apply to bunkering transits, cargo deck barges, or unladen vessels), then move to describe the geographic area for escort requirements and the escort tug functional and operational requirements, and close with required 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]

## 57. Functional and Operational Requirement Rationale

Sara then went through each of those rule components and how they relate to the alternatives under consideration. The first component is the escort tug functional and operational requirements. These requirements include the pre-escort conference; twin-screw propulsion; 2,000 horsepower tug for 5,000 – 18,000 DWT vessels; and a 3,000 horsepower tug for 18,000 - 40,000 DWT vessels. The rationale for each proposed requirement is listed on the slide.

The rule team suggests that the proposed alternative include these functional and operational requirements. Each of the proposed functional and operational requirements met the rule team’s best achievable protection evaluation. The total cost of these requirements is expected to be \$15,851 per year.

### 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.

## 58. Geographic escort area rationale

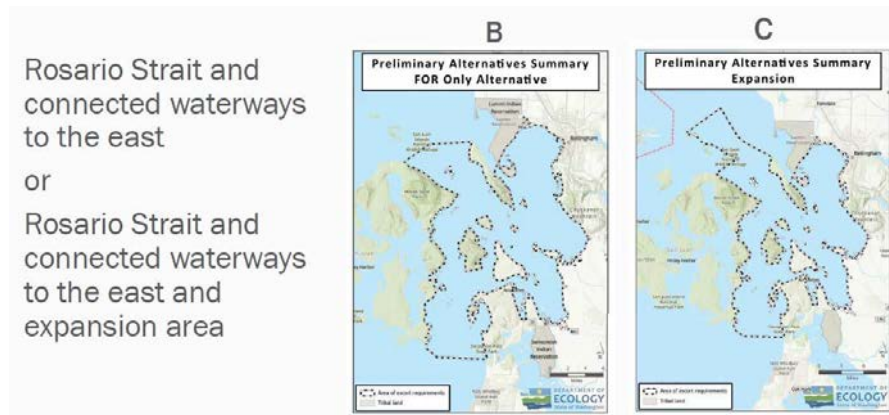
The next rule component to consider is the geographic escort area. The geographic area options are None (Alt D); Rosario Strait and connected waterways to the east (Alt A and B); and the Expansion Area plus Rosario Strait and connected waterways to the east (Alt C).

## 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.

### 59. Proposed Geographic Escort Area

The rule team suggests consideration of escorts in the geographic areas of Rosario and waters east (Alt B) and in the expansion area (Alt C). In terms of meeting the risk reduction goals of the rulemaking, the escorts in Alt C provide the most spill risk reduction with a Drift Grounding re-occurrence interval of 189-years. Alternative B's drift grounding re-occurrence interval was 186 years and the interval for Alt D removal was 167-years. The EIS found Tribal Resource and Vessel Noise impacts for Alternatives B and C. The next section provides suggested mitigation measures to address these impacts.



### 60. Mitigation Measures Included in the EIS

Next, Sara shared the possible mitigation measures that could be included in the rule language.

### 61. Mitigation Measures – Rule Language

Sara displayed how the mitigation measures might look in the rule language. To address the Tribal Resources impact, rule language could be that “Operators must consider Opportunities to coordinate with interested Tribes to avoid or reduce impacts of tugs to treaty fishing” To address the underwater noise impacts, rule language could be that “Operators must consider Opportunities to participate in voluntary underwater noise reduction measures where safe and feasible to do so.”

## In Rulemaking Language

Elements of the Environment	Mitigation Measures
All	<ul style="list-style-type: none"> <li>• Selection of geographic alternative</li> <li>• Inclusion of FORs</li> </ul>
Tribal Resources	<ul style="list-style-type: none"> <li>• Operators must consider opportunities to coordinate with interested Tribes to avoid/reduce impacts</li> </ul>
Underwater Noise, Plants and Animals	<ul style="list-style-type: none"> <li>• Operators must consider opportunities to participate in voluntary noise reduction efforts</li> </ul>

### 62. Mitigation Measures – Voluntary

She added that in addition to mitigation measures included directly into the rule language, there is also an opportunity to recommend voluntary mitigation measures to the Board of Pilotage Commissioners. Examples of voluntary measures are shown on the slide and will be discussed in more detail when we begin drafting a Board recommendation.

Elements of the Environment	Mitigation Measures
All	<ul style="list-style-type: none"> <li>• Continued participation in PSHSC Standards of Care and industry best practices</li> <li>• Extension of applicable PSHSC Standards of Care to 5,000 – 40,000 DWT escorts</li> </ul>
Underwater Noise, Plants and Animals	<ul style="list-style-type: none"> <li>• Voluntary noise reduction efforts in the EIS Study Area</li> <li>• Adoption of Be Whale Wise guidance</li> <li>• Transition to quieter, hybrid, and/or electric propulsion when technology and cost make this feasible.</li> </ul>
Plants and Animals	<ul style="list-style-type: none"> <li>• Voluntary environmental certification programs</li> </ul>
Tribal Resources	<ul style="list-style-type: none"> <li>• Encourage operators to develop agreements with interested Tribes to improve communication and reduce impacts to treaty fishing.</li> <li>• Encourage operators to limit waiting time at rendezvous locations</li> </ul>

### 63. Questions and Answers

The team then asked for questions and comments.

*Rein Attemann (Environment Alternate/WEC) suggested that one of the mitigation measures that might be pertinent was to require is the use of whale alert. His understanding was that this was like real time documentation of the presence of whales and southern residents, and so that might be something to utilize and have a better understanding of situational awareness with the presence of whales.*

*Artie Seaman (Tug Industry Alternate) commented that many of the operators have a clean wheelhouse policy, very similar to airlines, meaning there's no cellular or mobile devices on the bridge when underway on the tugs or vessels. He believes the whale alert is a great tool and certainly can be used in the right situation. However, he strongly recommended, if possible, utilizing the VTS system of broadcasting alerts over VHF radio and others.*

*Fred Felleman (Environment/Friends of the Earth) followed up Artie's point by adding that he felt very strongly that the mariner looks to the Coast Guard for situational awareness. He thought the whale desk was the tool best utilizing this ability to give the mariner the information they need. However, the concern has been not wanting to broadcast publicly where the whales are. He urged the importance of making full utilization of the Coast Guard's role and communicating on ship-to-ship channels.*

*Jim Peschel (Tug Industry Alternate/Vane Brothers) agreed with Fred and Artie. He added that yes, as an operator, they have a sterile wheelhouse. He's not sure that the average mariner is listening to the VTS working station. They're probably listening and scanning channel 16. He wondered if perhaps whale*



sightseeing vessels are familiar with the VTS working channels.

Blair Bouma (Pilot/Puget Sound Pilot) offered that the pilots do have access to the whale reporting system, which was helpful, and do use their phones for business, as it's the only way they can get that information other than what has been suggested through VTS.

**64. Narrowing to Preferred Alternative**

Sara continued by sharing, based on all the information presented, the rule team’s suggestion for 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.

**65. Proposal #1: Alternative B + Mitigation Measures**

The rule team proposes consideration of Alternative B + applicable mitigation measures. Alt B includes the FOR’s and escorts in the Rosario and waters east area shown on this slide.

**66. Proposal #2: Alternative C + Mitigation Measures**

The rule team also proposes consideration of Alternative C + applicable mitigation measures. Alt C includes the FOR’s and escorts in the expansion area as shown on this slide.

**67. Alternative C and D Quantitative Spill Cost Ranges**

During the stakeholder meeting last week, there was interest in looking deeper into the different methods for evaluating spill costs. This slide shows the 4-spill cost assessment method results for Alternative C and, for context, Alternative D. The team reviewed the Alternative C costs for each method earlier in the economic presentation. The Alternative D costs use the same formulas, however the odds of drift grounding occurring (variable O) changes within those formula. The catastrophic spill cost is the same for all Alternatives, \$16.46 billion. The estimated spill costs are greater across the other 3 methods in Alt D verse Alt C because of the greater odds of a drift grounding in Alternative D. The rule team focused on the first two cost assessment methods in their evaluations.

Cost assessment method	Alternative C (189 yr recurrence interval)	Alternative D (167 yr recurrence interval)
Catastrophic spill (259,00 bbl. spill)	\$16.46 billion total cost	\$16.46 billion total cost
Method factoring in probability of a drift grounding (259,00 bbl. spill)	\$1.4 million/yr	\$10.1 million/yr.
Method factoring in probability of a drift grounding AND probability of a spill from a grounding (259,00 bbl. spill)	\$11,101 /yr.	\$79,570 /yr.
Method factoring in probability of a drift grounding AND probability of a spill from a grounding (24 bbl. spill)	\$3,035 /yr.	\$21,751 /yr.

**68. Cost Benefit Summary (Alt B and C)**

Sara then presented a summary of the findings from the cost benefit analysis that we reviewed earlier, showing only Alt B

and C. In terms of Costs:

- Alt B costs \$15,851 per year
- Alt C costs \$850,000 per year

	Cost (qualitative & quantitative)	Benefit (qualitative & quantitative)
<b>B</b>	<ul style="list-style-type: none"> <li>• \$15,851 per year (FOR)</li> <li>• Underwater noise, tribal, and plants and animal impact</li> </ul>	<ul style="list-style-type: none"> <li>• FORs ensure escorts communicate and have sufficient maneuverability and power</li> <li>• Drift Grounding is <b>186-year event</b></li> <li>• <b>10.8%</b> chance of a drift grounding /20yrs</li> </ul>
<b>C</b>	<ul style="list-style-type: none"> <li>• \$850,000 per year (FOR and expansion)</li> <li>• Underwater noise, tribal, and plants and animal impact</li> </ul>	<ul style="list-style-type: none"> <li>• Save up to <b>\$1.4 M</b> in spill costs per year. Total cost of worst possible spill is <b>\$16.46 B</b> if spill prevented by expanded escorts.</li> <li>• Drift Grounding <b>189-year event</b>. <b>10.6%</b> chance of a drift grounding/ 20yrs</li> <li>• Expansion provides high escort efficiency, refines RCW area based on model and OTSC input.</li> </ul>

## 69. Least Burdensome

### Alternative Summary (Alt B and C)

Next was a summary of the findings from the Least Burdensome Alternative analysis showing just Alternatives B and C. The question for the OTSC to consider is whether Alt B or Alt C best accomplish the goals of this rule at the least burdensome cost to those who must comply with it.

	B	C
Cost to comply	<ul style="list-style-type: none"> <li>• Status quo costs <b>\$20 million</b></li> <li>• <b>\$15,851</b> additional cost per year to comply (FOR)</li> </ul>	<ul style="list-style-type: none"> <li>• Status quo costs <b>\$20 million</b></li> <li>• <b>\$850,000</b> additional cost per year to comply (FOR and expansion)</li> </ul>
Goal: Spill risk reduction	<ul style="list-style-type: none"> <li>• Drift Grounding is <b>186-year event</b></li> <li>• <b>10.8%</b> chance of a drift grounding /20yrs</li> </ul>	<ul style="list-style-type: none"> <li>• Drift Grounding is <b>189-year event</b></li> <li>• <b>10.6%</b> chance of a drift grounding /20yrs</li> </ul>
Goal: Consider Underwater Noise Impacts	<ul style="list-style-type: none"> <li>• Vessel noise found significant in the EIS. Mitigation options proposed.</li> </ul>	<ul style="list-style-type: none"> <li>• Vessel noise found significant in the EIS. Mitigation options proposed.</li> </ul>
Goal: Consider Tribal Impacts	<ul style="list-style-type: none"> <li>• Tribal impacts found significant in the EIS. Mitigation options proposed.</li> </ul>	<ul style="list-style-type: none"> <li>• Tribal impacts found significant in the EIS. Mitigation options proposed.</li> </ul>
Goal: BAP	TBD	TBD

## 70. Develop Recommendation to the Board

It was time to begin composing the draft recommendation to the Board. Sara reminded the group that at the last workshop the team asked for feedback on pre-escort language – thanks to Blair and Jeff for the feedback. Slides 72 and 73 show the updated pre-escort language with the edits in red.

## 71. Develop Recommendation to the Board

The team then closed out the PowerPoint and moved over to a word document where they were able to track the discussion and decision on the rule components that need to be included in the Board recommendation. For each rule component the rule team captured the OTSC recommendation, the rationale, and any dissenting options. Jaimie facilitated the input while Sara captures the notes.

Rule Component	Recommendation	Rationale
Functional and Operational Requirements		
Geographic escort area		
Mitigation Measures (in rule language)		
Mitigation Measures (voluntary measures to include in BPC recommendation)		

## 72. Pre-escort conference language – OTSC edits

Before commencing an escort required in WAC 363 – 116 – 600, the escorted vessel officer in charge shall hold a pre-escort conference to confer with the escort vessel officer in charge and the pilot (if applicable) to discuss and agree upon the operational details of the transit. The pre-escort conference must be recorded in the logbooks of the participating vessels and must include discussion of the following topics:

### a) Safety

- i. Safety of tug and escorted vessel personnel
- ii. safe working load of the deck fittings on the escorted vessel;

### b) Navigation

- i. anticipated route and destination;
- ii. anticipated speeds along the transit;
- iii. location and approximate time of the escorted transit beginning and end;
- iv. anticipated weather and state of tides, currents, sea-state and anticipated traffic;

## 73. Pre-escort conference language – OTSC edits

### c. Operations

- i. operational status of each vessel and their equipment including any limitations such as speed;
- ii. propulsion type and maximum direct bollard pull of the escort tug;
- iii. primary and secondary means of communication (i.e. VHF channels);
- iv. availability of appropriate crewmembers and their roles when responding to an emergency;
- v. relative position, direction of travel and tethering locations of the escort tug(s) while on transit;
- vi. method of connection of the escort tug to the tank vessel in an emergency or if tethering (i.e. tugs line, pennant, messenger lines etc.);
- vii. Whether any training or escort exercise will be performed during the transit; and
- viii. Any other items to ensure that the escort transit is conducted in such a way that in the event of a failure or emergency the tank vessel can be kept under control within the limits of the available channel.

73

The team began their discussion with the Functional and Operational Requirements. Jaimie used a round robin to get input and reminded everyone that if they have rationale beyond what is provided for their stance, to please share.

*Blair Bouma (Pilot/Puget Sound Pilots) said that the pilots support the FOR's as written here.*

*Clyde Halstead (Tribal Government Alternate/Swinomish) agreed with the pilots.*

*Jeff Slesinger (Tug Industry/Delphi Maritime) commented that all the voluntary mitigation measures which are a part of a rule component should be removed and placed in the functional operational requirements, so that there's a simple line item that says "review of appropriate voluntary measures" but*

*not include the mitigation measures in any kind of codified rule language. His rationale has two components. One is that the contradiction in language about "must involuntary" creates a legal minefield which will be exploited by various parties and create a bunch of confusion. The 2nd is that these voluntary measures are going to evolve over time in ways that can't possibly be imagined right now, and they need to be addressed outside of a rule, but in the context of being voluntary.*

*Going back to the FOR's, Jaimie asked Jeff to confirm that he is okay with them as listed. He responded yes. Blair agreed to the concept of moving the FORs but questioned putting them in the pre-escort conference to keep the focus narrow in the moment having to do with that actual operation in the moment and not expecting them to be referring to something that might need to be a company policy or something like that. Jeff thought that was a good point and wondered if there was some other place to put mitigation measures than in codified regulatory language.*

*Fred Felleman (Environment/Friends of the Earth) was of the opinion that the folks that have been doing this for years are the ones that are best qualified to make the call. Therefore, if this is what the pilots and tug operators see as appropriate, then he is all in favor of it.*

*Antonio Machado (Oil Industry/WSPA) supported the FOR's as presented. He echoed the comments that were said advising against voluntary language in a regulatory compliance document.*

*Jason Hamilton (BPC) concurred with the FORs and agreed with the confusion of the voluntary language being included in regulatory compliance documents. He thinks considering other options would be worthwhile.*

The group then moved on to the geographic area. The rule team is recommending the Rosario Strait and connected waterways east with the expansion area alternative. The rationale is that this area is adjacent to Rosario and Waters East escort area. The Ecology model showed this area to have a high escort efficiency and the OTSC in the past has agreed that the characteristics of this zone make it a good candidate for an escort requirement.

*Blair Bouma (Pilot/Puget Sound Pilots) supported the expansion. While there is a cost, it's a particularly high-risk area because of proximity to reefs and other navigational hazard and high current.*

*Clyde Halstead (Tribal Government Alternate/Swinomish) supported the expansion language.*

*Jeff Slesinger (Tug Industry/Delphi Maritime) deferred to the pilot's evaluation of the risk area. However, he commented that the cost benefit analysis might be misleading if using the probability figures, spending \$850,000 a year for a \$3,000 a year benefit. His other comment was that the area will most likely lead to engagement with Canada because of the tanker traffic coming through Boundary Pass. It may require international relations at some point. He added that his vote was yes, with the asterisk of the above comments. Blair responded that, in general, the approach with piloted vessels is that when a vessel is in whichever country's waters, they comply with that country's escort rules and have that country's pilot directing the operation. The proposed zone is 100% in US waters. And it doesn't intersect an area that the Canadian traffic will cross in their transits. So, for the purposes of this work he didn't think it will be a cross-border issue. But it was a relevant point for vessels that are crossing at some point, they will have to sort out which country's rules they're abiding with. He also added for 40,000 DWT tankers and above, this area is already being escorted.*

*Fred Felleman (Environment/Friends of the Earth) believed that this approach had many rationales and*

*supported it.*

*Antonio Machado (Oil Industry/WSPA) responded that based on their studies of the environmental impacts they preferred Alternative B, no expansion. But they also supported Alternative C.*

*Jason Hamilton (BPC) supported the expansion area.*

*Jaimie reminded everyone that the Board will do a preliminary review of the OTSC's first round of recommendations at next week's BPC meeting. Then the OTSC will have a chance to review Board comments at the March 6 OTSC meeting.*

### **Mitigation Measures**

Haley Kennard (Ecology SME) introduced this section by stating that the mitigation measures proposed were coming directly from the EIS. She explained that it was like a project-based EIS, like building a hotel in a wetland area for example. There are permits that need to be obtained that provide opportunities for the agency to put in conditions. Because this is a rulemaking, the only place to do this is within the rulemaking language, where the scope is narrow. The measures are a reaction to the findings about impacts to tribes and the findings about underwater noise and plants and animals. The modeling showed that tugs are only spending, depending on the scenario, between 34% and 39% of their time actively escorting and the rest is commuting. Those commutes are also times when tugs could have negative interactions with treaty fishing and when they're contributing to underwater noise. She said it was something to consider when thinking about whether this makes sense as a pre-escort conference when the potential impact exists both while the tug is actively escorting and while they're commuting.

*Blair Bouma (Pilot/Puget Sound Pilots) commented that the measures were good ideas. Specifically, he thought it was a very good idea for the operators to consult with tribes, but was unsure of the effect of codification.*

*Clyde Halstead (Tribal Government Alternate/Swinomish) also thought it was a good idea in general. However, he didn't believe it would mitigate much when considering each escort opportunity to coordinate with tribes. The tribe he works for is heavily involved in this area, but they do not have the staff or the time to consult with each tug every time they are going to escort. So, per Clyde, it's not the most helpful language. He thought it may be better to include as part of the escort conference that they consult the Notice to Mariners so that they're aware of tribal fishery operations. And then they could do what they can to either avoid or mitigate their presence in those fisheries, rather than putting this burden on the tribes every time there's an escort to try to figure out where they're going to be and try to avoid it. In conclusion, he said it was fine to include this, but practically speaking, the tribes won't be able to actually do anything to participate. Haley thanked him for his feedback and added that it made sense to include the Notice to Mariners language. She added that the intent of the language was that it would be happening outside of individual transits, like coming up with general agreements.*

*Jeff Slesinger (Tug Industry/Delphi Maritime) reiterated that the recommendations were fine, he was just strongly opposed to them being put into the rule.*

*Fred Felleman (Environment/Friends of the Earth), with the exception of Clyde's comment, didn't think any of the recommendations were burdensome and he hoped that industry was not averse to them. He mentioned that at the last Harbor Safety Committee, the Tribal Council made recommendation to create a committee specifically to deal with these sorts of interactions. He wondered if it would be appropriate for the OTSC to support such a measure and wondered what Clyde thought. Clyde responded that he didn't know the best way that they could lend support to the Harbor Safety Committee as part of this*

rulemaking. He appreciated all the support they can get and if the OTSC wanted to issue a letter or something supporting the Harbor Safety Committee and its efforts that would be great. But if the Harbor Safety Committee adopts anything, those would of course be voluntary best practices. He didn't believe it would be appropriate to include language in the rulemaking that they need to follow the Harbor Safety Committee best practices. Jaimie added that a recommendation could always be made separately from the BPC. Fred reiterated his support for qualified direction in the WAC language for the measures to be considered.

Antonio Machado (Oil Industry/WSPA) responded that they supported these activities and ensuring help for tribes. However, when it comes to language, if it's voluntary it creates compliance issues. He supported taking the opportunity to be clear with the language and didn't think the measures should be in the rule.

Jason Hamilton (BPC) appreciated Clyde's comments and after listening to all the perspectives, he believed a different location for the language made sense. He was supportive of the language in general.

Jaimie acknowledged that the group was running short on time and recommended moving on to the rest of the meeting topics. The discussion and recommendation of the mitigation measures will continue at the March 6 meeting.

#### **74. OTSC and BPC Meeting Timeline**

Sara presented the timeline. The Board meeting is next week and OTSC members are invited if they want to say anything regarding the first round of recommendations being discussed.

Date (2025)	What	Objective
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

#### **75. Final Questions or Discussion?**

Jaimie commended the group on the excellent meeting and work accomplished. She then adjourned the meeting.

## OTSC Recommendation to the Board on the Tug Escort Rulemaking – March 2025

The OTSC developed these mitigation measure recommendations to the BPC during the OTSC meeting on March 6, 2025.

### Recommendation for mitigation language in the WAC

Location	Mitigation Measure recommended by the OTSC	OTSC Rationale/Comments	Dissenting Opinions
Standalone WAC language	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Standards of care are too specific to reference directly in this WAC.</li> <li>The HSC SOC has not been updated to address these target vessel escorts yet.</li> <li>Better to not include unenforceable language in the WAC.</li> <li>The benefit of putting mitigation measures outside of the WAC is that they can be more easily updated in a different platform.</li> </ul>	There could be benefit by adding WAC language that Operators are encouraged to follow the Standards of Care in the Harbor Safety Plan, once/if developed.
WAC pre-escort conference language	<p>The following topics are recommended to be included for discussion in the pre-escort section of the WAC:</p> <ul style="list-style-type: none"> <li>Status of active tribal, commercial, and recreational fisheries;</li> <li>Relevant local notice to mariners;</li> </ul>	<ul style="list-style-type: none"> <li>It is important to know about all fisheries, not just tribal fisheries, while also showing support for reducing tribal fishery interactions.</li> <li>Important to discuss local notice to mariners.</li> </ul>	None

# Recommendation for mitigation language to include in a future letter from the BPC to the Puget Sound Harbor Safety Committee

Mitigation Measure recommended by the OTSC	OTSC Rationale/Comments	Dissenting Opinions
<p>Recommend that BPC draft a letter to the Harbor Safety Committee to (timing TBD):</p> <ul style="list-style-type: none"> <li>• Ask them to review their Tanker Escort Standard of Care applicability section to determine how to address escorts of 5,000-40,000 DWT vessels</li> <li>• Examine EIS mitigation measures to determine whether any can be included in the Harbor Safety Plan.</li> <li>• Express support for continuing conversations about tribal fishing interactions. This could include discussion or Standard of Care on how to best find sport, commercial, and tribal fisheries information.</li> </ul>	<p>OTSC plans to work on this recommendation to the BPC at a future time after rule adoption. Sharing the draft ideas with BPC now for awareness.</p> <p>For reference, HSC SOC practices supported in the EIS are:</p> <ul style="list-style-type: none"> <li>• Tanker Escort Standard of Care, Escort Speed recommendation of not exceeding 10kts speed in Rosario Strait.</li> <li>• Anchoring Standard of Care lighting and noise guidelines.</li> </ul>	<p>Discussion on the timing of the letter. Some members thought it could be sent now but most preferred to wait until adoption in 2026.</p>



# Recommendation for mitigation language to include in a future open letter from the BPC to escort tug operators

Mitigation Measure recommended by the OTSC	OTSC Rationale/Comments	Dissenting Opinions
<p>Once the rule is adopted, recommend that BPC draft an open letter to escort operators with best practices for escort tugs and operators while actively escorting and/or commuting to and from escort of target vessels. Best practices could include to:</p> <ul style="list-style-type: none"> <li>• Limit waiting time at rendezvous points to reduce interactions with tribal fishing.</li> <li>• Comply with marina/port-specific best practices re: discharge that could affect water quality.</li> <li>• Consider having a crew member on the escort tugs watch for marine mammals.</li> <li>• Consider agreements (or other ways of improving communication) to notify interested Tribes of tug routes to avoid impacts (Example: Swinomish agreement with Dunlap Towing)</li> <li>• Participate in the ECHO Program and Quiet Sound trials when commuting to and from escort jobs</li> <li>• Use the Whale Report Alert System (WRAS)</li> <li>• Adopt Puget Sound Partnership and Governor’s Salmon Recovery Office recommendations: regular cleaning and maintenance of vessels, trainings to promote wildlife awareness, voluntary environmental certifications</li> <li>• Adopt the Be Whale Wise Guidelines</li> <li>• Consider a transition to hybrid electric and eventually electric tugs, when the cost and technology make this feasible</li> <li>• Consider adopting zero-emission engines when technological readiness and cost make this safe and feasible</li> <li>• Consider opportunities to coordinate with interested Tribes to avoid or reduce impacts of tugs to treaty fishing</li> <li>• Consider opportunities to participate in voluntary underwater noise reduction measures and best practices where safe and feasible to do so.</li> </ul>	<p>OTSC plans to work on this recommendation to the BPC at a future time after rule adoption. Sharing the draft ideas with BPC now for awareness.</p>	<p>None</p>

**OTSC Recommendation to the Board on the Tug Escort Rulemaking – Draft Rule Language  
March 2025**

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WAC 363-116-500 Tug escort requirements for oil tankers 40,000 DWT or greater

WAC 363 – 116 – 600 Tug escort requirements for oil tankers between 5,000 and 40,000 DWT and barges and articulated tug barges greater than 5,000 DWT

- (1) The requirements in this section apply to the following tank vessels:
  - (a) Oil tankers between 5,000 and 40,000 DWT;
  - (b) Articulated tug barges that are designed to transport oil in bulk internal to the hull and greater than 5,000 DWT; and
  - (c) Towed waterborne vessels or barges that are designed to transport oil in bulk internal to the hull and greater than 5,000 DWT.
  
- (2) The requirements in this section do not apply to:
  - (a) Tank vessels that are conducting bunkering, which includes the transit of the tank vessel to the bunker location, the oil transfer operation, and the return transit of the tank vessel;
  - (b) Towed general cargo deck barges;
  - (c) Tank vessels that are equal to or greater than 40,000 DWT that are in ballast or unladen, which includes those whose clingage, residue, or other applicable cargo onboard is less than point five percent of the vessel's maximum cargo carrying capacity or 3,000 barrels, whichever figure is greater; or
  - (d) Tank vessels under 40,000 DWT that are in ballast or unladen, which includes those whose clingage, residue, or other applicable cargo onboard is less than two percent of the vessel's maximum cargo carrying capacity or 3,000 barrels, whichever figure is greater.
  
- (3) Escorts are required in Rosario Strait and connected waters, as bounded by the following lines:
  - a) A line at the northern boundary of the escort area:
    - i. From Point Migley (48° 44.907' N, 122° 42.912' W) to
    - ii. Northern entrance to Rosario Strait (48° 46.400' N, 122° 47.500' W) to
    - iii. Alden Bank Buoy B (48° 47.063' N, 122° 48.970' W) to
    - iv. Alden Bank Buoy A (48° 50.390' N, 122° 52.229' W) to
    - v. Patos Island Light (48° 47.340' N, 122° 58.282' W);
  - b) A line from Patos Island to Sucia Island:
    - i. From Toe Point (48° 47.111' N, 122° 56.452' W) to
    - ii. Lawson Bluff (48° 46.148' N, 122° 54.950' W);
  - c) A line from Sucia Island to Matia Island:
    - i. From NE tip of Sucia Island (48° 45.989' N, 122° 53.261' W) to
    - ii. North shore of Matia Island (48° 44.973' N, 122° 50.523' W);

- d) A line from Matia Island to Orcas Island:
  - i. From E tip of Matia Island (48° 44.741' N, 122° 49.586' W) to
  - ii. Puffin Island Shoal Light (48° 44.604' N, 122° 49.007' W) to
  - iii. Point Thompson (48° 42.773' N, 122° 52.745' W);
- e) A line crossing Obstruction Pass:
  - i. From Orcas Island (48° 36.399' N, 122° 48.803' W) to
  - ii. Obstruction Island (48° 36.051' N, 122° 48.803' W);
- f) A line crossing Peavine Pass:
  - i. From Obstruction Island (48° 35.487' N, 122° 48.687' W) to
  - ii. Blakely Island near (48° 35.308' N, 122° 48.674' W);
- g) A line crossing Thatcher Pass:
  - i. From Blakely Island (48° 31.880' N, 48° 31.880' N) to
  - ii. Decatur Island (48° 31.431' N, 122° 48.552' W);
- h) A line crossing Lopez Pass:
  - i. From Lopez Pass Light 2 (48° 28.867' N, 122° 49.092' W) to
  - ii. Lopez Island (48° 28.705' N, 122° 49.178' W);
- i) A line at the southern boundary of the escort area:
  - i. From Point Colville (48° 25.306' N, 122° 48.795' W) to
  - ii. Davidson Rock Light (48° 24.797' N, 122° 48.720' W) to
  - iii. Southern entrance to Rosario Strait (48° 24.000' N, 122° 47.151' W) to
  - iv. Whidbey Island near West Point (48° 24.000' N, 122° 39.900' W) to
  - v. Sares Head (48° 25.540' N, 122° 40.478' W);
- j) A line across the Swinomish Channel
  - i. At the Duane Berentson Highway Bridge (48° 27.267' N, 122° 30.851' W), and
- k) A line across Hale Passage
  - i. From Portage Point (48° 42.923' N, 122° 39.112' W) to
  - ii. Echo Point (48° 41.807' N, 122° 39.578' W).

(4) Tank vessels shall not operate in the area described in subsection (3) unless they are under the escort of a tug with a minimum of twin-screw propulsion.

(5) Tank vessels greater than 5,000 and less than 18,000 DWT shall not operate in the area described in subsection (3) unless they are under the escort of a tug with a minimum of 2,000 horsepower.

(6) Tank vessels equal to or greater than 18,000 DWT shall not operate in the area described in subsection (3) unless they are under the escort of a tug with a minimum of 3,000 horsepower.

(7) Before each escort, the tank vessel officer in charge shall hold a preescort conference with the escort tug officer in charge. If the tank vessel has a pilot onboard, the pilot shall also be included in the conference. The purpose of the preescort conference is to discuss and agree

upon the operational details of the transit. The preescort conference must be recorded in the logbooks of the participating vessels and shall include discussion of the following topics:

- (a) Safety
  - (i) Safety of tug and tank vessel personnel; and
  - (ii) Safe working load of the deck fittings on the tank vessel.
- (b) Navigation
  - (i) Anticipated route and destination;
  - (ii) Anticipated speeds during the transit;
  - (iii) Status of active tribal, commercial, and recreational fisheries;
  - (iv) Relevant local notice to mariners;
  - (v) Location and approximate time of the escort beginning and end; and
  - (vi) Anticipated weather, tides, currents, sea-state, and traffic.
- (c) Operations
  - (i) Operational status of each vessel and their equipment including any limitations such as speed;
  - (ii) Propulsion type and maximum direct bollard pull of the tug;
  - (iii) Primary and secondary means of communication (e.g., VHF radio);
  - (iv) Availability of appropriate crewmembers and their roles when responding to an emergency;
  - (v) Relative position, direction of travel and tethering locations of the tug(s) during the transit;
  - (vi) Method of connection of the tug to the tank vessel in an emergency or if tethering (e.g., tug's line, pennant, messenger line, etc.);
  - (vii) Whether any training or escort exercise will be performed during the transit; and
  - (viii) Any other items to ensure that in the event of a failure or emergency the tank vessel can be kept under control and within the limits of the available channel.